

AN ANALYSIS OF THE IMPACT OF RADIO ON  
DISASTER MANAGEMENT AWARENESS  
A STUDY OF SOME SELECTED RADIO LISTENERS IN  
YOLA METROPOLIS.

BY

FAISAL MOHAMMED BELLO  
2010230

BEING A PROJECT SUBMITTED TO THE COLLEGE OF  
CONTINUOUS EDUCATION, ADAMAWA STATE  
POLYTECHNIC, YOLA

DECEMBER, 2012

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BEING A PROJECT SUBMITTED TO THE COLLEGE OF  
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IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR  
THE AWARD OF NATIONAL DIPLOMA IN MASS  
COMMUNICATION

**DECEMBER, 2012.**

## CERTIFICATION

This is to certify that the project work titled "an analysis of the impact of radio on disaster management awareness" was carried out by me with ID No. 2010230 and has been read and approved by the undersigned as meeting the requirements.

\_\_\_\_\_  
Name of Supervisor

\_\_\_\_\_  
Sign

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of Coordinator

\_\_\_\_\_  
Sign

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of External Examiner

\_\_\_\_\_  
Sign

\_\_\_\_\_  
Date

## **DEDICATION**

This project is dedicated to Almighty Allah, my beloved father and mother.

## **ACKNOWLEDGEMENT**

My profound gratitude first and foremost goes to almighty Allah for his guidance and protection given to me, I also thank my project supervisor Mr. Abel Yerima for his relentless effort in correcting every draft of this work, making constructive criticism and suggestions where necessary. Thank you.

I also wish to thank my brothers, sisters as well as my friends, thank you very much.

## **ABSTRACT**

This research examines the impact of radio on disaster management awareness in Nigeria. This is an x-ray to the role of radio as an information outlet for creating awareness on disaster management. The research study identified as problems like un-affordability of communication and effective government policy. The objective of the study was based on the importance of radio on disaster management, awareness, technical capacity, government policy, funding, and capacity building. The literature review involves theoretical and conceptual analysis of disaster management in Nigeria. The data collection technique involves gathering elements with a view to finding the research problem. Simple percentages and t-test were used in analyzing the collected data.

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## CHAPTER ONE

### INTRODUCTION

#### 1.0 BACKGROUND OF THE STUDY

Disaster as a concept is viewed differently by scholars. Although there is no universally accepted definition of a disaster.

Disaster relief specialists Frederick C. Cuny (1994-1995) sees disaster as a "situation resulting from an environmental phenomenon or armed conflict that produced stress, personal injury, physical damage, and economic disruption of great magnitude".

Consequently, World Health Organization (WHO) terms a disaster as "the result of a vast ecological breakdown in the relation between man and his environment, a serious and sudden disruption on such scale that the stricken community needs extraordinary efforts to cope with it often with outside help or international aid. Where as, "The U.S Federal Emergency Management Agency (FEMA) describes disaster, "as any occurrence of a natural catastrophe, technological accident or human caused event that has resulted in severe property damage, deaths, and or multiple injuries.

However, the Director (Disaster Research Centre University of Delaware) Dr. Kathleen J. Tierney puts the matter in a different perspective many people trying to do quickly what they do not ordinarily do, in an environment with which they are not familiar.

A disaster can either be natural i.e. rain, flood cyclone, storm, landslides, earthquake, or man made disaster i.e. war including biological arson, sabotage, riots, accidents, fire, bomb explosion, and ecological disasters.

Disaster management is nothing but skillful ways and methods of controlling a disaster. Disaster management techniques or rather methods are based on the economic status of the country.

Any disaster management technique involves certain amount of investment. Hence, the process of managing disasters and thus increasing safety, involves a balancing act between the cost of reducing the risk of a disaster and the benefit arising from the amount of risk reduced. Thus, developed countries managed disaster better than developing countries.

However, developed countries have the upper hand at controlling disaster effectively as well managing disasters better. For example, most of non governmental organizations rendering assistance to disaster victims are from the developed countries e.g. Red Cross, UNICEF, IMF etc. all these organizations emerged from the developed countries and it is because of their economic strength.

Consequently, developed countries tend to have more effective facilities needed during disaster management e.g. Radio and the vibrant manpower needed for the purpose.

For any disaster management method to be successful, it requires mass participation which not only gives strength but also makes the task very simple and also when awareness and education about disaster are provided to the people, disaster management also became simple task. For example, for effective management of disasters in India which is one among the most populous countries in the world, it is very important that we bring about mass participation. Mass participations in a country like India means making people aware about disasters and educate them to know is their responsibility during such a disaster.

Apart from bringing about mass participations and responsibility in people awareness brings about:

- i. Cooperation between the government the intellectual community and general public.
- ii. Individual preparedness before, during or after a disaster.
- iii. The tendency to help the victims of the disaster.
- iv. Compliance with the laws and legislation for disaster control.

(Smith K. 1996, environmental hazards. Assessing risk and reducing disaster II edition, London and New York, Roullege).

Radio - Is the transmission of signals by modulation of electromagnetic waves with frequencies below those of visible light-electromagnetic radiation travels by means of oscillating electromagnetic fields that pass through the air and the vaccum of space (Franklin Watts, 1987). In other words it means the wireless

transmission through space of electromagnetic waves in the approximately frequency range from 10 kilohertz to 300,000 megahertz (Floydi, Thomas L. 1987). Radio receiver therefore, an electronic receiver that detects and demodulates and amplifies transmitted signals transmit message via radio waves.

### 1.1 STATEMENT OF THE PROBLEM

The positive contribution of radio on disaster management awareness is characterized with overriding problems. According to Proteep V. Philip, IPS (in) the problems of unavailability and un-affordability of communication system based on broadcasting via electronic waves. Other problems characterized with disaster management are the lack of government effort in repositioning the system in other to utilized a cost effective and charitable resource operations.

There was lack of effective government policy on disaster management in time of crises. Although, Nigerian are not prone to natural disasters like earthquake, and flooding. Crisis such as ethnic and religious upheavals are not new, and effort in minimizing suffering has not been encouraging. The body saddled with responsibility of disaster management is NEMA. NEMA is erimeshed with problems that made it untenable to deals effectively with disaster crisis.

## 1.2 OBJECTIVES OF THE STUDY

The objectives of the study is to analyze the impact of radio on disaster management awareness other objectives of the research are:-

1. To examine the role played radio on disaster management.
2. To appraise how inadequate awareness affects management of disasters in Nigeria.
3. To examine digitalization of radio services in enhancing disaster management.
4. To examine how inadequate technical capacity affect disaster management.
5. To appraise government policy towards disaster management.
6. How poor funding poses a problem.
7. How capacity building affects disaster management.

## 1.3 RESEARCH QUESTIONS

- i. How would radio play an important part on disaster management?
- ii. To what extent would inadequate awareness affects management of disasters in Nigeria?
- iii. How would digitalization of radio services enhances disaster management?

- v. How would inadequate technical capacity constitutes constraints?
- vi. How would government policies towards disaster management constitutes a major constraint?
- vii. How would poor funding affects disaster management awareness?
- viii. To what extent has capacity building been slow among radio staff?

#### 1.4 SIGNIFICANCE OF THE STUDY

The significance of radio in disaster management awareness cannot be over-emphasized. The significance of embarking on solving the problems of disaster management:-

1. To identify how radio would manage the recent disaster in the area of study.
2. To X-ray how radio can be used in disaster management
3. To give data institution wanting to have records or widing on similar research work.
4. To help in unearthing future disasters, in other to arrest impending situations.

#### 1.5 HYPOTHESIS FORMULATION

The hypothesis formulation are as follows:

$H_0$  = Certain underlined constraints does not affect the impact of radio on disaster management awareness.

$H_1$  = Certain underlined constraints affects the impact of radio on disaster management awareness.

#### 1.6 SCOPE AND LIMITATION OF THE STUDY

There are severally places that witnessed the occurrence of disaster in recent times, but the researcher has limited the research work to Yola South LGA.

The limitation enable the researcher to have an in-depth investigation into the research topic particularly focused the impact of radio on disaster management awareness and listeners.

## 1.7 DEFINITION OF TERMS

- **Radio:** Is the transmission of signals by modulation of electromagnetic waves with frequencies below those of visible light.
- **Disaster Calamity:** An event resulting in great loss and misfortune "the whole city was affected by the irremediable calamity" the earthquake was a disaster".
- **Impact:** A forceful contact, collision, or upset: also the impetus communicated in or as in a collision.
- **Disaster Management:** It is the discipline of dealing with and avoiding risk. In general it is the continuous process by which all individuals groups and communities manage hazards in an effort to avoid or minimize the impact of disaster resulting from the hazards.

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## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 INTRODUCTION**

This is review of theories and studies conducted by scholars on the use of radio in disaster management. However, the most paramount objectives of this review is to identify and describe relevant and related variables that have been used in similar studies by different scholars. The variables to be treated in this chapter are the radio, disaster, disaster management, and the impact all in relation to disaster management.

#### **2.1 DEFINITION OF THE CONCEPTS, TERMS AND THEORIES IN RELATION TO THE IMPACT OF RADIO IN DISASTER MANAGEMENT**

The concept of radio viz-a-viz disaster management arises from the fact that radio is the fastest channel of dissipating information to wider area. This concept dwells on the importance of radio being information generators. Radio being an important factor plays a significant role in enhancing disaster management. In a nutshell, the radio plays a yeoman job in improving the disaster consciousness of the general population and in disseminating early warning. The radio can be the critical link between the agency providing the warning and the general public. Radio is an effective way of disaster management

even in developing countries like Nigeria, they can be used to spread warning quickly to a broad population.

- i. Radio-Franklin Watt (1987) defines radio as an electronic receiver that detect, modulates and amplifies transmitted signals message via radio waves. Also, Floyed Thomas (1987) defines radio as the transmission of singles by modulation of electromagnetic radiation travels by means of oscillating electromagnetic fields that pass through the air and vacuum of space.

the American radio replay league (1996) is a wireless transmission through space of electromagnetic waves is the approximate frequency ranging from 10 kilohertz to 300,000 megahertz.

- ii. Disaster Fredrick C. Cunny (1994) defines disaster as a situation resulting from an environmental phenomenon or armed conflict that produced stress, personal injury, physical damage and economic destruction of great magnitude.  
The concept of disaster in disaster management dates back to the early times when man had to contend with catastrophes of alarming trend in other to survive in a bid to from a large society. Calamitous distressing, or ruinous effects of a disastrous event such as drought, flood, fire, hurricane, or war disrupt critical function of an organization, society or system for a period long enough to significantly harm it or cause it failure.

The U.S Federal Emergency Management Agency (FEMA) described a disaster as "an occurrence of natural catastrophe, technological accident or human caused event that has resulted in severe property damage, deaths or multiples injuries.

The World Health Organization (WHO), termed disaster as "the result of a vast ecological breakdown in the relation between man and his environment, a serious and sudden slow, as in drought, destruction on such a scale that the stricken community needs extraordinary effort to cope with it, often with outside help or international aid. However, there are two types of disasters on the basis of origin namely;

1. Natural disaster

2. Human induced disaster

1. Natural Disaster: It is an event that is caused by natural hazard and this lead to human, materials, economical and environmental losses. They are beyond the control of human being nature provides us with all the resources, but it can be sometimes cruel also some example of natural disasters are the 2001 earthquake in Gujirat, the 2004 Indian ocean Tsunami, the 2008 earthquake in China, and the 2007 cyclone in Myyammarr.

2. Human Induced Disaster: Man made disasters are caused by human activities such as nuclear explosion, chemical and biological weapon, industrial pollution, war, accidents, etc. some serious destruction are caused by human which affects lives and the

socioeconomic condition of the people. For example, the 1984 Bhopal gas tragedy, serial bomb blast in Mumbai 2008 etc.

- iii. **Disaster Management:** The concept of disaster management is stemmed from mans challenge of constant occurrence of calamity. Properties and lives are always lost in the course of this disaster management involves a holistic approach to eliminating or minimizing the aftermath of the effect of a disaster be it natural or man made. According to Cunny Fredrick (1983) 'disaster management is discipline of dealing with an avoiding risks. In general it is the continues process by which all individuals, groups and communities management hazards is an effort to avoid or minimize the impact of the disaster resulting form the hazards.

According to the author, it is impossible to fully control the damage caused by the disaster, but it is possible to minimize to some extend by these:

- i. By early warning through radio, TV or any information outlet.
- ii. Spreading awareness about disasters and tips on how to handle them.
- iii. Space technology plays a very important in efficient mitigation of disasters.
- iv. The police control room, fire control officers, the near by Red Cross Office and other rescue teams.

iv. The Impact: There are different phases of disaster management these includes:

- i. Response and relief: This is the immediate measure take up in anticipating of disaster to ensure that the effect are minimized-these are normally carried out simultaneously after a disaster.
- ii. Rehabilitation and construction: This initiatives are taken up by the government. NGO and various other agencies which assist the affected community. Road, power supply, communication, medical facilities must be restored.
- iii. Mitigation: Any action taken to minimized the extent of a disaster is known as mitigation. Mitigation can take place before, after or during disaster.
- iv. Preparedness: This involves measures that enable government, communities and individuals to responds to disaster situation and cope with them effectively. Walker Peter (1991) 'emergency management is the discipline of dealing with an avoiding risk'. It is a discipline that involves preparing for disaster before it occurs, disaster response e.g. emergency evacuation, quarantine, mass decontamination etc. and supporting the rebuilding process'.

Smith K. (1996), established that 'disaster management is nothing but skillful ways and methods of controlling disasters. Disaster

management techniques or methods are based on the economic status of the country and it hence it varies from one country to another. Therefore, the impact is the effect of disaster management on recurring disasters.

## **2.2 ORIGIN AND TRENDS IN THE DEVELOPMENT OF RADIO AND ITS IMPACT ON DISASTER MANAGEMENT**

This dwells on the origin of radio and trends in its development pace with regard to disaster management. This would enable researchers to appraise the role of radio in disaster management.

Radio is based on relationship between electric current and magnetism suggested by Gian Domenico Romagnosi in 1902, performed a widely known experiment on man made electric current and magnetism. Michael Faraday in 1831 discovered electromagnetic induction, which was mathematically modeled by Faraday's law-one of the four Maxwell equations (1861-1863). David E. Hughes was the first to transmit and receive radio waves in 1878. Henrich Rudolf Herz validates Maxwell theory between 1886-1888. In April, 1909 Charles David Harrold constructed a first broadcasting station.

Radio broadcasting was introduced into Nigeria as a form of distribution system in Nigeria in 1933. The post and telegraph received and transmitted via the wire system of BBC news, which was later called radio diffusion system. In 1939, a station was opened in Ibadan, Kano station was commissioned in 1949 while between 1945 to 1949 stations has been opened in town like

Kaduna, Enugu, Abeokuta, Ijebu Ode, Jos, Zaria, Calabar and Port Harcourt as relay station.

The Nigerian broadcasting received (NBS) which was established on April, 1<sup>st</sup>, 1951, later transformed into the Nigerian broadcasting corporation (NBC) under the NBC act No. 39 of 1956 by January, 1<sup>st</sup> 1962, Voice of Nigeria (VON) was launched as the internal service of radio Nigeria covering west Africa, east, central and South Africa North Africa and other parts of the world.

The 1<sup>st</sup> FM in Nigeria was commissioned on April, 22, 1977. It was known then as radio Nigeria 2 (metro FM) a year later when NBC was recognized, the state stations were handed to state governments. NBC was left with only Lagos, Ibadan, Enugu and Kaduna which becomes Federal Radio Corporation of Nigeria (FRCN).

Impact of radio on disaster management from Nigeria context has gone along way in redefining management of disasters, as a continuous occurrence. Despite the fact that disaster preparedness has not been identified as one of the MDGs: it is apparent that proper mechanisms for disaster awareness and means of disaster recovering are essentials to achieving the MDGs. In particular, the MDGs targets such as integrating the principles of sustainable development into country policies and programmes, and reversing the laws of environmental resources can never be achieved without given due emphasis to effective disaster management strategies' (Stephen, 1983).

Pls dis prepare  
code





The developmental trends of radio since its establishment has that it played a significant role in disaster management. Disaster prevention always comes from radio development trends since its inception in Nigeria. 'radio is a catalyst that speeds-up societal development through disaster management' (Babatunde Jose, 1986) therefore, the developmental trends of radio is attributed to the needs of Nigerian society in disaster prevention and management.

Therefore, the historical events that led to the establishment of radio stations in Nigeria were borne of the fact that the British colonials saw radio as the only channel of disaster management.

Information dissemination helps in preventing disaster occurrence in many parts of Nigeria (Stephen, 2002).

### **2.3 MODULES, THEORIES AND FINDINGS ON RADIO WITH REGARD TO DISASTER MANAGEMENT**

There are several scholars whose researches greatly to the role of radio impacting on the disaster management drive of the developing world.

According to unified theories and theories, the world is not safe place to live in these days as disasters and terrorism can strike at any moment. Communication is the only relief as times of disaster and hence the need for an efficient disaster management become imperative in public places and even in business establishments and important commercial joints where people move around in large

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numbers. Disaster strike in the form of natural calamities, terrorists attacks and accidents. 'thus an efficient disaster management system which will work in adverse condition is needed (Stephen, 1986). In times of natural calamities like flood, storm, or fire the usual mode of communication like phone, mobile etc might not work or might be lost in the calamity.

Whatever be the situation, one cannot rely transporting fuel to keep the power up for vital facilities. Since the power lines could be snapped with uprooted trees and power lines and towers twisted and broken completely, or simply there is no road to the generators- either due to floods or due to various obstacles like trees or damaged roads or bridges.

So, any natural phenomenon like earthquake or man made phenomenon like a radioactive can be a source of hazards, but whether it would culminate into a disaster depends on two factors;

- i. Physical exposure: Reflecting the range of potentially damaging events and their statistical variability at a particular location.
  - ii. Human vulnerability: Reflecting the breadth of social and economic tolerance to such hazardous events at the same site.
- Theoretical analysts suggested that radio is the most powerful tool is preventing disaster situation through rapid information diffusion. 'disaster management is nothing but skillful ways and methods of controlling disaster. Any disaster management technique involves certain amount of investment. Hence the

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process of management of disaster, and thus, increasing safety, involves a balancing act that between the cost of reducing of disaster and the benefits arising from the amount of risk reduced. Thus, developed countries managed disasters better than developing countries (Smith K. 1996).

According to findings, disaster management involves massive participation of people, equipments and ideas. These include:-

- i. Cooperation between the government, the intellectual community and general public.
- ii. Individual preparedness before, during or after the disaster.
- iii. The tendency to help the victims of the disaster.
- iv. Compliance with laws and legislation for disaster control (Stephen, 1984).

#### **2.4 OVERVIEW OF VIEWS, OPINIONS AND FINDINGS ON RADIO AS TOOL FOR DISASTER MANAGEMENT**

Scholarly contribution of views and opinions further uphold the early findings on the rich of radio in disaster management. There is a place where the lives of urban Nigerian youths are not hopelessly divested by AIDs senselessly sacrificed to the ravages of ethnic violence or condemned by poverty. That place is prime time radio on commercial and government stations through out Nigeria. Developed from extensive focus. Group research, the radio drama ready or not captures the optimism and realism of the every lives of urban youths in Nigeria that believe the easy stereotypes. This paper present the

design model as well as the research findings used to develop this authentic indigenously voiced material. It discusses the opportunity and challenge of developing quality Africa programming to more realistically portray Africa in world broadcasting. (Gretchen Babatsis and Sandra Mbanefo Abiako, 1986).

Some of the views with regards to the concept of radio as a tool for disaster management has learned on the fact that there are factors which were imperative. There is a unanimous agreement on the importance of radio as a tool for disaster management.

"The over riding issues concerning radio as a tool for disaster management is catalysts for national development. The society is prone to disasters which may be man made or natural. But the rate of effort geared was grossly inadequate despite myriads of efforts (United Relief Agency, 2000)".

According to findings of relief experts, relief agencies on disaster management underweight the need for immediate rapid response processes.

## 2.5 THEORETICAL FRAMEWORK BASED ON THE THEORIES AND CONCEPTS OF RADIO AS A TOOL FOR DISASTER MANAGEMENT

The unified theoretical framework based on the early theories and concepts of radio is based on the need for human to minimize the effect of disaster. Certain experience culminated on the need to design well defined framework based on the past theories and evolutions.

In 2007, Dr. Wayne Blanchard of FEMA's emergency management higher education project, at the direction of Dr. Cortez Lawrence, superintendent of FEMA's emergency management institute, convened a working group of emergency management practitioners and academics to consider principles of emergency management. This project was prompted by the realization that while numerous books, articles and papers referred to "principles of emergency management" nowhere in vast array of literature on the subject was there an agreed upon definition of what the principles were. The group agreed on eight principles that will be used to guide the development of a doctrine of emergency management. The doctrines are:

### **Principles Emergency Management**

- i. Comprehensive
- ii. Progressive
- iii. Risk-driven

- iv. Integrated emergency managers ensure unity of efforts
- v. Collaboration
- vi. Coordination
- vii. Professionalism (Principles of emergency management, 2002).

In recent years, the continuity feature of emergency management has resulted in a new concept, Emergency Management Information System (EMIS). For continuity and interoperability between emergency management stakeholders, EMIS supports the emergency management process by providing an infrastructure that integrates emergency plans at levels of government and non government involvements and by utilizing the management of all related resources for all four phases of emergency. In the health care field, hospitals utilized HICS (Hospital Incident, Command System) which provides structure and organization in a clearly defined chain of command with set responsibilities for each division.



## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.0 INTRODUCTION

This chapter deals with collection, organization, and analysis of data resources using an appropriate mathematical parameters. The research methodology for this process are:

1. Research Design
2. Population of the study
3. Sample and sampling technique
4. Instrument of data collection
5. Validation of instrument for data collection
6. Method of data collection
7. Method of data analysis

#### 3.1 RESEARCH DESIGN

This research study conducted a preliminary process about the research design. The aim of the study was aimed at seeking responses on the impact of radio on the awareness of disaster management. The research design is a mapped out strategy consisting of some selected radio listeners in Yola metropolis.

### **3.2 POPULATION OF THE STUDY**

The population of the study involves a mapped out elements in a study area for the research process. It entails collecting a preliminary data elements for the research in which a sample can be drawn.

The mapped out population consisted of 200 radio listeners in Yola metropolis. The mapped population was selected in three communities in the study area, namely;

- |               |   |    |
|---------------|---|----|
| 1. Bako       | - | 40 |
| 2. Damare     | - | 40 |
| 3. Wuro Hausa | - | 40 |
| 4. Shagari    | - | 40 |

### **3.3 SAMPLE AND SAMPLING TECHNIQUE**

The sample of a study involves the sub-population of the research study. It is a mapped-out elements choosen a designed population. This research study uses a sample of 200 radio listeners in Yola metropolis. Sampling technique is a technique employed in mapping-out a sample from the population. This research study uses a simple random sampling technique.

### **3.4 INSTRUMENT OF DATA COLLECTION**

This research study uses a structured questionnaire which was distributed to the 200 sample of radio listeners in Yola metropolis. The data collection in a research study is categorized into two:

1. Primary Data: This involved the use of questionnaire, interviews, etc. to obtain data responses from selected sample.
2. Secondary Data: This involved the use of previous data in a study area.

This research study uses the primary data sources involving structure a questionnaire.

### **3.5 VALIDATION OF INSTRUMENT FOR DATA COLLECTION**

The instrument for data collection has been validated by scholars from the department as certified by citations emanating in the discipline.

### **3.6 METHOD OF DATA COLLECTION**

The method of data collection involves a systematic method of collecting data resources from a mapped out sample in the study area.

A questionnaire was designed and administered on 200 sample of radio listeners in Yola metropolis in four areas. The structured questionnaire is divided based on the information required, namely;

1. Section A: This involves personal information e.g. name, age, occupation etc.
2. Section B: Involves responses from questions in the questionnaire.

### 3.7 METHOD OF DATA ANALYSIS

This involves mathematical analysis of collected data resources in a research process. The method used in this research was based on simple percentage and hypothesis formulation using t-test.

The simple percentages denoted as % is given by

$$\% = \frac{\text{sum of responses}}{\text{total sum of responses}} \times 100\%$$

The t-test denoted by t is given by

$$t = \frac{\bar{d} - md}{sd}$$

$\bar{d}$  = mean difference of the two parameters.

$md$  = mean deviation of the population

$sd$  = standard deviation.

Department of Mass Communication,  
College of Continuous Education,  
Adamawa State Polytechnic.  
13<sup>th</sup> December, 2012.

NAME: \_\_\_\_\_  
AGE: \_\_\_\_\_  
OCCUPATION: \_\_\_\_\_

Dear Respondent,

**ANALYSIS OF IMPACT OF RADIO ON DISASTER MANAGEMENT  
AWARENESS**

In reference to the above project topic, I wish to solicit your response to enable me undertake a research project. I wish to promise that all data responses will be strictly personal and for the research only.

I am grateful for your kind response.

Yours Faithfully,

Faisal Bala

## CHAPTER FOUR

### DATA PRESENTATION AND ANALYSIS

#### 4.1 INTRODUCTION

This chapter involves presentation and analysis of data resources using selected mathematical parameter.

This entails organizing data responses from a selected primary source.

This research project distributed a structured questionnaire to a 200 sample of radio listeners in Yola metropolis. 170 questionnaires were returned for each of the question, a table was designed for the responses. Responses were analyzed using simple percentages. Also a hypothesis formulation was used based on t-test on questions in Section B.

The table and analysis for each of the question are as follows:

#### Section A

**Table 1: How long have you been an ardent radio listener?**

Proposition	Responses	Percentage (%)
Less than 2 years	40	23.5
2-4 years	30	17.7
More than 4 years	100	58.8
<b>TOTAL</b>	<b>170</b>	<b>100</b>

**Source:** Field Survey 2012

The distribution shows that 23.5% are ardent radio listeners for less than 2 years. 17.7% listens to the radio between 2-4 years, while 58.8% listens to the radio for more than four years.

**Table 2: What is your most favourable radio station?**

Proposition	Responses	Percentage (%)
Local Radio stations	95	55.9
International radio station	75	44.1
<b>TOTAL</b>	<b>170</b>	<b>100</b>

**Source:** Field Survey 2012

This shows that 55.9% listens to local radio stations while 44.1% listens international radio stations.

**Table 3: What is your duration of listening time in 24 hours?**

Proposition	Responses	Percentage (%)
Less than 2 hours	72	42.4
2-4 hours	80	47.1
More than 4 hours	18	10.5
<b>TOTAL</b>	<b>170</b>	<b>100</b>

**Source:** Field Survey 2012

The distribution shows that out of 170 responses, 42.4% listens to the radio less than 2 hours a day. 47.1% listens to the radio between 2 to 4 hours day, while 10.5% listens to the radio more than 4 hours a day.

## SECTION B

**Table 4: Do you think that radio plays an important part on disaster management?**

Proposition	Responses	Percentage (%)
Yes	103	60.6
No	67	39.4
<b>TOTAL</b>	<b>170</b>	<b>100</b>

Source: Field Survey 2012

This shows that 60.6% believed that radio plays an important part on disaster management. While 39.4% disagreed.

**Table 5: Do you agree that inadequate awareness affects management of disaster in Nigeria?**

Proposition	Responses	Percentage (%)
Yes	84	49.4
No	86	50.6
<b>TOTAL</b>	<b>170</b>	<b>100</b>

Source: Field Survey 2012

49.4% believed that inadequate awareness affects management of disasters in Nigeria. 50.6% thought otherwise.

**Table 6: Do you think that digitalization of radio service will enhance disaster management?**

Proposition	Responses	Percentage (%)
Yes	97	57.1
No	73	42.9
<b>TOTAL</b>	<b>170</b>	<b>100</b>

Source: Field Survey 2012



57.1% respondents agreed that digitalization of radio services will enhance disaster management. 42.9% thought otherwise.

**Table 7: Do you agree that inadequate technical capacity has been one of the major constraints?**

Proposition	Responses	Percentage (%)
Yes	102	60
No	68	40
<b>TOTAL</b>	<b>170</b>	<b>100</b>

Source: Field Survey 2012

60% of respondents thought inadequate technical capacity has been one of the major constraints. While 40% thought otherwise.

**Table 8: Do you think that government policy towards disaster management was one of the major constraints?**

Proposition	Responses	Percentage (%)
Yes	81	47.6
No	89	52.4
<b>TOTAL</b>	<b>170</b>	<b>100</b>

Source: Field Survey 2012

47.6% respondents shows that government policy towards disaster management was one of the major constraint 52.4% thought otherwise.

**Table 9: Do you agree that poor funding was also a major problem?**

Proposition	Responses	Percentage (%)
Yes	108	63.5
No	62	36.5
<b>TOTAL</b>	<b>170</b>	<b>100</b>

Source: Field Survey 2012

63.5% respondents thought that poor funding was also a major problem in disaster management awareness 36.5% thought otherwise.

**Table 10: Do you think that capacity building was slow among radio staff?**

Proposition	Responses	Percentage (%)
Yes	70	41.2
No	100	58.8
<b>TOTAL</b>	<b>170</b>	<b>100</b>

Source: Field Survey 2012

41.2% respondents shows that capacity building was slow among radio staff. 58.8% thought otherwise.

#### 4.2 HYPOTHESIS TESTING

Hypothesis involves the formulation of two parameters namely  $H_0$  and  $H_1$ .

$H_0$  = Null hypothesis

$H_1$  = Alternative hypothesis

Hypothesis entail comparing two variables in a research process.

In this research process, questions in section B was harmonized and tested using t-test.

The hypothesis formulation is as follows:

$H_0$  = certain underlined constraints does not affects the impact of radio on disaster management awareness.

$H_1$  = certain underlined constraints affects the impact of radio in disaster management awareness.

### Decision Rule

If  $t_{cal} \leq t_{table}$ , we reject  $H_0$ , otherwise accept  $H_0$ .

The harmonized questions in section B is as follows:

Question	Table	Responses	
		Yes	No
4	4	103	67
5	5	84	86
6	6	97	73
7	7	102	68
8	8	81	89
9	9	108	62
10	10	70	100

let  $x$  = yes variable

$y$  = no variable

d is the difference between x and y variables

$$d = x - y$$

X	Y	d = X - Y	d - $\bar{d}$	$[d - \bar{d}]^2$
103	67	36	13.1	171.6
84	86	-2	-24.9	620.0
97	73	24	11.0	121.0
102	68	34	11.11	123.4
81	89	-8	-30.9	954.8
108	62	46	23.1	533.6
70	100	30	7.1	50.4
<b>645</b>	<b>545</b>	<b>160</b>		<b>2574.8</b>

$$\bar{d} = \frac{\sum d}{N} = \frac{160}{7} = 22.9$$

using t - test formula

$$t = \frac{\bar{d} - md}{s_d}$$

$$\bar{d} = 22.9$$

$$\text{but } md = \sum \frac{(X - Y)}{N} = \frac{\sum X}{N} - \frac{\sum Y}{N}$$

$$= \frac{645}{7} - \frac{545}{7}$$

$$= 92.1 - 77.6$$

$$= 14.5$$

$$\begin{aligned}
 sd &= \sqrt{\sum \frac{(d-\bar{d})^2}{N-1}} \\
 &= \sqrt{\frac{2574.8}{7-1}} \\
 &= \sqrt{\frac{2574.8}{6}} \\
 &= \sqrt{429.1}
 \end{aligned}$$

$$Sd = 20.72$$

$$\therefore t = \frac{22.9 - 14.5}{20.72}$$

$$t = \frac{8.4}{20.72}$$

$$t = 0.405$$

$$\therefore t_{cal} = 0.405$$

Also using the level of significance at 5% or 0.05 interval, the degree of freedom D.F is given as

$$\begin{aligned}
 D.F &= N - 1 \\
 &= 7 - 1 \\
 &= 6 \text{ df}
 \end{aligned}$$

Therefore

$$t \longrightarrow 0.05 \text{ at df } 6 = 1.94$$

$$\therefore t_{table} = 1.943.$$

### Decision rule

Since  $t_{cal} = 0.405 < t_{table} = 1.94$ , we reject  $H_0$  therefore, all underlined constraints affects the impact of radio disaster management awareness.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 SUMMARY

This research study examine the analysis of impact of radio on disaster management awareness. The research project appraises the disaster management relation to radio as a medium of communication. Radio as the most fastest outlet of information dissemination plays a role in disaster management awareness. The research defined disaster from different scholarly perspective. The definitions dwells on the fact that the Africa society is the most prone to disasters of both nature and man-made. The research study identifies problems like unavailability and unavoidable of communication system, ineffective government policy, and other constraints. Therefore, the objective of the study was to x-ray how radio plays a part on disaster management. The study was also to examine inadequate awareness, digitalization, technical capacity, government policies, funding, and capacity building. The significant of the study was based on how radio can be used in disaster management so as to stem recurring problems.

The research study, in order to unearth the constraint, designed a data collecting technique. This involves mapping out a population from four stratified areas in Yola South Local Government namely Bako, Damare, Wuro Hausa and Shagari. A sample study population of 200 radio listeners were chosen for the research. A structured

questionnaire was designed and distributed to the 200 selected radio listeners. 170 questionnaires were returned. Responses were organized and tabulated for each question. Simple percentages and hypothesis formulation using t-test was used in analyzing responses based on parameters.

## **5.2 CONCLUSION**

From the research study, it can be deduced that

1. Radio plays an important part on disaster management. But inefficiency of the communication is hampering the radio as the most important outlet in disaster management.
2. Inadequate awareness was never responsible for management of disaster in Nigeria.
3. Digitalization of radio services will enhance disaster management.
4. Inadequate technical capacity is one of the major constraints.
5. Also government policies has not played a significant role.
6. Poor funding was also a problem.

Thus, the hypothesis test shows that all constraints affects the impact of radio management awareness.

## **5.3 RECOMMENDATIONS**

The following recommendations were made after the research:

1. Operations of radio stations must be digitalized.

2. A framework for disaster management using radio as a fulcrum must be initiated.
3. An evaluation and planning must be instituted.
4. A capacity building process must be initiated.
5. Private investment must be encouraged to increase funding.
6. Information and communication technology must be inculcated as part of the disaster awareness
7. Radio operation must be refocused for effective disaster management.



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13<sup>th</sup> December, 2012.

NAME: \_\_\_\_\_

AGE: \_\_\_\_\_

OCCUPATION: \_\_\_\_\_

Dear Respondent,

**ANALYSIS OF IMPACT OF RADIO ON DISASTER MANAGEMENT  
AWARENESS**

In reference to the above project topic, I wish to solicit your response to enable me undertake a research project. I wish to promise that all data responses will be strictly personal and for the research only.

I am grateful for your kind response.

Yours Faithfully,

Faisal Bala

## SECTION A

1. How long have you been an ardent radio listener?  
Less than 2 years ( ) 2-4 years ( ) More than 4 years ( )
2. What is your most favourable radio station?  
Local radio stations ( ) International radio station ( )
3. What is your duration of listening time in 24 hours?  
Less than 2 hours ( ) 2-4 hours ( ) more than 4 hours ( )

## SECTION B

4. Do you think that radio plays an important part on disaster management? Yes ( ) No ( )
5. Do you agree that inadequate awareness affects management of disasters in Nigeria?  
Yes ( ) No ( )
6. Do you think that digitalization of radio services will enhance disaster management?  
Yes ( ) No ( )
7. Do you agree that inadequate technical capacity has been one of the major constraints?  
Yes ( ) No ( )
8. Do you think that government policy towards disaster management was one of the major constraints? Yes ( ) No ( )
9. Do you agree that poor funding was also a major problem?  
Yes ( ) No ( )
10. Do you think that capacity building was slow among radio staff?  
Yes ( ) No ( )

## REFERENCE

- Alexnader, David (2002). Principle of Emergency Planning and Management. Harpenden: Terra publishing: ISBN 1-903544-10-6.
- Cunny Fred, C (1983), Disaster and Development (Oxford. Oxford University Press Cunny Fred).
- Carter, Aiden R. Radio (1987), From Marconi to the Space page (New York: Franklin Watts).
- Lorna Victoria (2002), The Impact Assessment Project (Thailand: Asian Disaster Preparedness Center).
- Lindell, M., Prater, C., and Perry, R. (2006). Fundamentals of Emergency Management. Retrieved January 9, 2009 at <http://training.fema.gov/EMIWed/edu/fem.asp>.
- Mare Jansen (2010-06-29). "Starterteite des studiengangs katastrophenvorsorge und-management". Kavoma.de. <http://www.kavoma.de/retrieved2010-07-29>.
- Smith K. (1996), Environmental Hazard: Assessing Risk and Reducing Disaster II addition (London and New York-Routledge).
- Walker, Pater (1991), International Search and Rescue Teams, A League Discussion Paper. (Geneva: League of the Red Cross and Red Crescent Society).

