

**ASSESSMENT OF INSTITUTIONAL CAPACITY FOR MANAGING FIRE  
DISASTER IN NIGER STATE, NIGERIA**

**BY**

**OSIDE, Remare Igiri  
MDRS/CDRM&DS/2010/2744**

**CENTER FOR DISASTER RISK MANAGEMENT AND DEVELOPMENT  
STUDIES**

**FEDERAL UNIVERSITY OF TECHNOLOGY,**

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## **ABSTRACT**

Fire disaster is one of the most drastic disasters known to man. It's wide and fast spread especially in populated areas and ability to consume everything reaffirms the severity of the aftermath of fire incidences. The study is majorly concentrated on the appraisal of existing institutional capacity in Niger state with a view to making recommendation for effective management of fire disasters in the state, in other to achieve this aim here are the objectives; to evaluate the experience(s) of fire disaster in Niger State, assess the capacity of the institutions for managing fire disaster in Niger State and examine the capacity building effort, and proffer strategies for improvement. The methodology used for this research work is primary and secondary source of data collection, where three agencies were sampled out of six that was identified for the study. The sampled agencies are Niger State Emergency Management Agency, Niger State Fire Service and Nigeria Security and Civil Defense Corps. Ninety-six (96) questionnaires were distributed to the disaster mangers that the study identified. The study reveals that majority of the staff were transferred from different department and/or ministry into the disaster agency. The fire service was the only agency that employed the bulk of its field officer directly. Also inadequate fire safety equipment, man-power and appropriate funding of the agency responsible for fire disaster are a serious problem affecting the performance of the agency. The study now recommends that; the first is to ensure that the political leadership is aware of the need for continuous institutional capacity building for disaster managers and sustainable human development. The second is to empower the people so that they, too, are aware of its importance, are vigilant and expose capacity gaps and insist on continuous institutional capacity building.

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## **ABBREVIATIONS**

- CSO - Civil Society Organization**
- DRM- Disaster Risk Management**
- DRR- Disaster Risk Reduction**
- FFS- Federal Fire Service**
- HFA – Hyogo Framework for Action**
- MDG- Millennium Development Goal**
- NEMA- National Emergency Management Agency**
- NGO - Non Governmental Agency**
- NSCDC- Nigerian Security and Civil Defense Corps**
- NSEMA- Niger State Emergency Management Agency**



## **CHAPTER ONE**

### **1.0 INTRODUCTION**

#### **1.1 Background to the Study**

Disasters are severe happenings that cause extensive social interruption, destruction to property as well as loss of and trauma (Jamison, Breman, Measham, Alleyne, Claeson, Evans and Musgrove, 2006). In the Caribbean, a number of natural hazards have resulted in disasters. Human-induced or natural events that result to extreme adverse effects on humans, the environment, goods and services, which exceeds the capacity of the affected community's ability to take decisive action is known as disaster. Steps taken prior to the occurrence of a disaster which is aimed at the reduction of its effects, inclusive of preparedness and long-standing measures for the reduction of risk are known as mitigation (Bankoff, Frerks, and Hilhorst, 2004). Various disasters like earthquake, landslides, volcanic eruptions, forest fires, flood and cyclones are natural hazards that kill thousands of people and destroy property worth billions of dollars and habitat every year (Marquet, 2012). The rapid growth of the world's population and its increased concentration often in hazardous environment has escalated both the frequency and severity of natural disasters. With the tropical climate and unsustainable landforms; coupled with deforestation, unplanned growth proliferation, non-engineered construction (which makes the disaster prone areas more vulnerable), poor communication, little or no budgetary allocation for disaster prevention are all characteristics typical of developing countries. It is important to note that these countries are most affected whenever there is a disaster (Gbenga, 2007).

Globally, the year 2010 recorded many disasters like flood, hurricane, these disasters brought about serious economic and humanitarian consequences. Also Nigeria was not left out of those

very sad incidences. Climate change is singled out as a major factor responsible for the increasing occurrences of flooding in many parts of the globe (Elaigwu, 2012).

It is a fact of life that at one time or another a community or nation will be faced with an adversity, a calamity, a catastrophe, a disaster or emergency, either natural or man-made. Realizing disaster as a fact of life and the need to prepare for its eventuality led the Federal Government to formulate a National Policy on Disaster Management in 1999, which is meant to cater for required responsibilities of the Federal, States and Local Governments respectively when disasters occur (Moore and Lakha, 2007).

Over the years, government at all levels, NGO's and Civil Society Organizations (CSO's), the private sector, International Development Partners and United Nations Agencies have pursued a wide range of strategies and programme to prevent and respond to disaster situations. Notwithstanding, these activities have been attempted in ways that can be best described as less steady and congruous (Godwin, 2000). This way remains receptive and ungraceful outside a lucid strategy schema.

The essential objective of the national policy is to coordinate disaster response and administration by mitigating disaster management in the national advancement process so as to encourage brisk and facilitated reaction to such circumstances as may be needed (Moore and Lakha, 2007). This is with the aim of saving as many lives as possible when disaster happens, taking into consideration that increased wellbeing will exhibit the utilization and pleasure regarding our surroundings and monetary improvement.

The approach mandates the establishment of Disaster Management structures at all levels of legislation (elected, states and neighborhood) in Nigeria. It fixates on the standards of imparted obligation and the need to guarantee legitimate incorporation and joint effort around stakeholders. There might be National Emergency Management Agency (NEMA) at the Federal level, State Emergency Management Agency (SEMA) at the state level, and Local Emergency Management Authority (LEMA) at the local government level. This to a substantial degree might reinforce the abilities of Federal, State and Local Governments to lessen the probability and seriousness of calamities.

Each level of government should build the capacity of their disaster administration establishment to get ready for, react to and recoup from catastrophic occasions. Federal, State and Local Government, significant Ministries, Departments and Agencies (MDAS), the Military, Police, Para-military and Civil Society Organizations (CSOS) should create their abilities in catastrophe administration. This abilities known as capacities should be improved consciously as first responders, and Emergency Management Volunteers (EMV) might be made to compliment the composed structures. Disaster Response Units (DRUS) might be created in diverse military installations in the nation over to give help to civil control throughout crises situations (Cullather, 2006). The policy is aimed at establishing and strengthening of disaster management institutions, partnerships, networking and main streaming disaster risk reduction in the development process, so as to strengthen the resilience of vulnerable groups to cope with potential disasters. The policy also highlighted coordination of disaster risk reduction initiatives within a unified policy framework in a proactive manner at all levels of Government (Carafano, 2003). The wide spread of disaster prone areas in a country as large as Nigeria requires that policy on disaster management should not only vary drastically from one area to another with

respect to the same type of disaster but also that overlapping jurisdictions do not introduce unusual ambiguities and complexities in the interpretation and execution of policies.

## **1.2 Statement of the Problem**

The National Emergency Management Agency (NEMA) was secured through Act 12 as amended by Act 50 of 1999, to oversee man-induced and natural disasters in Nigeria. Fundamentally, it defines arrangement on all exercises identifying with disaster administration and organizing the arrangements and projects for a nationwide effective and compelling reaction to disasters.

It doesn't have a full complement of firefighting personnel, security work force, road marshals in addition to different outfits to battle such related emergencies like flooding, fire, communal clashes, pestilences and landslides. It is nonetheless statutorily for the organization to engage organize and direct other relevant institutions, for example, Federal Ministry of Health, Federal Road Safety Commission, Nigeria Security and Civil Defense Corp, The Police, Fire Service and even the non-administrative association like Red Cross and Red Crescent, to meet people's high expectations in overseeing catastrophe in the nation (Sherpa, 1995). This it showed throughout the last crisis between communities in Jos resulting to emergencies, flooding in Kogi, landslides in Cross River and fire disasters in markets in a few states (Kano and Sokoto states in particular) by organizing the evacuation of dislodged individuals and giving relief and succors to the impacted in the manifestations of relief materials for alleviation of their stress.

According to a news item in The Punch of Wednesday, June 8, 2011 titled "In Abuja, Fire Stations are junkyards". It was revealed that "The Federal Fire Services (FFS) has seven stations across the FCT, but none of them has more than one functional fire engine while the headquarters has just two functional fire trucks in the service. The common feature of these

stations is the dead fire engines that litter their premises of the fire service station. The functional trucks dispense about 1,500 gallons of water, which does not last beyond five minutes. Other equipment relevant to its operation such as the air breathing apparatus, fire resistant garment, fire rate lock, fire blanket, telescopic fire warden sign, megaphones, first aid kit as well as modern fire trucks and helicopters were in short supply, if available at all. If we compare Federal fire service (FFS) to other fire stations across the world,” the FFS is an infant at play”. The New York Fire Department reacts to approximately 260,000 non-fires and fire associated disasters and over a million crises and catastrophic situations annually including medical emergencies, disasters and terrorist acts. It maintains 250 fire houses and ambulance stations. This is not surprising as the department has a budget of \$39.14bn just for its capital projects for 2010-2013. On the other hand, the FFS got N405m for its 2011 capital projects and N2.3bn as total allocation for the year”.

A common understanding from people interviewed in the field is that NEMA is widely known for circulating alleviation (relief) materials for casualties of disaster, which is largely a reactionary methodology to emergency. One of its successful proactive techniques is to instruct and brief people in general on prevention, anticipation and control measures for disasters. Thus, it sorts out interactive or question and answer sessions, workshops, seminars and press conferences customarily for distinctive stakeholders on the fundamental basis and steps to be taken during disasters or crisis situations. The members of these capacity building interactions include civil, social order associations, community leaders, NGOs, instructors, students and youths.

Most times, Staffs of the organization undertake sensitization and advocacy training to markets and communities to train artisans and trivial merchants on the need to have safety equipment and

use safety wares in the event of the occurrence of fire disasters. This exercise is aimed at reducing the misfortunes when such disasters occur.

While there have been some local and national level activities concentrating on more extensive parts of the management of disasters, the several flooding in Niger and Kogi states, the most recent bomb blast in Suleja and the civil unrest in Minna that erupted as a result of fuel subsidy have certainly electrifies prominent backing and with that more amazing political association. Therefore, there is need for additional activities concentrated more on standard but workable strategies, evacuation drills and response plans at different levels of the society, particularly at the local levels as that will institutionalize such activities.

For NEMA to achieve its longing to screen the state of readiness of organizations to respond and mitigate the effects of disasters in Nigeria, it customarily arranges mock exercises with the cooperation of the stakeholders. The latest simulation or mock exercise was on the aeronautics sector that took place at Abuja International Airport. Fire Fighters, Security work force, disaster organizations and Health Workers witnessed the simulation exercise of battling to recover and clear assumed passengers in the span of a few minutes from a false airplane which was expected to have accidently arrived in thick smoke. The motivation behind such simulation activities is to test the competencies of the first response organizations in the occasion of a sudden occurrence.

### **1.3 Aim and Objectives of the Study**

#### **1.3.1 Aim of the Study**

The primary aim of the research is to assess the existing institutional capacity in Niger state with a view to making recommendation for effective management of fire disasters in the state.

### **1.3.2 Objectives of the Study**

- i. To evaluate the experience(s) of fire disaster in Niger State.
- ii. To assess the capacity of the institutions for managing fire disaster in Niger State.
- iii. To examine the capacity building effort, and proffer strategies for improvement.

### **1.4 Justification of the Study**

The pattern of flooding in the world does not show respect or distinction between rich and poor nations. For example, several towns in United States of America (USA) and towns in Haiti were equally inundated with flood waters that swelled to rooftops and destroyed many economic and social structures; properties and lives (both animal and human) in the process.

Likewise, it is pertinent to undergo a well-planned and rational programme for the management of disaster since it is the basis for a disaster risk management policy. In this strategy, the distinctive parts of every level of government and different stakeholders are enunciated. An approach of this type might give transparent rules to foreseeable conduct of the unambiguous regulations for disaster administration and an unmistakably recommended pattern of such disaster administration with the parts of the diverse players and characters plainly characterized. Before the definition of this approach, the administration of disaster at every level of government have been personal with each actor carrying out its activities “to the best of their ability” and the duplication of functions which is an evitable risk under such conditions. This approach is accordingly vital with a specific goal which is to launch a coordinated methodology to the administration of disaster. Disasters ought to be analyzed not in isolation yet as great circumstances that influences the commonplace and activities of a populace. They should be analyzed also taken into consideration the advancement of the whole social frameworks in which they take place.

Human obstruction initiates the organic, physical, social and efficient procedures that should be with a specific end goal to expand the capacity to adapt to conceivable negative impact. It is vital to have sufficient data in numerous complex choices; as such information or knowledge is exceptionally significant to overcome issues of uncontrollable development, haphazard, decaying natural quality, loss of prime rural area, annihilation and untamed wildlife among others. This research would develop a comprehensive assessment in measuring the capacity and effectiveness of disaster management agency in Niger State that can be used by planners and environmentalist with emphasis on fire disaster.

### **1.5 Scope and Limitation of the study**

The scope of the research was covering the local and national capabilities for efficient management of emergency risk in Niger State and its assessment is based on the NEMA Initiation Plan. The research will focus on enhancing the legal and institutional systems structure for the management of disaster risk in the Niger State. It evaluates the role of Niger State Emergency Management Agency (NSEMA), Niger State Fire Service, Fire Academy, Nigeria Security and Civil Defense Corps in enhancing the legal instruments on disaster risk management. It will focus on the staff strength; Staff training, equipment and developing a State disaster management plan. Also it focuses on the need to strengthen disaster management coordination mechanisms at all level in the State.

### **1.6 Study Area**

Niger state is situated in West-Central Nigeria and is bordered to the south by the Niger River. It shares boundary with states like Zamfara and Kebbi to the north, to its north and northeast by Kaduna, to the south and southeast by Kwara and Kogi respectively as shown in the Figure 1.1 below. On the eastern and western fringes of Niger State are the Federal Capital Territory (FCT)



and the Republic of Benin respectively. The environment comprises basically of lush savannas and incorporates the floodplains of the River Kaduna.

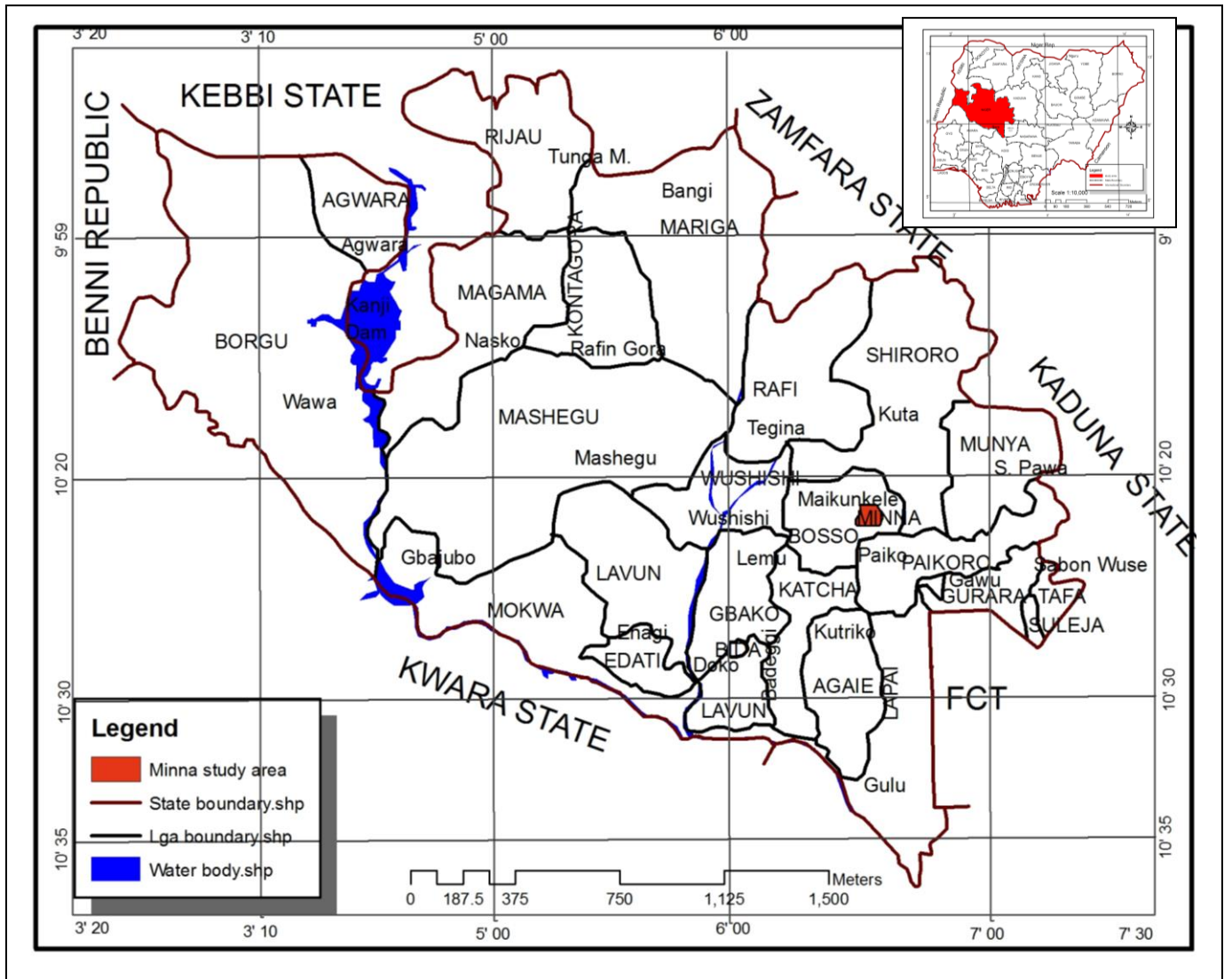
Raiding of slaves by the Fulani multitudes of the Nupe and Kontagora kingdoms in the nineteenth century extremely drained the locale and the existence of tsetse fly (that spreads trypanosomiasis or also known as sleeping ailment) has thwarted resettlement. The territory of Niger was established by Britain in 1908 and referred to as Nupe region from the year 1918 to 1926. The region incorporated the Agaie, Abuja, Kontagora, Lapai and Bida emirates, the Gbagyi (Gwari), Wushishi and Kamuku kingdoms and the federation of Zuru. In 1967, the Niger territory turned into the southern portion of North-Western states and in the year 1976; it became known as Niger state (avoiding the recently created Federal Capital Territory). In the year 1991, some portion of northwestern Kwara state, situated between River Niger and the Republic of Benin was joined to Niger state.

The main tribes in Niger State includes the Gwari to the east, the Nupe people to the south, the Busa to the west, and the Hausa, Kambari (Kamberi), Kamuku, Fulani and Dakarawa (Dakarki) to the north.

Most Nigerlites are agriculturists from birth. Shea-nuts, Cotton, groundnuts (peanuts) and yams are grown both for domesticated utilization and exports. Millet, sorghum, maize (corn), cowpeas, palm oil and pieces, tobacco, sugarcane, kola nuts and fish are bred and are important items for neighborhood exchange. Paddy rice is generally cultivated as an economic crop in the flood plains of the Kaduna and Niger rivers, particularly in territories surrounding Bida emirate. Cows, sheep, goats, guinea fowl and chickens are reared for their meat both for domestic and trade purposes. In the environs of Minna pigs are kept and made available to be purchased to the southern parts of Nigeria.

Iron, gold, quartz and tin (utilized by glass experts located in parts of Bida) are dug basically for indigenous experts. Metal work, pottery, fabricators of glass, articles made from raffia and indigenously colored fabrics are critical items for exportation. Kwakuti close to Minna is a location where marble is mostly quarried; while a brick manufacturing plant is situated in Minna, the state capital. Niger state government is a stakeholder in every one of the three dams of the Niger Dams Project that incorporates one at Shiroro, another at Gorge on the Kaduna River and one located at Jebba (in Kwara state) with its reservoir lying in part in Niger state. The Dam at Kainji (commissioned in 1969) and a portion of its reservoir, Kainji Lake, could additionally be identified in Niger state. Other than the production of hydroelectric power, the dams are utilized for the management of irrigation ventures and fishing (angling) which has created an enterprise based on the water reserves of dams. A large portion of Kainji Lake National Park (once Borgu Game Reserve) is situated in Niger state.

The two most populated and improved towns in Niger state are Minna and Bida and additionally the primary centers of learning with teachers training institutes, a federal university of technology located in Minna and a polytechnic establishment in Bida. A rice research institute and an agricultural exploration institute are located close to Bida area. A rail line from Lagos navigates Niger state with its principle thruway structure that passes north of the rail line and serves the business towns of Kontagora, Mokwa, Tegna, Kuseriki and Kagara. The other expansive towns found in the state of Niger are serviced by systems of neighborhood roads. The state has an area mass of about 29,484 square miles (76,363 km<sup>2</sup>) and population was estimated to 3,950,249m (NPC, 2006).



**Figure 1.1: Location of Niger State**

**Source: Urban and Regional Planning FUT, Minna, (2013)**

## CHAPTER TWO

### 2.0 LITERATURE REVIEW

#### 2.1 Institutional Capacity

The idea and practice of reducing the risk of disasters through deliberate consultations in order to dissect and deal with the causal variables of emergencies, that incorporates reduced presentation to dangers, reducing helplessness of individuals and property, shrewd land and environmental administration, and enhanced readiness for negative occasions are steps towards the right direction (Ngcamu, 2011). In 2005, 168 nations of the world came together, drafted and sanctioned the Hyogo Framework for Action (HFA) at the World Conference for Disaster Reduction, Kobe, Japan (ISDR, 2006). The HFA gives direction to attaining a set of conclusions and effects pointing towards diminishing the possibility of emergencies for a ten years period (that is from the year 2005 to the year 2015). It also emphasizes on the connection that exists between decreasing disaster risk and accomplishing more extensive development constraints, for example, the Millennium Development Goals (MDGs). It prepares stakeholders at global, national and neighbourhood level to give careful consideration to Disaster Risk Reduction (DRR) as a major aspect of their more extensive advancement motivation and essentially, distinguishes the important nature of capacity building to that assignment.

The HFA prescribes a definite ten-year technique to coordinate the reduction of risk as a crucial segment of national improvement policies and projects. The procedure recognizes five necessary areas of concentration (ISDR, 2006) which are follows:

1. Is to ascertain that disaster risk reduction is emphasized at the local and national level.
2. To Identify, observe and evaluate the risk associated with disasters and improve upon existing early warning systems and process.

3. To utilize information gather, educate and build capacity with the aim of building a culture of security and strength at all levels.
4. The reduction of the primary risk components, by "mainstreaming" exercises into numerous improvement segments and project areas.
5. To empower disaster readiness for prompt and efficient reaction at every level.

The Hyogo Framework for Action (HFA) laid down the constraints to every stakeholder and emphasize on the development of capacities for Disaster Risk Reduction (DRR). It's a fact that, none of the five priorities for action could be attained unless due consideration is given to capacity development issues. Also emphasis must be given to the strategies to achieve this capacity building initiative as the form an integral part of the action agenda. The "advancement of capacities" is referred to in not less than 40 times in the 19- page text and this characterizes the HFA.

The goals of capacity advancement which is to reduce disaster risk have been underlined by recent global calamities and its consequences. Since the Indian Ocean tsunami in December 2004, there have been different effects and damages of uncommon magnitude brought about by tropical storms Rita, Nargis and Katrina, alongside latest shocking seismic tremors in China, Pakistan, Haiti and India (Herlianita, 2011).

More than once such occasions drive home two scenarios:

- That emergency could turn around development that was not easily achieved, increase demonstration of the connections between the reduction of poverty, environmental debasement and powerlessness to disasters. This further shows the relationship between Disaster risk management and the Millennium development goal. An example as illustrated earlier would be the impact and cost of the USA and Haiti floods. There would

be greater cost implications and physical damage to communities in the Haiti than in the United States of America if both case were to be compared.

- That capability or the absence thereof remains at the centre of diminishing the risk of disasters. Also looking at the USA and Haiti floods, the major distinctive factor between the experiences and effects of both flood cases is that of capacity to mitigate the damages the flood caused.

Herlianita (2011) the accentuation now accorded to capacity advancement for DRR reflects more extensive acceptance of its connection to the sustainability of development of any people or nation. An accountable and dependable region sustained through an efficient civil society and involved individual sector is distinguished to be fundamental for attaining national developmental targets. Without fit and reasonable neighborhood establishments, there is little that outside assets can do alone to handle poverty, decrease the risk of disaster or to lessen national reliance on assistance. Inside the HFA, there are three central standards communicated that are especially pertinent for the advancement of capacity. These principles are that;

1. Nations have the lead responsibility for acknowledging national reduction of disaster risk.
2. Universal and Regional performers need to give backing to nations' own particular exertions.
3. The development of capacity is a “cross-cutting component” for the reduction of disaster risk.

## **2.2 Challenges Related to Capacity Development**

The continuous assessments of the efficiency of aid points that the improvement of capacity is always distinguished as a standout amongst the most discriminating issues faced by both partner

and donor nations. The 2005 Paris Declaration on Aid Effectiveness and the 2008 follow-up gathering in Accra emphasize the necessity for a collective upgraded backing for national endeavors aimed at reinforcing governance and enhance the performance of development. The meeting also recognized and called for the development of capacity as the core goal of national advancement and strategies for poverty reduction. In the interim the UN General Assembly High-Level Plenary Meeting on the Five-Year Review of the Millennium Declaration that held in September 2005 indicated the reality that civil sector capacity is falling behind every other MDG markers. This underscores the reality that the development of capacity is among the principal constraint confronting developing nations and their external allies as well.

Whereas the significance of capacity is broadly distinguished, how it develops, how to create and assess it and how to support it, is vague for a lot of people and a large number lack of understanding. There are various encounters, instruments and assets that are currently accessible in the field of disaster risk reduction and they all identify that the best way out is to build and improve the capacity of the affected (Clinton, 2000). Knowledge of previous experiences, for instance, point to numerous improper methodologies with brief effects from development cooperation partners. Nevertheless, there is need to better understand the connection between capacity, its advancement and the reduction of disaster risk.

It is important to state here that this exercise should be urgently considered and the necessary steps taken. Although there are some examples, the proof and information existing within the community of disaster risk reduction on the strategy for supporting capacity development, this strategy is nevertheless not generally received and imparted amongst nations on daily basis. In most developing and transition countries, there is a lack of institutional capacity to address disasters (Clinton, 2000).

## **2.3 Concepts of Disaster Risk Reduction**

There exist two correlative hypotheses in the writing that investigates the risk of disaster and also vulnerability. The foremost hypothesis is the “disaster pressure and release model” and the subsequent one is the “Access model”. From these hypotheses the connections between hazard, vulnerability, disaster risk and adapting capability could be inferred. These hypotheses have prompted the development of the “Drought cycle administration” model that is an interpretation of the speculations into a realistic working apparatus. These hypotheses were utilized to infer the substitutes that shaped the premise for the statistical estimations (Blaikie, Cannon, Davis, and Wisner, 1994).

### **2.3.1 The “Disaster Pressure and Release” Model**

The “Disaster PAR model”, was developed by Blaikie, Cannon, Davis and Wisner (1994) and explains disaster risks from a macro perspective. The PAR model argues those natural hazards that results in disasters occur at the tangent between two opposing forces and the processes that leads to vulnerability. It explains that it is when these two forces coincide that a disaster happens. Vulnerability could be defined as the nature of a person or group and situation surrounding them that affects their capacity to anticipate, cope with, resist and recover from the impact of a natural hazard.

The model identifies a progression of vulnerability, in which root causes are shaped by a series of dynamic pressures and can give rise to unsafe conditions. These three forces are defined;

- Root causes (or underlying causes) are a set of well-established, widespread economic, demographic and political processes within a society and the world economy that give rise to vulnerability (and reproduce vulnerability over time) and affect the allocation and distribution of resources between different groups of people;



- Dynamic pressures are the processes and activities that change the effects of the root causes into vulnerability thereby channeling the root causes into particular forms of insecurity related to hazards such as population growth, rapid urbanization, deforestation and a decline in soil productivity. These may also include a lack of training, inappropriate skills and poor local conditions of markets and weak policies;
- Unsafe conditions are the specific forms in which the vulnerability of a population manifests itself in time and space in conjunction with the hazard. This may occur through such processes as fragile local economic conditions, a fragile environment, lack of disaster planning and preparedness.

### **2.3.2 The Access Model**

The Access model Wisner; Blaikie; Cannon and Davis, (2003) illustrates disaster risk from a macro viewpoint. The PAR model contends that those naturally occurring hazards that bring about disaster do happen at the digression between two contradicting forces and the methods that create vulnerability. It explains further that it is the point at which these two forces harmonize that disaster occurs.

The model distinguishes a movement of vulnerability, whereby its main causes are formed by an arrangement of dynamic pressure and could result to hazardous conditions. The three forces are characterized:

- Root causes (or underlying reasons) are a series of well entrenched, broad investment, political and demographic processes inside a social order and the global economy that produce vulnerability (and duplicate vulnerability within a period) and influence the allotment and sharing of assets between distinctive gatherings of individuals;

- Dynamic pressure are the procedures and exercises that convert the impacts of the underlying causes into vulnerability and redirect the main causes into specific structures of unreliability identified with hazard, for example, rapid urbanization, growth of the populace, decrease in the productivity of soil and deforestation. These may comprise the absence of preparation, suitable abilities and indigenous condition of businesses and strategies;
- Precarious conditions are the particular structures in which the vulnerability of a populace is exhibited in space and time in combination with the hazards. This could happen by these procedures as delicate indigenous budgetary conditions, absence of disasters planning and readiness and a precarious environment.

The Access model Wisner *et al.* (2003) clarified how precarious conditions at a family level develop as a consequence of procedures which designate resources. A family unit level of access to resources can impact either positively or negatively on its ability to react to the effect of hazard. These assets could be financial (e.g. credits, income, work) in nature. It may be associated with wellbeing or infrastructural facilities (comprising telecommunications) or may be data-based. The access model "... recognizes how the interaction between family units' right to gain accessibility to different resources and the decisions made inside a series of structural obligations affects on their capability to withstand emergency" (Riet, 2008). The access of family units to different resources is critical to enhancing their livelihoods, making them sustainable, expanding their flexibility against hazards and having the ability to restore their jobs after the disaster has taken place.

## **2.4 Building Institutional Capacity for Good Governance**

Capacity is recognized as the key and the most important link to disaster risk reduction. However building such capacities in Africa has been one of the lost connections to the continent advancement and democratization. In the world of governance, capacity involves the capability of government establishment (the executive, judiciary, legislature, private sector or civil social groups) to execute its political and constitutional prescribed role or function effectively and viably. Capacity issues are constantly considered extremely important by African leaders. Capacity in the African setting is basically about the capacities for advancement which could be explained as Capacities to push democratic based administration or governance; to enhance the structures and foundations of financial policy decisions; to stimulate the quality of civil society groups that would assist national advancement and to make an environment of social strengthening for the individuals where they can definitively help choices that influence their life and the development process (Teranishi, 2004).

This involves the easy access to financial, material and human related needs which are the key for the effective management of organizations. Also the recognition and hiring of staff with the prerequisite experience, knowledge, skill, capability and administrative skills to handle the organization is important. Basically, it is about exposing the innovative energies of the individuals, enhancing those energies and giving the legitimate, material and institutional setting in whereby these energies will thrive (Teranishi, 2004).

In the African continent, existing capacity and most importantly building on those capacities are crucial when pushing for good legislation and governance. Good governance is a cardinal point in making an environment peaceful, stable and secured. It guarantees that individuals have the liberty to pursue different profitable and innovative exercises and endeavours. This is also

important to encouraging the advancement of man as jobs are created and wealth thereby mitigating poverty. It is necessary to state that good governance comes from deliberate policies and arrangement. It beholds on all the establishments of governance to perform in line with a nation's established standard procurements of the law, required procedure of law, traditions and cultures. For the diverse institution of governance to perform their capacities effectively and successfully, they must possess the suitable capacities. Good administration is an advancement or development matter with capacity building implications (Shaw, 2006). It audits the capacity setbacks in the African continent, thereby recognizes the capacity gaps in establishments and parts of government influence and gives suggestion for filling those gaps dependent upon the recommendations and encounters from the national report(s).

Capacity and capacity building constitutes the basic issues in the African continent since self independence. The colonial administration transferred to most African states, powerless and ineffectual establishments that had a tendency to serve the interest of a minor group of individuals (the small African urban first class and colonial masters) instead of the whole populace. In numerous African nations, there is a fast development of education, social infrastructure and preparation which is complimented by external support, guidance and expertise. These developments in different sectors are aimed at enhancing specialized capacities in defined ministries. With the assistance of foreign professionals, numerous African nations outlined improvement strategies and engaged in indigenization strategies both at the level of the economy and the civil service and embraced an import substitution methodology for industrialization (Shaw, 2006).

Most policies of development lack the substantial effect(s) on capacity building on the grounds that they were essentially foreign dependent and structured. The profoundly unified strategy of

advancement and development smothered capacity as opposed to reinforcing it. The first crop of African pioneers leaders acknowledged centralization of political authority and power, the controlling of material assets and the mobilization of individuals to be the basic components in their quest for nation building and financial advancement. Nation building involved orchestrating differing ethnic, racial, social, traditional and religious groups into one genuine country. At the investment level, this involved top-bottom dictator monetary policies which do not, one way or the other reflect the aspirations of the individuals nor engaged them (Shaw, 2006).

At the political realm, the rationale of power centralization in addition to different components prompted the combining of power by the administration and the political parties. The whole time the political parties in the helm of affairs manipulated and controlled the lawmaking body to guarantee that it reacted to the wishes of the leadership of the parties, which increasingly worked against its freedom and ability to exist as a free establishment of governance. Considering the activities of individuals, dictator administrations undermined and devastated the development and advancement of autonomously composed political aggregations, nascent resistance groups and different pundits in the civil social order. The administrations endeavored to co-opt current fledgling civil social groups and associations. The suppressed those not participating and cooperating and devastated those that seemed, by all accounts, to be threats or contradicted the administration. The general outcomes were that institutional capacity building was side-lined, and the remaining yet feeble institutional capacity handed down by the colonial masters was additional undermined and certain cases, for example, the law formulating bodies, permitted to rot (Lebel and Kotum, 2005).

The rise of military fascisms in numerous African nations had an amazingly harming effect on the capacity of establishments of governance in the African continent. This implies in simple

terms that the military could be said to be an enemy of good governance. In its unnecessary distraction and preoccupation with control and security, it limited the political procedure, thereby suppressing civil social groups, and suspended existing constitutions that were the fundamental establishments of good democratic process and legislation, prohibited political gatherings, undermined the judicial system, debilitated the media, smothered private segment participation and established a climate of submission, fear and docility (Lebel and Kotum, 2005).

In the 1980's and 1990's, the structural adjustment projects launched by the Bretton Woods establishments and underpinned by the global development and contributor communities radically undermined the capacities of numerous public organizations all around the continent of Africa, incorporating organizations in the health, civil service and education sectors and different state-owned ventures. A common agreed fact which was reduction in the size of government proposed and demanded by the universal development organizations intimated, down-sizing of civil servants and decrease of the capacity of civil organizations and establishments to execute their responsibility proficiently and successfully. While liberalizing the economy created much prospects for the engagement of the natives to partake in it. This was however carried out at the liability of the nation's institutional ability to prepare and convey crucial public services and goods in the education and health segments. No efforts were embarked upon to reinforce the capacity of existing foundations; neither was there committed thought accorded to conceivable results of the strategies on the significant segments of governance.

Through the past twenty years, the upheavals in participatory vote based system and in advancement of good governance and human rights in the African continent in combination with the subsequent development of the democratic administrations have crushed the several existing authoritarian and military administrations. The period started above has made genuine

implications and capacity building constraints for these nations. As an example, without the conveyance of the required public merchandise and services, a vote based administration could be undermined and eventually discredited. In spite of the fact that just 23.5% of the specialists overviewed across selected nations said that the democratic structure has been acknowledged by every political and social group as the premise for organizing political exercises. A higher percentage of 37% are of the opinion that, even though they have acknowledged the democratic structure they are yet still unsure of its incorporation in the administrative frameworks of their nations. Put together, these are uplifting patterns.

On a final note, there exist two basic measures to hand the major constraint to building capacity in Africa. The foremost is to guarantee that the head of political institutions are mindful of the necessity for uninterrupted and consistent institutional capacity building for good administration and the sustainability of human improvement. The second involves the strengthening of the individuals with the goal that they become more and more mindful of its relevance, observant and uncover capacity loopholes and demand nonstop institutional capacity building (Heyns and Stefiszyn, 2006)

## **2.5 Policy and Legislative Environment for Disaster Management**

### **2.5.1 Legislative Environment**

The tsunami that happened in 2004, which exceeded the limits of most advanced countries, extremely tried the capacity of the DDPM, an organization of just two years. The tidal wave due the tsunami occasion uncovered the institutional loopholes in connection to what might have been obliged to react sufficiently. Consequently, Thailand established a new organization, the National Disaster Warning Center (NDWC), with duplicity of responsibilities when compared with other national organizations to guarantee extensive coverage in all comparative national

emergencies. This establishment still has an unsubstantiated legitimate base under the legal jurisdiction of the Office of the Prime Minister, with a Royal Decree or an Act pending to be completed. This resulted in a sit back and watch mode for different organizations which feel threatened by its establishment. The draft authority for NDWC has been settled not yet affirmed by the bureau because of a present (September 2006) government alteration.

### **2.5.2 Institutional Environment**

The structure for the administration of disasters in Thailand embraces a multi-stakeholder strategy with the inclusion of numerous organizations at the local, provincial and national levels. On the other hand, this system is not entirely complete, with a few loopholes and a few overlapping. Holistically, we could say that there are two forms of establishments for the management of disaster in Thailand. These include the initial new establishments, such as, NDWC and DDPM whose main obligations is disaster management and the different long-standing offices and specialized organizations that play certain role in distinctive phases of the disaster management cycle. These two series of organizations go under the general purview of the National Civil Defense Committee (NCDC).

The National Civil Defense Committee (NCDC), structured under the Civil Defense Act of 1979 is a key decision-making establishment. This establishment is led by the Minister of Interior with a sole aim of detailing civil defense policies and measures. The NCDC is made of 17 agents from different institutions with DDPM as its secretariat.

It consist of sub-district, district and provincial civil defense groups and take their orders from the Tambon Head, District Deputy and Provincial Governor respectively. In any case, the NCDC convenes sporadically and the strategic heading it ought to give is not obvious on ground. The National Safety Council of Thailand (NSCT) is an alternate disaster management related agency



saddled with managing technological and man-made emergencies, such as, chemical hazards, domestic related risks, mishap in public venues, fires in tall structures amongst others. NSCT is also responsible for the advancement of policies, national security strategies, rules for organizing such exercises according to the plan. Finally, NSCT is a core agency responsible for stating funding instructions on security related issues. The DDPM which was founded in 2002 is likewise a new organization and it is creating its own particular capacities. It occupies a place on the national scale and in the greater part of the regions (except for Bangkok Metropolitan Area). It is responsible for prompt early warning communication, response to emergencies, and the preparation and mitigation aspect of disaster management. With the establishment of the NDWC, certain of its obligations indicate an overlapping of functions. DDPM has an extremely synergistic approach and performs with every applicable specialized organization like the Thai Meteorological Department (TMD), the Royal Irrigation Department (RID), the Department of Mineral Resources (DMR) and others in exercises, such as, flood readiness and avalanche risk alleviation. The DDPM has a national institute, which is at present directing trainings for its own personnel and certain government stakeholders. It is made up of 12 provincial centers which operate as its outreach centre all over the nation. The DDPM has both obligations for operation because of its indigenous status and strategic guideline, which makes preparation its duties (Jamison, Breman, Measham, Alleyne, Claeson, Evans and Musgrove, 2006).

The NDWC was established and put under the Office of the Prime Minister by regulation B.E.2548. NDWC was established as a point of convergence for multi-hazard and end-to-end early warning system (EWS) for the country of Thailand. The NDWC is an extremely new establishment that has been operating from the mid 2005, and comprises of specialized and managerial personnel backed from different government establishments. This has brought about

the reduction of competencies of the assisting institutions, for instance, through the exchange of researchers and specialists from the Royal Thai Navy, Thai Meteorological Department, Department of Mineral Resources amongst others. At a seminar underpinned by the US IOTWS programme, agents of NDWC unmistakably delineated the office's institutional structure and an idea of operation for a stream of information and policy making. In any case, they were not wide spread or popular to different stakeholders. At first, its order stretched out to right on time warnings especially for tidal waves or tsunamis. However the Center seems to have been instructed by the past Prime Minister to obtain a multi-hazard approach and focus on the whole disaster management framework. This encroaches into a few capacities of the DDPM and is talked about extensively.

Specialized divisions, such as the TMD and DMR are strong and they work together with both the NDWC and DDPM. The absence of a thorough policy arrangement and authoritative structure does restrict this cooperation to a fundamental level. Coordinated efforts with organizations, such as the Department of Public Works & Town Planning (DPT) are more than enough for the purposes of reconstruction phase. Here, generally accessible landslide risk maps are not completely incorporated into their development plans whereas a few activities on disaster complaint construction standards are being worked on. The absence of a general strategy structure that brings together these proficient organizations obviously impedes advancement in the disaster management and response field as a rule for Thailand.

### **2.5.3 Political Environment**

During the post tsunami period, there was extraordinary political will and responsibility to the management of disaster. This commitment was noticed by the expanded budgetary allocation for emergency related exercises and in the formation of the NDWC specifically under the office of

the Prime Minister. It additionally gave backing to reinforcing early warning capabilities of the area. With a new administrative setup after the overthrow in September 2006, the entire political organization was up-turned and every ministerial portfolio reallocated. The panel for improvement of the NDWC and an Early Warning System still rested under the leadership of the individuals hand-picked by the past government. Therefore, improvements of present years have not been faltered. Then again, the pace of exercises in NDWC has unmistakably eased off, with the dethronement of the administrators that made and pushed NDWC to the middle of activity (Jamison *et al.*, 2006).

With the bureaucratic changes actualized in 2002, the Provincial Governors are likewise vested with a considerable measure of authority in managing activities in the region. This activity focuses on helping to execute activities regarding the reduction of risk at the local level. The numerous advisory groups that are obligated at the local level are not generally structured. This shows that the management of disaster was not a necessity especially that significant emergencies have not been a basic event in the history of Thailand. The tsunami that occurred in the year 2004 changed the outlook and the authority's gives an impression of taking emergencies created by the prevalent floods all the more genuinely and with enthusiasm.

## **2.6 Policy Formulation**

As earlier discussed, the lack of a complete policy structure implies that different strategies would work in detachment, bringing about absence of integration between the distinctive stakeholders.

Essentially, there is a lack of a strategy for the coordination of departments and establishments, for example, the DDPM, Public Works and RID. This coordination would enable each one considers the arrangements and undertakings of different organizations and the effects of their

activities. This lack of strategy remains a source of concern when considering mitigating flood disasters. Developmental projects, for example, dwellings and associated infrastructures, like, roads and expressways also do not completely give consideration to the reduction of disaster risk, bringing about escalating emergencies.

The efforts of the Town Planning Department remains response inclined to a large extent. There utilization of existing accessible risk maps and other comparable data is not obviously proactive. Irrespective of the availability of approaches or enactment controlling the utilization of lands and different administration of resources, implementation of these laws is famously discouraging and low. For instance, despite the fact that arrangements were ready for setbacks throughout the reconstruction after the tsunami period, they were not executed completely. Several persons decided to remain near or within territories that are vulnerable. There were few cases of individuals that relocated into the national park zones after the tsunami, and later on gained possession from the Government for permanent residence. In spite of the fact that tourism has being one of the primary sources of foreign trade, in the coastlines, a coordinated effort has yet to be articulated to advertise an idea of tsunami prepared motels and infrastructure for tourism. Throughout the period of response to the tsunami, the lack of regulations and strategies resulted in foreign institutions and NGOs confronting different challenges trying to enlisting themselves and in actualizing their activities. Indeed without clear rules and policies, a few organizations, like, the DMR have faith in the relevance of public enlightenment at the local stage. The constantly assign personnel to the suburbs to instill information concerning the hazard that they are exposed to, for example landslide, and how to plan and cope with them. Despite the shortcomings in strategy and implementation mentioned above, it worth noting that the responsible organizations have genuinely been searching for results. Nonetheless, due to the pace of events that unfolded after the tsunami, they were regularly overpowered with the requests for

explanations to tricky inquiries in regards to setbacks of coastlines, planning for reconstruction, and enforcement. As in different nations, the strain of rebuilding in the coastlines is amazingly high, with regards to private possession of land and the value or quality, individuals put on being near the ocean.

## **2.7 Policy Supporting Disaster Management at all Levels**

In Thailand most of the existing strategies assist in the management of disaster at the national and neighborhood levels. The regional governors are authorized to exercise their coordination controls through the Provincial Civil Defense Committee. This committee embodies government establishments concerned with disasters and, to a degree, specialized and human assets from DDPM regional units. Some establishments which could be termed as important, such as that of Flood Mitigation and Preparedness Committees are secured in territories prone to disasters, to plan and prepare for the intermittent flooding occurrences. Regional governors and other local organizations set up their damage analysis and solicitations for relief, restoration and repairs. In addition, governors may decide to utilize reserved resources of up 50 billion baht that is accessible for key emergencies.

Similarly, at the area level, the District Chief Officer oversees the District Civil Defense Committee, while the Mayor supervises the Municipal Civil Defense Committee. The Tambon Administrative Organization is likewise included in the preparation of yearly plans for emergency and disaster relief. They work in collaboration with the District Committees. Nonetheless, a large portion of these plans at the neighborhood levels, are pointed at emergency response and not as much for mitigation or preparedness. Strategies, as examined, don't generally push for substantive coordinated effort for the reduction of disasters in continuous improvement at these stages (Lebel and Kotum, 2005).

Disasters, Catastrophes and Emergencies are not inclinations; they are independent, unique issues that require different strategies for reacting to their effects. Disaster is an occasion recognized from daily emergencies through four components; Institutions are constrained into various types of collaborations than ordinary; Institutions lose certain of their typical sovereignty; Performance norms is altered and; Lastly more facilitated public sector and or private area connections are needed.

Disasters are different from catastrophes in that: Most or the greater part of the society assembled framework is intensely affected; personnel working at local levels can not carry out their normal work duties; nearly all or major aspects of daily community activities are hindered and; finally assistance that comes from adjacent communities would not be made available.

Resources are described to be either non-living things or living things, economic or social. Hazard are however solved and sorted by its cause, either human-made or natural. The whole strategic management procedure is separated into four fields and this distinction help in distinguishing the procedures. These four fields simply explained comprises the reduction of risk, get ready assets to react to the hazards, reacting to the real harm created by the hazards and constraining further impact (e.g., emergency evacuation, mass purification, quarantine to mention a few), and finally try to get back as close to as possible to the initial state before the hazard episode. The field happens in both the private and public sectors, utilizing the same methods, however with diverse focal points.

Management of emergencies is a key procedure not a strategic methodology. In this regards it's the responsibility of the executive level in an institution to manage emergency. It ordinarily has no immediate authority, however serves in a coordinating or advisory capacity to guarantee that all components of an establishment are kept focused on and concerned with a general objective.

Efficient Emergency Management depends largely on a careful incorporation of disaster arrangements at every level of the establishment, and an understanding that the least levels of the establishment are saddled with the responsibility of dealing with the disaster and obtaining extra funds and support from the higher levels (ISDR, 2004).

The Vietnam and Philippines case studies give two good practical cases of institutional DRM set up at local, regional and national levels. The two frameworks give an additional and fascinating knowledge on methodologies for the establishment of social capitals and incorporation in the local government coordination instruments. They are initiating a general discovery which is such that within every stakeholders in Disaster Risk Management, local governments have a solid proportional edge to be the forerunner in Disaster Risk Management harmonization (not so solid however on response and relief) (ISDR, 2004).

In certain instances, big and well renowned NGOs are generally better prepared to unite different non-governmental and governmental players for the purpose of managing the constraints to DRM. An illustration of this is in India and Gujarat where the post-emergency aid provided by the Self Employed Women's Association (SEWA) was extremely and generally welcomed. This was basically because of numerous components amongst which are that SEWA had an excellent knowledge of the environment and its populace, as it had been working in the impacted regions for over a decade. Secondly, it had encounters from past disasters and a broad grassroots system of members (largely ladies) all around the most impacted territories that made a quick and efficient disaster response profoundly attainable. Thirdly, due to its strong notoriety and institutional impact, SEWA quickly figured out how to acquire tents, medicinal supplies and aid from technical organizations and its distribution. Realistically, certain organizations like WFP, UNICEF and the authorities of the state of Gujarat, directed their relief through SEWA. The

State Government specifically offered money to SEWA, together with bundles of nourishment and therapeutic assistance, for further distribution to impacted individuals of the area. Fourthly, the decentralized and the well coordinated pattern of the distribution system of relief empowered SEWA to give satisfactory and opportune aid as at when needed Tandon and Mohanty (2002).

SEWA also have the capacity to handle the constraint of interdisciplinary responses to emergencies exceptionally well. Since the regions affected by earthquake were still encountering a second year of back to back drought when the quake struck, the test for SEWA was to ensure that aside providing drought assistant; the restoration project had a multi-hazard point of reviewing encompassing cyclone and seismic resistant strategies and also that of drought alleviation strategies. The emergency rehabilitation program discovered ways to exploit a few chances to introduce and co-ordinate earthquake and drought alleviation strategies into the rural development and reconstruction processes. For instance, through the housing rebuilding project, a way of expanding accessibility to water was established by including roof-top rain water collecting structures to the innovative dwellings been developed. Simultaneously in order to give drought assistance, a food security system comprising of dried fodder and cows feeds was also implemented. Finally the actualization of a housing refuge reclamation project which began after a participatory, owner driven methodology, also assisted towards mitigation the effect of the disaster experienced.

An analysis was carried out to compare all the highlighted case studies with fewer applicable but excellent encounters in community-based trainings and capacity building for Disaster Risk Management. The Mozambique's case researchers believe depicts an intriguing experience of a GTZ backed project in Buzi District after the floods of the year 2000. The Gestão de Risco de Calamidades (GRC) and GTZ Project assumed the front role in Buzi particularly with regards to



post-disasters aid and response. After the flood, GTZ took part in the rehabilitation of damaged health centers and schools, and helped the Government in the creation a local disaster management system. The system that was formed comprises of:

- a) The institutionalization of neighborhood advisory groups for disaster management in the district of Buzi;
- b) Providing neighborhood advisory groups with essential items for enhanced early warning, response and rescue purposes;
- c) The advancement of trainings and workshops on the prevention of disaster, excellent response and preparedness;
- d) The presentation of innovative agricultural methodology and new farm produce or the reinforcement of indigenous crop.

In every community, a group, comprising of seven (7) volunteers, stands for the GRC. This panel likewise operates as a team with neighbourhood traditional government. Their focus is to gather individuals residing in low-lying locations to relocate to more secure spots.

In Honduras, the establishment of a local governance framework was the cardinal point of attention to managing disaster. This framework comprising of local authorities assume responsibility for disaster and its management, whenever the needed arises. In this regard numerous shortcomings that were identified here exceed the particular issue of “disasters”. The development of local people oriented and managed establishments make available an institutional structure for disaster management. This management broken into phases would have particularly interest in the phase of prevention and throughout the immediate period of the disaster. At such phases, the local or neighborhood government is available to facilitate the request for outside post-emergency mediations. Actually the formation of independent emergency frameworks in most disaster may be counter-productive. It should be a component of

the weave and woof of local institutionalization since it has been originally in environmentally negligible communities.

## **2.8 Challenges of Local Organizations in Disaster Risk Management**

The case studies investigated have revealed extensively that local establishments are most times not ready to react effectively to disasters situations. For instance, the floods of the year 2000 and cyclones that took place in Mozambique revealed that no definite projects or arrangements for reacting to and managing the disaster existed. This activities meant to react to and manage disaster includes response, evacuation and preparedness. The settlements also did not foresee an occasion or event of such magnitude, thereby hindering suitable reactions and responses, especially to early warning. A percentage of the major parts of institutional limitations recognized for Mozambique is also applicable and yet appropriate to a large portion of the other case studies are as follows:

- The absence of institutional coordination to react to circumstances of compelling need;
- The use of unreliable instruments for transfer of information between diverse levels of the organization;
- There is an obvious absence of productive channels and systems to disseminate information on the peculiar natural hazards management to groups that truly require such information;
- The centralization of policy making at the national level and non-adaptable strategies for dissemination of information from bottom to the top. Therefore, most of the choices made do not reveal the desires and needs of the individuals on the ground;
- The incompatible connections between the diverse forces made in a setting of new democratization. At the neighborhood level, there is no definition which has been agreed

upon for the responsibilities of the customary and regulatory authorities. This situation often brings about conflict that could have an adverse impact on institutional coordination in the management of disaster;

- Inadequate coordination with contributors and inadequacy of testing their impositions/conditions of where and how to give help.

An additional key aspect has to do with accountability. Most of the researchers of case studies investigated have enlisted their undivided concern for the manner in which disaster relief are distributed to affected individuals which process are overseen by the local authority (non-formal and formal). This appears to be a territory where “outsiders” are accorded a comparative advantage though the fact remains that this requires to be supplemented with local appreciation of who are the most susceptible individuals and where their living quarters is located. The recommendations emanating from Burkina Faso, Iran and Niger is that vulnerability appraisal and the dissemination of relief ought to be managed by both the local people and NGOs. This appears to be a particular sign of the more extensive issue of representation of marginal group of people and appears to be especially apparent, for instance, for pastoralist individuals influenced by drought spell.

Moreover, while institutionalized government organizations don't tackle the differential susceptibility of groups, the informal social groups perform the task of being a channel for the redistribution of relief support to the most susceptible throughout emergency situations. Since support for rehabilitation is typically given on the foundation of complete and not relative misfortune experienced by families, the less privileged families sustain excessively more misfortunes.

Majority of loans from corporate establishments like banks go to the privileged ones and middle income individuals in local areas. This is largely because of insurance pre-requisites and their ability to meet the demands. The less privileged ones are forced to borrow cash from relatives without premium or local money lenders with high premium rates, particularly throughout the season of scarcity. Local micro finance establishments don't appear to be the most fitting apparatus for circulating credit to encourage recuperation in territories. This is because these micro finance establishments are largely insignificant to these communities which are repetitively susceptible to natural emergencies. Since local organizations that incorporate extremely poor customers will have a tendency to be more susceptible to natural emergencies, the greater challenge is between attending to the less privilege (and disaster susceptible) group of individuals and budgetary sustainability. The planning apparatus for systematic disaster preparedness to create and consistently up-date emergency plans are noticeably exempted is the normal basic practice.

Public enlightenment, guidelines and realistic training are necessary and required for communities. Also local authorities are employed specifically, to establish an environment whereby emergency planning turns into a general practice. The most prominent disparity can be seen between rural development planning and DRM. Amongst the nine case studies, the one at Philippines was the only case where Disaster Risk Management exercises were unmistakably consolidated and in accordance with provincial development plans.

## **2.9 The Nigerian Context**

The formation of the National Emergency Management Agency (NEMA) was the first conscious effort of the federal government of Nigeria at addressing the issue of Disaster risk management in Nigeria. Considering its scope of operations, it became obvious that enforcement agencies

needed to be drafted to assist the agency resulting in the collaboration between NEMA, the Nigerian Police Force (NPF), Nigerian Security and Civil Defense corps (NSCDC); the Nigerian Red Cross Society, the Fire Service (FS), Ministry of Lands and Housing, Ministry of Information, Nigerian Armed Forces and other relevant government establishment and Non Governmental Organizations' (NGO's).

NEMA collaboration with these agencies and organization are for some “as the situation present itself” while for others like the NPF, NSCDC, the Nigerian Red Cross Society their presence at every emergency situation is important and vital to the rescue and recovery effort.

### **2.9.1 Building capacity at the State Levels**

In the view to build capacity to respond to disaster rescue and recovery operation, NEMA established State Emergency Management Agency at the state level and went further to educate the states on the need to establish an Emergency Management Agency at the Local Government Area (LGA) levels.

For some states such as the study area – Niger State could be adjudged as living up to the expectation. After the formation of the Niger State Emergency Management Agency (NSEMA) and the state government through the Local Government council chairmen established Local Government Emergency Management Committees in all the Local Government Areas of the state. These Local Government Emergency Management Committees liaise with the NSEMA on emergency and where beyond their capacity request for assist from NEMA.

This method of collaboration has proved effective especially during the floods of 2012, where some LGA's in Niger State were practically submerged by flood water.

## **CHAPTER THREE**

### **3.0 RESEARCH METHODOLOGY**

#### **3.1 Introduction**

In carrying out this work, certain methods were used. This chapter explains in depth, the procedures followed in arriving at the inference of this research work. Research decision is the framework for assessment of a research problem or in other words refers to the methods used in collecting data, which are to be used in investigating and analyzing a research problem.

#### **3.2 Research Design**

Research design is the arrangement on how the individual conducting the research intends to do his examination work. It is a deliberate arrangement of what needs to be carried out or achieved and how the information will be dissected. Research design essentially demonstrates what the significant themes in the examination are and their points of interest. It gives an overview of how the research would be done and the techniques that will be utilized. It incorporates an abstract of the investigative study, instruments of description of the research design, independent and dependent determinants, the presumptions and shortcomings of the investigation, research question chain of command, techniques for sampling the data and an arrangement for the dummy information demonstrating how information would be displayed.

The survey design used in this research points identified the institutional capacity for the management of fire disaster in Niger State. It is an appraisal form of research utilizing the instrument of questionnaires and individual interviews for obtaining data from the respondents.

#### **3.3 Source of Data Collection**

The study employed both primary and secondary data to achieve its objectives. The secondary data is derived from library documents, publications on Internet, and relevant materials to be

research. The primary data were obtained through questionnaires. The study incorporates both sources of data to enhance a balance between the research observation and available literature on the matter under consideration. This is always believed to promote objectivity. The framework, strategy and plan of examination are considered in order to get answers to research issues. It guarantees that the obliged information are gathered and they are precise. Be that as it may, the primary source of data utilized as a part of this study is gotten from Niger State Emergency Management Agency, Directorate of Fire Service and Nigeria Security and Civil Defense.

### **3.4 Method of Data Collection**

The gathering of relevant data, using appropriate instrument is the bedrock of any research. In this assessment two methods were employed on gathering the requisite data; questionnaire and personal interview.

#### **(a) Questionnaire**

The questionnaire serves as a major tool for the collection of data for the study. It is divided into two sections. Section (a) which provided Bio-data about the respondents and section (b) provided information which was used in the analysis. The questionnaire of the study were distributed to the identified disaster management agency in the state

#### **(b) Interview**

This method was adopted in order to increase the depth of the study as well as obtain sensitive and salient information about the issue under consideration which could not be obtained via the questionnaire. In short, the interview provided an opportunity for meeting with the head of the fire stations visited and discussion helped supply other pertinent information which greatly assisted in the findings made.

### **3.5 Sampling Techniques**

Sampling techniques are methodologies utilized as a part of statistical analysis whereby a decided number of observations would be obtained from a larger populace. The simple random sampling method was utilized for this study. The sample frame of this research is the related agencies that were involved in managing the occurrence of disasters in Niger State which are Niger State Emergency Management Agency, Niger State Fire Service and Nigeria Security and Civil Defense Corps, Ministry of Information and communication, Ministry of land and Housing, Ministry of Environment etc. However for this survey, NSEMA, Niger State Fire Service and NSCDC were the focal points.

### **3.6 Method of Data Analysis**

The data collected in this study were analyzed statistically by the use of frequency tables and percentage.

### **3.7 Sample of Questionnaire**

The research questionnaire was divided into four section comprising the bio-data, personnel management, Equipment management and Observations.

#### **Sample:**

##### 1) BIO - DATA

Sex: Male or Female

Age:

Marital Status:

Family size:

Locality:



## 2) PERSONNEL MANAGEMENT

Number of Staff in Station:

Highest qualification:

Field of study:

Length at present employment:

Length at previous employment:

Level:

Annual Salary:

Last training attended:

Latest professional certification attempted:

## 3) EQUIPMENT MANAGEMENT

Number of Stations:

Number of Fire Engine:

Number of Fire apparatus:

Functionality of engine:      Low    Optimal    High

## 4) OBSERVATIONS:

Awareness level in the locality: 10% - 100%

Rate of response:                      10% - 100%

## **CHAPTER FOUR**

### **4.0 PRESENTATION OF DATA AND DISCUSSION**

#### **4.1 Introduction**

The chapter illustrates the combined and analyzed data obtained from the agency managing disaster in the state. The research focused on three agency mainly responsible for managing Disaster, which are; Niger State Emergency Management Agency (NSEMA), Niger State Directorate of Fire Service, and Nigeria Security and Civil Defense Corps. The data collected were analyzed and subjected to simple test to ascertain the degree of validity. Questionnaires were the fundamental tool used for collection of data for this study. The analysis was principally based on two techniques the frequency and percentages technique.

## 4.2 Assessing the Capacity of the Institution Managing Disaster in Niger state.

**Table 4.1: Disaster Management Agency**

<b>Agency</b>	<b>Ownership</b>	<b>Statutory Objective</b>	<b>Service Rendered</b>
<b>NEMA</b>	<b>Federal Government</b>	Formulate policy disaster management in Nigeria and co-ordinate the plans for efficient and effective response to disasters in the country.	Distribution of emergency relief materials to victims disaster in the county
<b>NSEMA</b>	<b>State Government</b>	Respond to disaster within the State and may seek assistance from the NEMA when damage and need assessment are considered beyond the state's capacity of response	Carrying out disaster management activities in the State
<b>STATE FIRE SERVICE</b>	<b>State Government</b>	The Fire Service shall be employed for the extinguishment, control and prevention of fire, the saving and protection of life and property and for such other humanitarian and other works	Ensuring safety of lives and property through the establishment and monitoring of standards in: Fire Prevention, Fire Education and Training and Fire Statistics
<b>NSCDC</b>	<b>Federal Government</b>	To provide protection, crisis resolution and security to public infrastructures.	Assisting in the maintenance of peace and order and in the protection and rescuing of the Civil population during the period of emergency.
<b>RED CROSS</b>	<b>Non- Governmental Organization</b>	To protect human life and health, to ensure respect for all human beings, and to prevent and alleviate human suffering.	Humanitarian Services
<b>THE NIGERIAN POLICE</b>	<b>Federal Government</b>	Defense and internal security of the nation	Defense and internal security of the nation

Source: Author's Analysis, (2013)

**Table 4.2: Staff Strength of Disaster Management Agencies in Niger State**

Agency	No of Staff	Gender (M/F)	Percentage %
NSEMA	22	14/8	22.9
FIRE	14	10/4	14.6
NSCDC	60	34/26	62.5
<b>TOTAL</b>	<b>96</b>	<b>58/38</b>	<b>100</b>

**Source: Field Survey, (2013)**

From the field work, it was discovered that the total of 96 personnel were in charge of disaster management in Minna, 22.9% of them are from Niger State Emergency Management Agency, 14.6% are from the directorate of fire service while 62.5% are from Nigeria Security and Civil Defense Corps.

**Table 4.3: Personnel Strength by Professions**

Agency	Staff	Professional/Technicians	Administrative/Managerial	Clerical
NSEMA	22	17	3	2
Fire Service	14	11	2	1
NSCDC	60	46	7	7
Percentage %	-	75%	12.5%	10.5%

**Source: Field Survey, (2013)**

From table 4.3, it shows that 77% of the personnel in disaster agency were professionals in the field of disaster management, 12.5% are administrative and managerial staff, while 10.5% are clerical and messenger.

**Table 4.4: Level of Education**

<b>Educational Qualification</b>	<b>No of Staff</b>	<b>Percentage (%)</b>
Ph.D	0	0
M. Sc / M. Tech	9	9.4
B.Sc / B.Tech	37	38.5
HND/OND	29	30.2
SSCE	21	21.9
<b>Total</b>	<b>96</b>	<b>100.0</b>

**Source: Field Survey, (2013)**

The analysis in Table 4.4 indicate that 9.4% of the respondent has either Master of Science or Master of Technology in various field related to disaster mostly in environmental sciences, while 38.5% posses first degree in environmental disaster related fields, 30.2% have Higher National Diploma or Ordinary National Diploma and 21.9% are Secondary school certificate holders, which consist mainly of clerical staff and messengers in the various agencies.

**Table 4.5: Level of Experience in Disaster Management Field**

<b>Years of Experience</b>	<b>No of Staff</b>	<b>Percentage (%)</b>
1 - 5 Years	67	69.8
6 - 10 Years	12	12.5
11 - 15 Years	7	7.3
16 - 20 Years	6	6.3
20 years and above	4	4.2
<b>Total</b>	<b>96</b>	<b>100.0</b>

**Source: Field Survey, (2013)**

From Table 4.5, it can be seen that 69.8% of the personnel have 1-5 years working experience, 12.5% of the total staff have 6-10 years working experience, 7.3% have acquire 11-15 years working experience, 6.3% have 16-20years working experience, while 4.2% have been working in disaster related environment for 20 years and above. It was also discovered that majority of

the staff were transferred from different department and/or ministry into the disaster agency. It is only specialized firemen that were originally employed for the field for the number of years they have served.

### 4.3 Capacity of the Niger State Fire Service Agency

**Table 4.6: Capacity of Fire Service Stations**

LGA (I)	Standard No of Station (II)	Available No (III)	Deficit (II – III)
AGAIE	3	0	3
AGWARA	3	0	3
BIDA	5	1	4
BORGU	5	0	5
BOSSO	5	0	5
CHANCHAGA	7	3	4
EDATI	3	0	3
GBAKO	3	0	3
GURARA	3	0	3
KATCHA	3	0	3
KONTAGORA	5	1	4
LAPAI	5	1	4
LAVUN	3	0	3
MAGAMA	3	0	3
MARIGA	3	0	3
MASHEGU	3	0	3
MOKWA	3	0	3
MUYA	3	0	3
PAIKORO	3	0	3
RAFI	3	0	3
RIJAU	3	0	3
SHIRORO	3	0	3
SULEJA	5	1	4
TAFA	3	0	3
WUSHISHI	3	0	3

**Source: Niger State Fire Service, (2012)**

The Local Government Area structure in terms of development and population in Niger state is divided into, 5 urban Local Government Areas and 20 rural Local Government Areas. The data collected from Niger State Fire Service Department shows that each Local Government Area that

is developed is expected to have a minimum of three (3) fire stations. In addition it was review that for Local Governments in urban areas the standard is a minimum of five (5) and the state capital should have at least seven (7) stations including a special station for in-housing training. From the Table 4.6 which evaluates the capacity of the Niger State fire service based on the number of fire service station(s) available reveals that only 4 Local Government Areas have at least one fire service station, while remaining Local Government Areas do not have a fire service station.

**Table 4.7: Capacity of the Fire Service Engines**

LGA (I)	Standard No. of Fire Engine (IV)	Available No. (V)	Deficit(IV – V)
AGAIE	3	0	3
AGWARA	3	0	3
BIDA	5	1	4
BORGU	5	0	3
BOSSO	5	0	3
CHANCHAGA	7	3	4
EDATI	3	0	3
GBAKO	3	0	3
GURARA	3	0	3
KATCHA	3	0	3
KONTAGORA	5	1	4
LAPAI	5	1	4
LAVUN	3	0	3
MAGAMA	3	0	3
MARIGA	3	0	3
MASHEGU	3	0	3
MOKWA	3	0	3
MUYA	3	0	3
PAIKORO	3	0	3
RAFI	3	0	3
RIJAU	3	0	3
SHIRORO	3	0	3
SULEJA	5	1	4
TAFA	3	0	3
WUSHISHI	3	0	3

**Source: Niger State Fire Service, (2012)**

The capacity of the Niger State Fire Service personnel to respond to disaster in the state based on the number of fire fighting machines available is illustrated in the Table (4.7). It is obvious that none of the Local Government Areas in the state meets the stipulated standard of fire fighting machine each Local Government Area should possess to combat fire incidence in their localities. From the table, only four (4) local governments have fire fighting machines.

**Table 4.8: Staff strength of Niger State Fire Service**

LGA	Standard No. of Firemen	No. of Available firemen
AGAIE	63	2
AGWARA	63	1
BIDA	105	22
BORGU	105	2
BOSSO	105	0
CHANCHAGA	147	42
EDATI	63	0
GBAKO	63	0
GURARA	63	0
KATCHA	63	0
KONTAGORA	105	0
LAPAI	105	10
LAVUN	63	0
MAGAMA	63	0
MARIGA	63	0
MASHEGU	63	0
MOKWA	63	0
MUYA	63	0
PAIKORO	63	0
RAFI	63	0
RIJAU	63	0
SHIRORO	63	0
SULEJA	105	14
TAFA	63	0
WUSHISHI	63	0

**Source: Niger State Fire Service, (2012)**

Table 4.8 examines the available number of firemen against the expected number of firemen each Local Government Area of the state should have. Each fire service station is expected to



have a total of 21 firemen, consisting of 4 Crew (working on three shifts), 4 Drivers, 4 Rescue men and 1 Officer in-charge of the station. Therefore, each local government is expected to have a minimum of 21 firemen per station multiplied by the number of fire stations in the area. The rural areas should have at least 63 firemen, while the urban areas which include Bida, Borgu, Kontagora, Suleja are expected to have 105 Firemen. The state capital which should be able to boast of 7 fire stations is expected to have 147 Firemen. From the above data it is clearly seen that none of the local government meet the standard requirement of Firemen. The state capital with three available Fire Stations has only 42 Firemen. Bida with one Fire station has 22 Firemen and Suleja also with one fire station has 14 firemen. Agaie, Agwara and Borgu without an existing fire station or fire engine have 5 Firemen. This also shows that there is no relative balance in the allocation of firemen in the Niger State Fire Service.

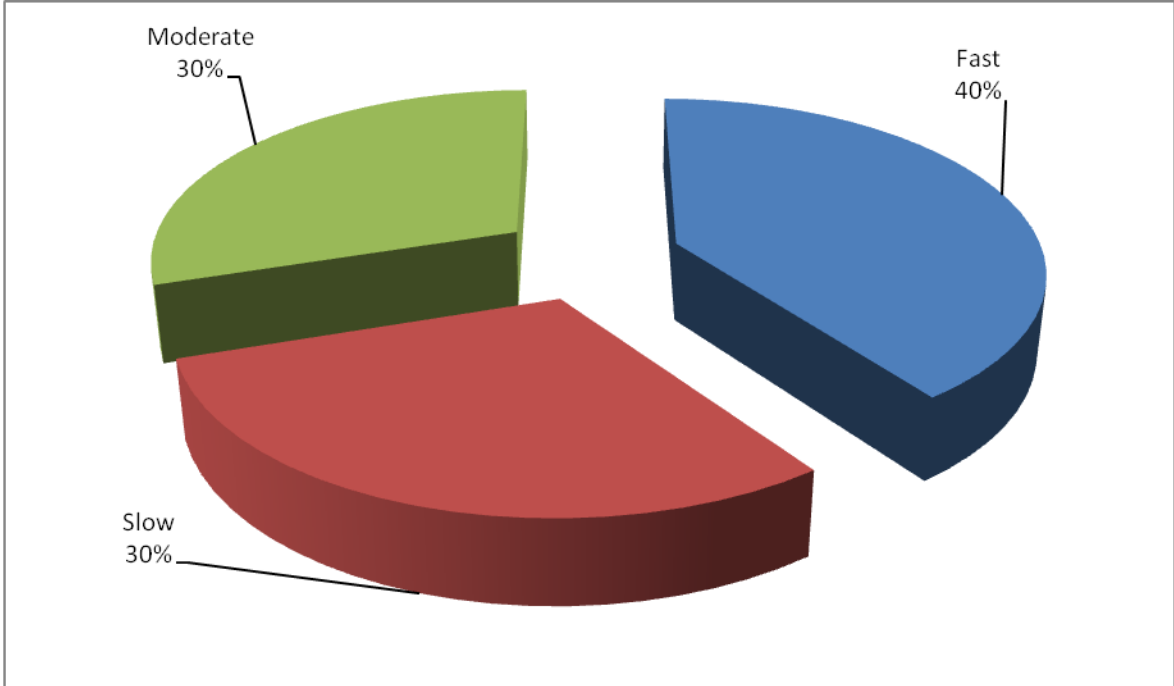
**Table 4.9: Records of Loss of lives and Properties per month due to Fire Disaster in 2011**

<b>Month</b>	<b>Loss of lives</b>	<b>Estimate of Loss of Properties (=N=)</b>
January	4	5million
February	2	2.5million
March	-	6.5million
April	4	4million
May	1	7million
June	-	3.5million
July	3	3.7million
August	3	2.3million
September	4	10million
October	7	6.8million
November	3	12million
December	8	19.6million

**Source: Niger State Fire Service, (2012)**

Table 4.9 shows that result in loss of property estimated in millions of Naira and the figures keeps increasing monthly. The number of lives lost monthly due to fire incidences in the year 2012 revealed that December 2011 recorded the highest number of lives lost to fire disaster.

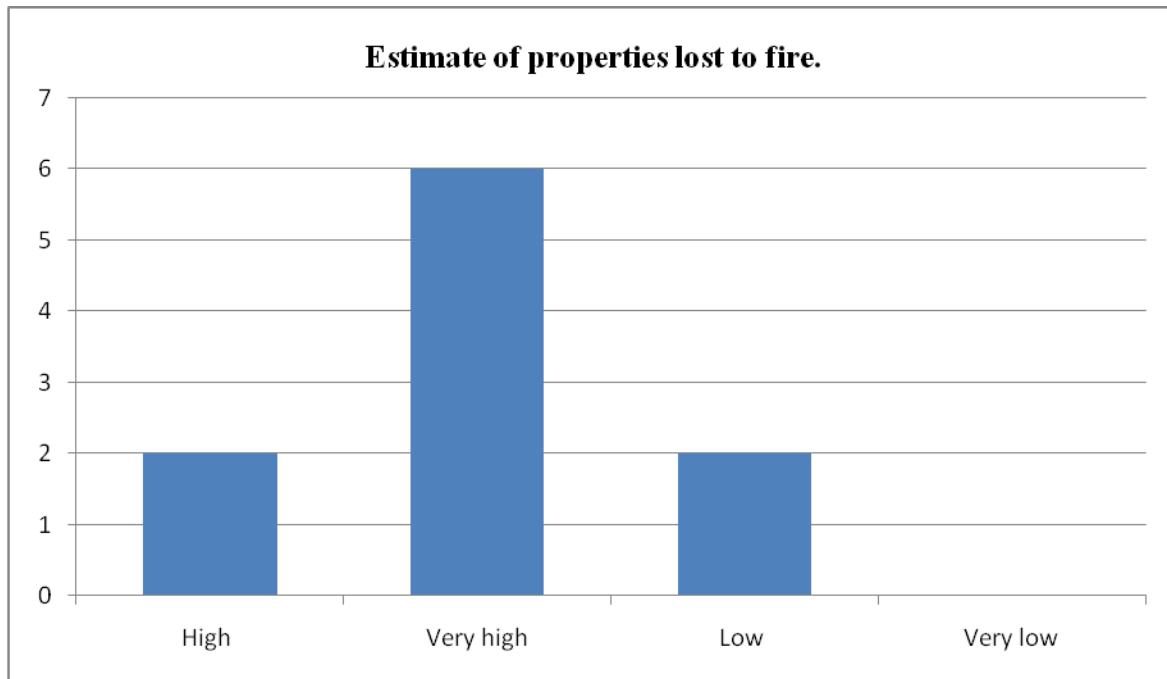
The above tables 4.10, illustrates the grave consequences faced by the Nigerlites and its resident due to the past neglect in building the capacity of the fire service to respond to fire incidences in the Niger State. A continuous neglect of this agency would be disastrous considering the speed at which fire spreads and the huge havoc it causes.



**Figure 4.1: Rate of Response**  
**Sources: Field Survey, (2012)**

The above figure 4.1 shows in percentage how responsive the Niger state fire agency would be in the event of a fire incidence. From the figure, 40% of Niger State Fire service staff feel that their response to fire emergency is fast and quick, while 30% were of the view it is only moderate and another 30% are of the view that the response to fire disaster is slow. The rate of response to fire disaster is important because at faster rate more lives and properties can be saved. Also important to note is that the attitude of staff to their core job functions – protections of lives and properties from fire incidence is something that should not be overlooked. At a relatively slow or moderate rate, more lives and properties will be lost. It is obvious that there is improvement in terms of

response to fire disaster but a lot more commitment is require from Government, citizens and staff to reduce the damage fire disaster cause.



**Figure 4.2: Estimate of Properties Lost to Fire Disaster**  
**Sources: Field Survey, (2012)**

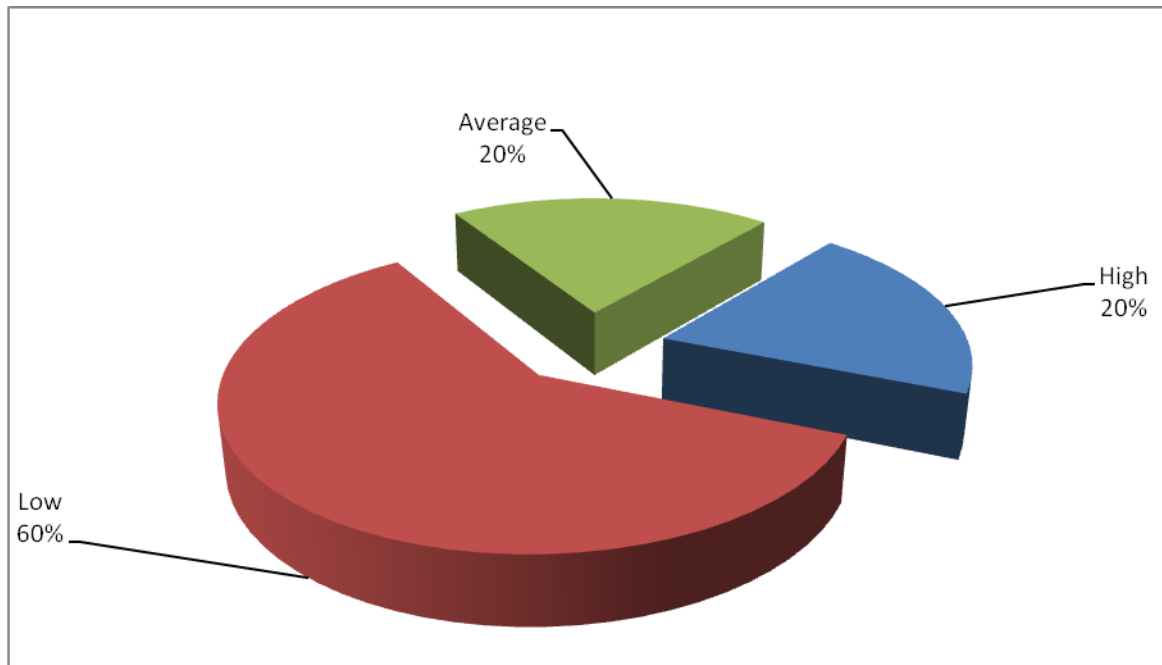
Frequent loss of structures and building is an indication that the rate of development in the managing fire disaster is slow or retarded. Figure 4.2 indicates that 60% of the respondents in Niger state fire service opined that the estimate of loss of properties due to fire disaster is very high in many areas. This reveals that lost of structures, buildings among others is on the increase.

**Table 4.10: Functionality of Facilities/Equipments.**

<b>Response</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Satisfactory	5	50
Not Satisfactory	5	50
<b>Total</b>	<b>10</b>	<b>100</b>

**Sources: Field Survey, (2012)**

Fire-fighting equipment is fundamental to effectiveness of fire service agencies. A poorly equipped fire service agency will not be effective. From table 4.10, 50% of the respondents in fire service agency in Minna were of the view that the equipment required for fighting fire are satisfactory and another 50% were of the view that it is not satisfactory.

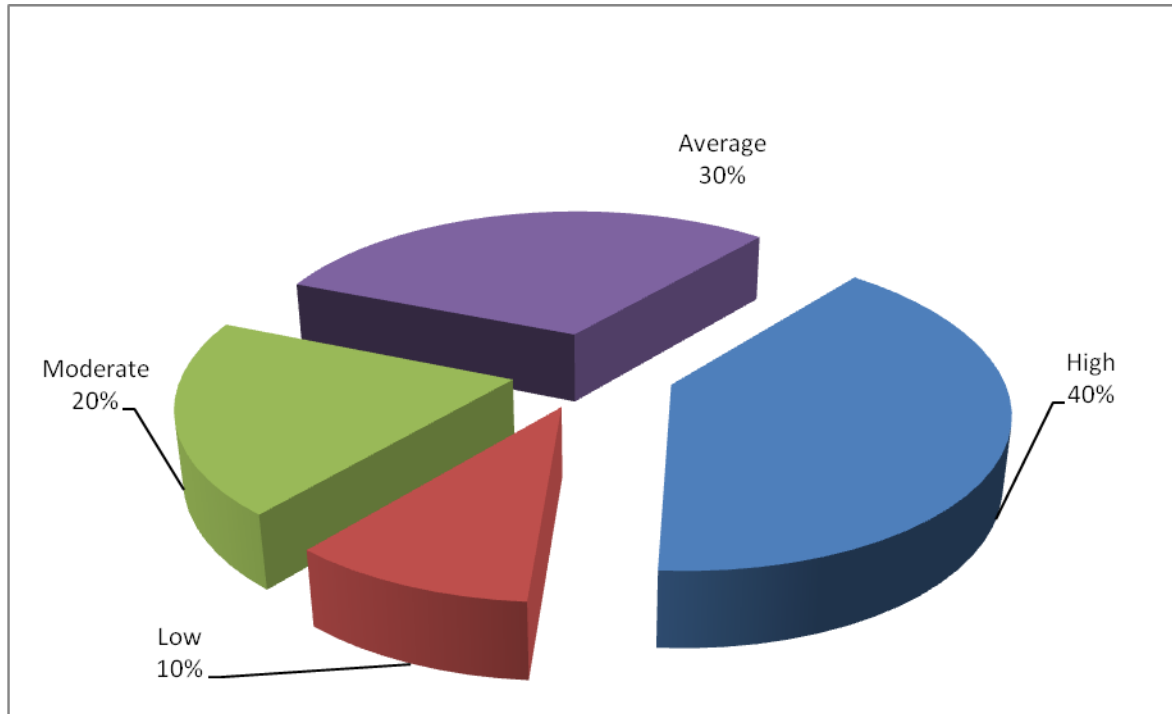


**Figure 4.3: Extent of Awareness on Fire Disaster.**

**Sources: Field Survey, (2012)**

Figure the above figure 4.3, indicates that 60% of the respondents are of the view that the awareness level of the populace is low as far as fire disaster is concerned. It also shows that 20%

were of the view that awareness level is high and another 20% were of the view that the awareness level is average.



**Figure 4.4: Vulnerability Rate of Fire Disaster in Minna.**  
**Sources: Field Survey, (2012)**

The vulnerability rate is one index that will show how likely the incidence of fire disaster will occur in a particular area. Figure 4.4, indicates that there is high vulnerability of disaster in Minna. Hazard identification and vulnerability assessment is important in determining the vulnerability rate of area. Also, 40% of the respondents were of the view Barkin Sale and Chanchaga areas of the Minna metropolis are highly vulnerable to fire disaster, while 30% reveals that Shango area of the Minna metropolis is at average of vulnerability to fire disaster, 20% and 10% of the respondents indicated that Tunga areas of the Minna metropolis vulnerability to fire disaster is at the rate of moderate and low respectively.

## **4.4 Summary of Findings**

### **4.4.1 Staff Strength of Disaster Management Agencies in Niger State**

From the field work carried out, the three agency randomly sampled are NSEMA, Fire Service and NSCDC. The NSCDC is 100% federal government owned, while the Fire service has a federal and a state component. Finally NSEMA is a state government agency with collaboration from the federal arm- NEMA. It was discovered that for the above identified agencies, a total of 96 personnel were in charge of disaster management in Minna, 22.9% of them are from Niger State Emergency Management Agency, while 14.6% are from the directorate of Fire Service and 62.5% are from Nigeria Security and Civil Defense Corps.

Table 4.3 and 4.4 goes further to show the quality of staff managing disaster in these agencies. It reveals that 75% of the personnel in disaster agency were professionals in the field of disaster management, 12.5% are administrative and managerial staff, while 10.5% are clerical and messenger. The analysis in table 4.4 indicate that 9.4% of the respondent has either Master of Science or Master of Technology in various field related to disaster mostly in environmental sciences, 38.5% have first degree in environmental disaster related fields, 30.2% have Higher National Diploma and Ordinary National Diploma and 21.9% has school certificate mainly clerical staff and messenger in various agencies.

Table 4.5, shows the level of experience in disaster management; 69.8% of the personnel have 1-5 years working experience, 12.5% posses 6-10 years working experience, 7.3% have 11-15 years working experience, 6.3% of the staff have 16-20years working experience, while 4.2% have 20 years experience and above. It was also discovered that majority of the staff were transferred from different department and/or ministry into the disaster agency. The fire service was the only agency that employed the bulk of its field officer directly.

#### **4.4.2 Capacity Building Efforts of the Agency**

The data collected from Niger State Fire Service Department shows that each Local Government Area, should have a minimum of three (3) fire stations. Local Government Areas that are in urban areas are to have minimum of five (5) fire stations and the state capital is expected to have Seven (7) fire stations including a special station for in-housing training. From the available data it was seen that none of the local government area in the state meet the stipulated standard.

Table 4.7, evaluates the manpower requirements of the Fire Services, It shows the standard number of firemen each of the local government area is expected to have as against what is available. Each station is expected to have at least 21 firemen that are made up 1 Officer in-charge of the station, 4 Crew working each on three shifts, 4 drivers and 4 rescue men. With this as a basis, it is expected that each Local Government Areas should have at least 63 fireman for the three (3) standard number of station it should possess. It is pertinent to note that not even one Local Government Area meets this standard. There it becomes obvious from the tables 4.6 and 4.7 that there is an urgent need for a deliberate government intervention in the aspect of construction of more fire service station, fire service machines and employing more trained firefighters. It is also amazing to point out that there has been a poor balance in the allocation of firemen in the Niger State Fire service.

From data obtained, although no local government areas meets the standard number of Firemen, the state capital with three (3) available Fire Stations has 42 Firemen, Bida with 1 Fire station has 22 Firemen and Suleja also with 1 fire station has 14 firemen. Agaie, Agwara and Borgu without an existing fire station or fire engine have 5 Firemen. The question is where do the 5 firemen daily report for duty and in the event of fire incidence of what use would the firemen be to the community without a station and equipments?

Figure 4.1, graphically reveals the opinion shared by staff of Fire Service on how responsive the agency has been to fire incidences. It shows that 40% of the staff of the Fire Service feels their response to fire emergency is fast and quick, while 30% say it is only moderate and another 30% are of the view that the response to fire disaster is slow. For an effective and efficient managing of fire incidences, the rate of response to fire disaster is important and must be fast. It is obvious that there is need for great improvement in this regards.

Apart from Hazard identification and vulnerability assessment, the vulnerability rate is one index that will show how likely the incidence of fire disaster will occur in a particular area. Figure 4.4 indicates that there is high vulnerability of disaster in Minna. 40% of the respondents were of the view that vulnerable areas in Minna are high, while 30% says the rate of vulnerability in Minna is at average, 20% indicates that it is moderate and 10% says the vulnerability rate is low. These are some indices that should really draw Government to act in the area of political will, enforceable legislation and proper budgetary allocation.



## CHAPTER FIVE

### 5.0 CONCLUSION AND RECOMMENDATIONS

#### 5.1 Conclusion

Capacity issues are being taken very seriously by African leaders as well as Africa's development partners. Capacity in the context of Africa is about capacity for development: capacity to promote democratic governance, to invigorate the strength of civil society to contribute to national development, to improve the structures and institutions of economic policymaking and to create an environment of social empowerment for the people where they can meaningfully contribute to decisions that affect their life and the development process.

The incessant cases of fire disaster in Niger state resulting into loss of lives and properties needs to be addressed speedily and appropriately. Information and data are highly essential in all developmental plans and particularly in managing disaster adequately.

Based on this, the project seeks to gather useful and relevant data for use with the understanding that fire disaster can retard development. The issue of fire safety is essential and is everybody's business. Attempting to study the scenario making town and cities prone to fire disaster is paramount and imperative. Inadequate fire safety equipments, man-power and appropriate funding of the agency responsible for fire disaster is a serious problem affecting the performance of the agency; seven (7) fire stations are expected to be in Minna only three (3) are provided by the government, therefore firemen in Tunga Fire Service station cannot effectively attained to a fire disaster in Shango or Chanchaga area in an appropriate time.

This entails the availability of the human, material and financial resources as essentials for efficiently managing the institution and the identification and recruitment of personnel with the required knowledge, expertise, experience, competence and leadership to manage the institution.

Essentially, it is about unbundling the creative energies of the people, improving those energies and providing the legal, institutional and material context in which those energies will flourish.

## **5.2 Recommendations**

The research assessed the capacity disaster management agency in Niger State and identifies the capacity gaps in institutions and sectors of governance and provides recommendations for filling those capacity gaps based on the experiences and suggestions. However, addressing the key challenges to capacity building in Niger State and Nigeria in general, it will require two critical measures. The first is to ensure that the political leadership is aware of the need for continuous institutional capacity building for disaster managers and sustainable human development. The second is to empower the people so that they, too, are aware of its importance, are vigilant and expose capacity gaps and insist on continuous institutional capacity building.

The following measures are recommended to improve the capacity of institutions responsible for managing fire disaster in Niger state and Nigeria as a whole. These are;

1. Improve and strengthen the Policy and Legislative of Disaster management in the State
2. Empower the Institutional Environment for effective disaster management
3. Policy support for disaster management at all level
4. Proper funding to disaster management agencies and to disaster management activities.
5. Greater awareness on disaster, its effect and mitigation.

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