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## Response and Recovery Strategies for Disaster Management: a case of National Archives of Nigeria, Ibadan

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### ABSTRACT

The National Archives of Nigeria as a custodian of the nation's cultural heritage needs adequate management strategies to mitigate the effects of disasters. This study investigates response and recovery strategies deployed towards disaster management at the National Archives of Nigeria, Ibadan. The study is survey-based, using a qualitative method of data collection to provide answers to two research questions. Convenience sampling method was used to select a sample size of twenty-one respondents from a total of thirty personnel at the National Archives of Nigeria, Ibadan. Face-to-face semi-structured interviews were employed for data collection. All interviews were audio-recorded, transcribed, and analysed using NVIVO version 12. Findings revealed that there were no disaster response teams to tackle the occurrence of disasters and that collaboration with other safety agencies was minimal. The study recommends that the Federal Government of Nigeria should show greater commitment to preserving the cultural heritage of the nation by implementing revitalisation of projects that will enable it to achieve its purpose and transform the National Archives of Nigeria, Ibadan to world standard.

**Keywords:** Archives, disaster recovery, disaster management, disaster response, Ibadan, Nigeria, record digitisation

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### 1. INTRODUCTION

The National Archives of Nigeria as a department under the Ministry of Information is saddled with the responsibility of preserving the nation's cultural heritage stored in different archives within the country. The National Archives of the U.S.A. (2016) described an archive as a place where people visit to access first-hand information in the form of facts, data, and/or evidence as contained in letters, reports, notes, memos, maps, photographs, as well as other primary sources. Archives could also be regarded as a reflection and a result of what happens in society (Glaudemans, Jonker & Smit, 2017). It is, therefore, not uncommon for archival collections to be housed in institutions including universities, schools, churches, business organisations, and artistic and community organisations that frequently maintain their institutional records.

Despite the importance of archives, they are prone to disasters like every other establishment. According to the Centre for Disease Control and Prevention (CDCP, 2014), disasters refer to significant disturbances of societal functions which cause widespread human, material or environmental loss that outpaces local response capabilities and necessitates external assistance, responses and control. In the case of archives, disasters could be a flood, fire outbreak, insect infestation, collapse of the building and others. The ability to manage these disasters has become very important to the development and sustainability of the archive. Disaster management refers to the processes of coordination and integration of all activities necessary to build, sustain and improve the capability to prepare for, protect against, respond to and recover from natural or human-induced disasters (NEMA, 2009).

Disaster response has to do with taking appropriate measures to attend to a disastrous event. It also includes taking actions in anticipation of, during, and immediately after a disaster occurs to ensure that its effects are minimised and those affected by the event are given immediate relief (Queensland Government, 2021). Disaster response comprises the coordination and management of resources (including personnel, equipment, and supplies). It involves utilising the Incident Command System in an all-hazards approach and measures taken to secure lives, properties and the environment (Cabinet Office, 2013).

Disaster response according to NEMA (2018), may also include post-disaster assessment, emergency relief, and social services for personnel (including protection and psycho-social support). However, if the facilities are damaged, activities may extend to logistic considerations like restoring communications, finding alternate work locations as well and transportation of employees to another location (NEMA, 2018). In this study, disaster response measures the availability of a response team at the National Archive of Nigeria, Ibadan, adequate provision of response facilities such as fire extinguishers, and smoke detectors and availability of medical support for personnel.

Disaster recovery is concerned with the processes of resuming normal operations following the occurrence of a disaster by regaining access to data, networking equipment, power and internet connectivity. It also includes sourcing items from desks and computers. To assess the disaster recovery strategies in place at the National Archives of Nigeria, Ibadan, questions were asked on how the management and staff of the organisation will carry out recovery processes such as; recovery of essential services, and retrieval of records should a disaster occur.

This study is in two parts; Part – A is on disaster preparedness strategies at the National Archives of Nigeria, Ibadan while Part B is on the response and recovery strategies adopted for disaster management at the National Archives of Nigeria, Ibadan.

### **1.1 Statement of the Problem**

A study by Kolade-Faseyi (2018), examines the operations, management and legislation of National archives in Nigeria and finds that the level of record-keeping is very low. At the Michael Okpara University of Agriculture Library in Umudike, Abia State, Nigeria, Solomon-Uwakwe (2019) studied the disaster awareness and preparedness of academic libraries. Findings showed that although the library had a disaster preparedness plan, its implementation was defective. The library had no insurance policy and there was no modern equipment for fire detection, remote sensing, or smoke detectors.

Disaster preparedness and the strategic management of public records in South Africa was a study conducted by Ngulube, Modisane, & Mnkeni-Saurombe (2011). The study gives the result of an evaluation of disaster management initiatives in South African public archives and found that lack of written disaster management plans and strategies was a glaring indicator that disaster management did not rank high on their priority list. The study concluded that public archives cannot guard against collective cultural heritage and preserve South Africa's history without disaster management plans.

Amodu (2019) studied the various challenges and prospects of the National Archives of Nigeria, Ibadan and found the following challenges: lack of acquisition and maintenance of holdings, shortage of staff, and lack of back-up or digitalisation of records. Amodu (2019) also identified the prospect of the National Archives of Nigeria, as being a custodian of the nation's heritage in terms of records which has become a rich source of information for both scholars and policymakers.

The studies highlighted above do not identify the response and recovery strategies put in place for emergency management at the National Archives of Nigeria, Ibadan. It also shows that limited literature exists on disaster response and recovery strategies at the National Archives of Nigeria, Ibadan. Therefore, the objectives of this study are to examine the disaster response and recovery strategies in place at the National Archives of Nigeria, Ibadan.

### **1.2 Research Questions**

- i. What are the disaster response strategies in place at the National Archives of Nigeria, Ibadan?
- ii. What are the disaster recovery strategies in place at the National Archives of Nigeria, Ibadan?

## **2. REVIEW OF RELATED WORKS**

Archives are valuable to nations, regions, organisations, communities, and individuals as they provide proof of historical events, tell stories, record persons and identities, and are important sources of information for research. They represent our preserved memories and play a significant role in the culture, and histories of societies. According to Heap (1991), archives differ from institutions like libraries primarily in the reliability of their uninterpreted records which are needed to understand the past, but libraries may have archival sections. Documents in archives are sources of historical construction and reconstruction. From a critical point of view, the past does not exist objectively unless it is found in evidence and records. Such records are the result of the activities of groups and individuals within a specific society. They are kept as part of collections needed in future for the comprehension of the past with the eyes of the present (Cook, 1997).

### **2.1 History of National Archives of Nigeria, Ibadan**

The Archives Ordinance Number 43, which authorised the establishment of the National Archives of Nigeria to handle the preservation of public archives, was passed on November 14, 1957 (Salau, 2016). The archive was under the supervision of the Department of Public Works until it was transferred to the Ministry of Education in 1957. As a form of commitment to its establishment, the federal government provided fifty-one thousand pounds (£51,000) to construct the first permanent building in Ibadan, a project included in the first economic programme between 1955 and 1960. The building was opened on January 9, 1959 (National Archives of Nigeria, 1995).

The Archives Ordinance Number 43 gave the National Archives of Nigeria the authority to open as many branches as necessary. The National Archives Decree No. 30 of July 8, 1992, corrected the deficiencies found in the Archives Ordinance (Onyeneke, 2017). This made the National Archives primarily responsible for the permanent storage, custody, procurement, and control of federal government records or historical records as may be required at specific times (National Archives of Nigeria, 1995).

The National Archives of Nigeria existed in Ibadan, Enugu and Kaduna; based on the regional grouping in Nigeria between 1954 and 1982 (Kolade-Faseyi, 2018). Today, it has branches in Abeokuta, Akure, Benin, Calabar, Ilorin, Jos, Owerri, Port-Harcourt and Sokoto. Although the corporate headquarters of the National Archives has been moved to Abuja, the main archival holdings remain in Ibadan (Kolade-Faseyi, 2018).

## **2.2 Concept of Disasters**

Numerous terms have been used in association with "disaster" by academics, such as extreme events, risks, vulnerabilities and environmental stress. Mishra (2010) posits that environmental stress results when the cumulative effects of hazards, disasters, and other types of degradation and pollution exceed the natural environment's tolerance limit and alter the environmental balance. Savindra & Singh (2013) consider environmental stress as the point at which environmental deterioration has reached its severe limit and the natural system's homeostatic mechanisms can no longer absorb its negative impacts. From an economic point of view, Hallegatte & Przyusky (2010) describe disaster as any event that disturbs the operation of the ecosystem and has a considerable negative impact on assets, production factors, output, employment or consumption.

## **2.3 Classification of Disasters**

According to Sinha & Srivastava (2015); Uthman & Ogunsola (2017), disasters can be categorised as natural and biological types. Natural disasters may occur unexpectedly (such as landslides and tornadoes), or be preceded by warning indications (such as tropical cyclones), while biological disasters can be caused by life organisms, and also human activities, errors or negligence. Examples of biological disasters include pandemics and epidemics. Biological disasters could also include insect infestation.

### **Natural Disasters**

Natural disasters are caused by hydrometeorological, and geological-induced hazards. Examples of hydrometeorological disasters are cyclones, typhoons, monsoons, floods, tornados, hurricanes, ice storms, and extreme heat, which may become a factor in other hazards such as wildfires (Miceli, Sotgiu and Settanni, 2008). Geological occurrences that can lead to disasters include earthquakes, landslides, avalanches and volcanic eruptions. Some natural disasters often overlap and can be difficult to categorise. For example, tsunamis are triggered by geological events but they involve oceanic processes that manifest themselves as water-related hazards (Sinha & Srivastava, 2015). Another example is a mudslide that occurs as a result of flash floods from a hurricane or other storms.

### **Biological Disaster**

According to Sinha & Srivastava (2015), biological disasters are most commonly associated with outbreaks of diseases, epidemics, and pandemics. For instance, the spread of diseases such as Ebola, COVID-19 pandemic and others. These diseases occur when people come in contact with infected animals, and engage in indiscriminate refuse disposals which can lead to flood, contamination of fresh water and environmental pollution. Environmental pollution could also arise as a result of several other human activities. A study by Ogunsola & Shobajo (2017) reported that a lot of electronic waste (e-waste) is generated in Nigeria like many other developing countries which have limited technology and skills to manage the e-waste. A lot of times, e-waste are disposed on landfills thereby exposing the environment to hazardous component elements such as cadmium, mercury, lead, chromium, arsenic, and plastics (Ogungbuyi, Nnorom, Osibanjo & Schluep, 2012; Ideho, 2012).

Contaminations by e-waste can have a significant effect on the health of citizens as well as the environment because it can infiltrate the food chain in the form of toxic chemicals thereby exposing people to harmful chemicals in the form of polycyclic aromatic hydrocarbons and persistent organic pollutants (Borthakur, 2016). Other human activities that may be indirectly impacting the natural ecosystems or the environment include deforestation which can cause landslides and droughts, placing communities closer to flood zones and also increasing the impact of floods and tsunamis.

Some other human activities that are directly involved in generating disasters are industrial in nature (Alonso, Schuck-Paim & Asrar (2014). An example of this is the 2010 Gulf of Mexico oil spill that killed eleven workers instantly (Erickson, 2010). Also, Oil spillage has resulted in the loss of many lives and properties in Nigeria; the sixth-largest exporter of oil and the sixth-largest nation among the Organisation of the Petroleum Exporting Countries (OPEC) (Alberta, Amaratungaa & Haigha, 2018). Nigeria's Minister for Environment at the time of this study, reported that the country recorded 4,919 oil spills between 2015 to March 2021 (Vanguard, 2022). This has an enormous impact on the Nigerian environment; especially along the nation's coastlines.

### **2.4 Archival Disaster Timeline Around the World**

The southern part of New York State in the United States of America saw unprecedented, catastrophic flooding in June 2006 as a result of a storm (Flaherty, 2010). One modest rural public library was among the many properties that got damaged as a result of the flood. Also, in April 2007, the Lane Community College Archives at the University of Oregon, U.S.A, located in the basement of a particular building on campus, was soaked and contaminated by sewage water as a result of blocked drains on the floor above. This caused sewage water to gush out of the overhead drain into 280 boxes of college records (Uhlrig, 2008).

According to the Directorate of Libraries, Archives, and Museums of Chile's Department of Public Libraries, the February 2010 earthquake and its aftershocks killed more than three hundred people and destroyed six libraries. Approximately one hundred and thirty-three of the four hundred public libraries were unable to operate immediately after the earthquake and the Tsunami (Erickson 2010). The aftershocks of the earthquake and Tsunami also caused structural damage to many libraries. During service delivery protests in the various provinces of South Africa, many libraries were set on fire (Ntsala & Mahlatji, 2016), while the University of Jos, Nigeria also experienced two devastating fire disasters in 2013 and 2016.



The University of Jos library's computer laboratory, circulation and reserved units, library card catalogues, furniture, and other facilities were destroyed by fire. Akintunde (2016) reported that a grant was later given to the university for the rehabilitation of the library. These examples highlight the possibilities that disasters can affect cultural heritage institutions and the importance of having good response and recovery strategies is of utmost importance. Also, any cultural heritage institution may experience a disaster caused by technical risks such as power outages, sprinkler malfunctions and others.

### **2.5. Concept of Disaster Response**

Disaster response refers to those activities carried out to protect personnel as well as properties in the wake of a disaster. Disaster response includes evacuation, search, rescue, damage assessment, continuous assistance, and the quick restoration or construction of infrastructure. The purpose of disaster response is to deliver quick aid to keep people alive, enhance their health, and boost their morale (NEMA, 2016). Such support could also entail making preliminary repairs to damaged infrastructure.

Disaster response is also described as decisions and activities conducted following the strategic, tactical, and operational objectives established by the Disaster Response and Control guidance published by the British Government (Cabinet Office, 2013). These are aimed at protecting lives, lessening the effects of disasters, and establishing the circumstances for a return to normalcy. Steps taken to address a disaster's immediate repercussions are collectively referred to as response. In many cases, it lasts for only a few hours or days. Therefore, plans for cooperation, coordination, and communication must be implemented quickly. The response is an effort to address both the direct and indirect impacts of the disaster (Tavakoli, Yar Mohammedian & Reza, 2015).

### **2.6 Disaster Response Strategies for Archives**

It is important to highlight that the actions in the disaster preparedness stage are very different from those in the response stage. As highlighted by Karen (2009), the following steps are essential to disaster response in the event of a flood:

- a) An immediate remedial plan is required to prevent mould formation within two to three days of water damage. The premises should be kept and the affected area protected from 'live' electrical current.
- b) If the flooding is localised, materials that are not damaged can be temporarily protected with polythene covering.
- c) Move any contaminated material to a dry, preferably cold, location, beginning with material on top shelves.
- d) For relatively undamaged materials, gentle first-aid may be attempted with clean clothes or by inter-leaving with clean blotting paper. However, items on coated paper require swift professional attention, if inks or dyes start to run or dirt starts to spread.
- e) Volumes that are damp but not soaked can be held upright with the pages gently spread apart to allow them to dry naturally.
- f) When air blowers are used to speed up the drying process, the setting should be kept cool rather than hot because heat might encourage the growth of moulds.

- g) Saturated materials should be handled carefully since they might be particularly vulnerable to damage. No attempt should be made to separate pages that are stuck together at this time, nor should they be stacked on top of one another. A specialist should be consulted on how to pack for travel.

### **2.7 Disaster Recovery Strategies for Archives**

This stage majorly addresses how to rebuild after a disaster has occurred. This stage is targeted at restoring at least the archives to some level of stability where some skeletal or full services can be rendered to the users. The management and staff of the archive will carry out recovery processes such as; recovery of essential services, and retrieval of records. This stage is also referred to as the "control" stage. This stage could last for several days, weeks and/or months depending on the severity of the disaster that occurred.

Disaster recovery strategies offer opportunities through which prevention of similar occurrences can be enhanced by minimising the potential consequences of other or related events (Federal Ministry of Health, 2020). It also involves creating action plans or protocols to address the impacts of a disaster and the way forward. For example, a flood protocol could include:

- a) The internal plan to mitigate the effects of water (such as fan deployment for air drying)
- b) Contacting water remediation service
- c) If the first vendor is not available, contact an alternative organisation that provides similar services.

This study examines both disaster response and recovery strategies for the National Archives of Nigeria, Ibadan.

### **3. METHODOLOGY**

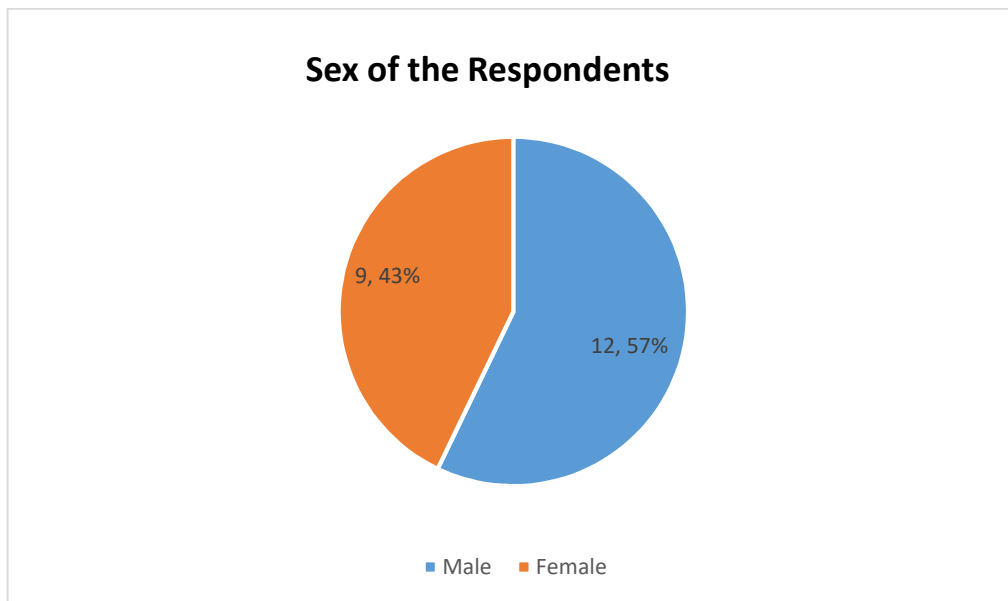
This study was carried out at the National Archives of Nigeria, Ibadan. The sample was drawn using the Convenience sampling technique. Out of a population of thirty members of staff, a sample of twenty-one members of staff participated in the study; based on the number of staff available at the time the study was conducted. Qualitative data were collected via semi-structured face-to-face interviews using an interview guide developed by the researchers.

The validity of the instrument was established based on a pilot test conducted at the archival section of Kenneth Dike Library, University of Ibadan, Ibadan. For the pilot test, data were collected from five members of staff of the archival section, Kenneth Dike Library. The pilot test showed that all research questions were adequately answered by the interview guide and that respondents understood the questions well. Audio responses from all interviews (pilot test and the main study) were transcribed into text and data was thematically analysed using NVIVO Version 12.

**4. DATA ANALYSIS AND DISCUSSION OF FINDINGS**

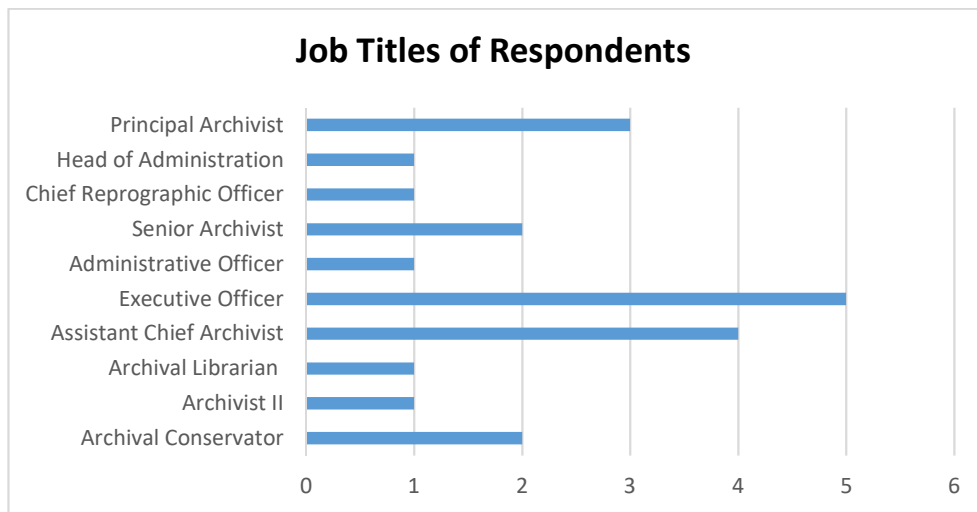
**4.1 Socio-Demographic Information of the Respondents**

This section provides the demographic characteristics of respondents. Figure 1 consists of information on the sex of the respondents:



**Figure 1: Sex of Respondents**

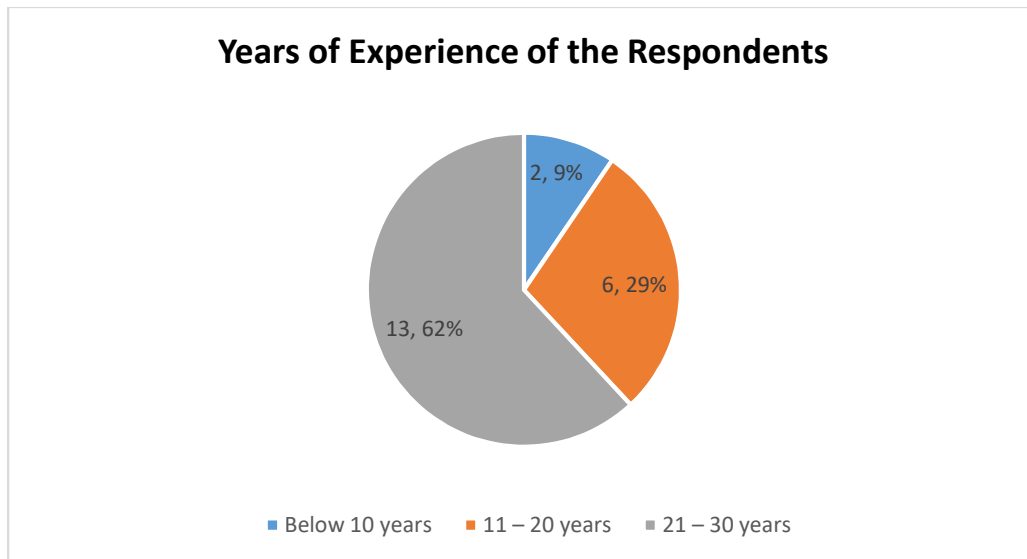
Male respondents were 57% of the population, while 43% were female respondents.



**Figure 2: Job Title of the Respondents**



The data collected showed that Executive Officers (23.8%) and Assistant Chief Archivists (19%) had the highest representation while Archivist II (4.8%), Archival Librarian (4.8%), Chief Reprographic Officer (4.8%), Head of Administration (4.8%) were least represented in the study.



**Figure 3: Years of Experience of the Respondents**

Respondents with 21 – 30 years of experience have the largest representation of 61.9%, while those below 10 years of experience have the lowest representation of 9%.

**Research Question One: What are the disaster response strategies in place at the National Archives of Nigeria, Ibadan?**

To identify the disaster response strategies in place at the National Archives of Nigeria Ibadan, participants were asked a series of questions. The first question attempted to determine if there were disaster response teams in the establishment. The second question investigated the adequacy of the disaster-fighting facilities while the third question sought to know if there was collaboration with other safety agencies. Answers to these questions are presented in subsequent paragraphs.

Responses to the question on whether there were disaster-response teams in the National Archives of Nigeria, Ibadan are grouped into "Yes" and "No" responses as shown in Figure 4:

<input type="radio"/>	Are there disaster response teams in the National Archives of Nigeri	21	21
<input type="radio"/>	No	18	18
<input type="radio"/>	Yes	3	3

**Figure 4: Node Showing the Disaster Response Strategies in Place at the National Archives of Nigeria, Ibadan**

Figure 4 shows that the majority of the respondents (18) said that there was no disaster response team at the National Archives of Nigeria, Ibadan. Excerpts from the interview transcript that revealed the result of this categorisation are presented below;

*"There is no disaster response team." (Female, Executive Officer, 23 years)*

*"There is no official disaster response team; everybody is just contributing their quota to the safety of the archives" (Male, Executive Officer, 23 years)*

One of the respondents, who cannot state authoritatively that there is no disaster response team, tries to describe some personnel who play the role in the organisation:

*"We have some male staff we call on for assistance. We have the security personnel we can call on for assistance too." (Female, Executive Officer, 23 years)*

Figure 5 shows the response to the second question on whether there are adequate facilities to fight disaster at the National Archives of Nigeria, Ibadan. The majority of the respondents disagreed that there were adequate facilities to fight disaster.

<input type="radio"/>	Are there adequate facilities to fight against disaster	21	21
<input type="radio"/>	Yes	4	4
<input type="radio"/>	No	17	17

**Figure 5: Node Showing the Adequacy of Facilities to Fight Disaster at the National Archives of Nigeria, Ibadan**

Excerpts from the interview transcript that supported Figure 5 are presented below;

*"No, the fire extinguishers are not functioning, No Air condition in the repositories, some of the roofs are bad." (Female, Assistant Chief Archivist, 13 years)*

*"No, the fire extinguishers are old and empty, and smoke detectors are no longer functioning (Female, Executive Officer, 23 years)*

*No, the facilities are inadequate." (Female, Principal Archivist, 22years).*

*"No, all the equipment such as fire extinguisher, fire alarms, smoke detector are all old and no longer functioning." (Male, Archival Conservator, 23 years)*

The participants were asked if there was any collaboration with other safety agencies. The answer to this was categorised based on interview responses and presented in Figure 6.

<input checked="" type="radio"/>	Is there any collaboration of the Archive with other safety agencies	21	21
<input type="radio"/>	No	16	16
<input type="radio"/>	Yes	3	3
<input type="radio"/>	Cannot Say	2	2

**Figure 6: Node showing the existence of any collaboration between the National Archives of Nigeria, Ibadan and other safety agencies**

Figure 6 shows that sixteen of the respondents (16) stated that they were not aware of any collaboration with other safety agencies, while three (3) affirmed a collaboration between the National Archives of Nigeria, Ibadan and the fire service unit of the University of Ibadan.

Below are some excerpts from the interview transcript:

*"No, we don't have." (Female, Assistant Chief Archivist, 29 years)*

*"No, none that I know of." (Male, Administrative Officer, 20 years)*

*"With the facility on the ground within the campus, I would say `yes` because we are interwoven in one way or the other. The maintenance department equally comes in to assist in whatever restructuring or maintenance that is due." (Female, Archival Conservator, 24 years)*

*"There is no collaboration with any safety agency, the only agency that collaborates with us is the Centre for Black Africa and Culture (CBAC) which is a sister agency that deals with the preservation of culture." (Male, Head of Administration, 19 years)*

Based on the result of the analysis of the interview questions in this section, it can be said that there are no adequate disaster response strategies in place at the National Archives of Nigeria, Ibadan.

There were no adequate facilities to fight the disaster. It was also revealed that there were no major collaborations between the National Archives of Nigeria, Ibadan and other safety agencies.

**Research Question Two: What are the disaster recovery strategies in place at the National Archives of Nigeria, Ibadan?**

During the interview sessions with research participants, they were asked how they could get the National Archives of Nigeria back to its normal state after disaster had struck. Based on their response, the disaster recovery strategies in place were identified. The major themes identified were; digitisation of records, reprography and quick response to infrastructural renovation needs to reduce the effect of the disaster. Figure 7 shows the screenshot of the interface of node and themes under “disaster recovery strategies in place at the National Archives of Nigeria, Ibadan.”

Disaster Control Strategies in the National Archives	21	21
Digitisation of Records	11	11
Quick Resonse to Infrastructural Renovation Needs	1	1
Reprography	2	2

**Figure 7: Disaster Recovery Strategies in Place at the National Archives of Nigeria, Ibadan**

Figure 7 shows that the major strategy for disaster recovery is the digitisation of records. The NVIVO software was also used to query the node. This queries the participants' responses directly as shared during the interview session. The result is illustrated in Figure 8:



**Figure 8: Word Cloud Showing Disaster Recovery Strategies at the National Archives of Nigeria, Ibadan**

As illustrated in the word cloud above, it is evident that the majority of the respondents commented on the digitisation of records as the major strategy to get the National Archives of Nigeria back to its normal state after a disaster.

Excerpts from the interview transcript that supported digitisation of archival records include;

*"The institution has plans to do aggressive digitisation, the majority of these records are still in hardware and not software and that is not safe. Until digitisation is achieved, there is no way to fully recover from disaster in the archive." (Female, Archival Conservator, 24 years)*

*"Yes, we are moving towards digitisation of the archive, the process is currently ongoing. Once it is completed, we will be able to have surrogate copies and through that, records can still be recovered if disaster strikes in the archive," (Male, Senior Archivist, 8 years)*

*"We are having a programme which is the digitisation of archives. So, all our documents will have a soft copy which will serve as a backup for the hard copy." (Female, Assistant Chief Archivist, 13 years).*

Also, some respondents stressed that reprography is another strategy for recovery losing archival records to disaster. Excerpts from the interview session that supported this include;

*"There is a section called the reprographic section, where records can be microfilmed and stored in a fireproof cabinet. In this fireproof cabinet, even if the entire building is burnt to ashes, the microfilmed document will still be safe and, through that, records can be recovered and reprinted as though disaster never struck." (Male, Chief Reprographic Officer, 24 years)*

*"Microfilming can preserve records for as long as five hundred years but unfortunately, the microfilming camera is no more functioning." (Male, Archival Conservator, 23 years)*

One of the respondents expressed that a quick response to infrastructural damage is another disaster recovery strategy as this act can prevent the destruction of archival records:

*"But let us say there is rainfall now and maybe a part of the building is destroyed, I know we will quickly get some carpenters to fix it." (Female, Executive Officer, 10 years).*

Based on the evidence available for this research question, the major disaster recovery strategies in place at the National Archives of Nigeria, Ibadan, are digitisation of records and quick response to infrastructural renovation needs to reduce or avert the impact of any threat to archival records.

## 5. DISCUSSION OF FINDINGS

The study ascertained that there is no disaster response team to see how disaster can be curtailed in the eventuality of its occurrence, if all members of staff are to wake up to such a call if the need arises, this itself can lead to further disaster because confusion may arise when everybody rushes to the scene of disaster with little or no clue of what is to be done. The study established that the facilities needed to help fight against disaster are inadequate; the fire extinguishers are empty, some are expired, and the smoke detectors as well as fire alarms are non-functional.



This was also found to be so by Kolade-Faseyi (2018). This is also supported by Uthman & Ogunsola (2017), whose studies indicated that low usage of sophisticated ICT in emergency management was discovered among emergency management agencies in Lagos State, Nigeria.

The study also found that there are no collaborations between the National Archives of Nigeria, Ibadan and other safety agencies. Considering the fact that there are inadequate facilities within the National Archives, Ibadan to fight against disaster, its collaboration with other safety agencies could have been a great backup plan because even though the National Archives of Nigeria, Ibadan may be incapable of fighting disaster itself, the collaborating agency can help reinforce and cushion the effect of disaster before it will cause too much damages to the archive. From all the information gathered, it is safe to say the National Archives of Nigeria, Ibadan has no disaster response strategies in place. This corroborates the study of Solomon-Uwakwe (2019) which affirms that there is no disaster response and recovery team in the library.

Based on the evidence available, the disaster recovery strategies in place at the National Archives of Nigeria, Ibadan, are digitisation of records and quick response to infrastructural renovation needs to reduce or further avert the impact of any threat to archival records. However, digitisation is still ongoing and only an insignificant part (less than 2%) of the record has been digitized. This is supported by Amodu (2019) who referred to that as one of the challenges facing the National Archives of Nigeria, Ibadan,

The study also found out that the reprographic section does not have the required equipment needed to microfilm records too. As at the time that this study was conducted, it can be said that there are no solid disaster recovery strategies in place at the archive yet. This is supported by Hlabaangani and Mnjama (2008) whose findings revealed that the information centres lacked facilities for conservation and restoration of records in the face of disaster.

## **6. SUMMARY AND CONCLUSION**

This research examined disaster response and recovery strategies at the National Archives of Nigeria, Ibadan. The study found that the disaster response strategies in place were minimal because there were no response teams in place to help cushion the effects of disaster, nor were there adequate facilities to fight such occurrences. It was also found that there was no collaboration between the National Archives of Nigeria, Ibadan and other safety agencies. If any major disaster strikes, it might be the end of the records as there is little or no strategy for recovery in the archive, rather, members of staff only pray that such catastrophe will not befall the archive. Based on the evidence available, the only disaster recovery strategy in place at the National Archives of Nigeria, Ibadan is the planned digitisation of records which is still at a very low level as only about two per cent of the records have been digitised as at the time of this study.

## 7. RECOMMENDATIONS

Based on the research findings, the following recommendations are made:

1. As a matter of urgency, the National Archive should create a disaster response team and set up training programmes on how to fight disaster.
2. The binding and reprographic section of the archive should be equipped with micro-filming cameras, microfilms and all other equipment needed to microfilm records such that surrogate copies of the records will be available in case of disaster.
3. The National Archives of Nigeria, Ibadan should collaborate with other safety agencies who will provide reinforcement when the need arises.
4. The process of digitising records should be at top speed so that all records will be made available to users at the click of a button rather than accessing the original document now and then.
5. The Federal Government of Nigeria should be more responsive in preserving the cultural heritage of the nation. To do this, the National Archives of Nigeria, Ibadan needs government funding to bring it to the standard of other archival institutions in the world.

## REFERENCES

- Akintunde, S.A. (2016). Ashes to beauty: The story of the University of Jos Library. Retrieved on January 12, 2021 from <https://www.acu.ac.uk/membership/member-communities/research-knowledge-information/realising-research/may-2016/university-jos-library>.
- Alberta, O.N, Amaratungaa, D. & Haigha, R.P (2018). Evaluation of the Impacts of Oil Spill Disaster on Communities and Its Influence on Restiveness in Niger Delta, Nigeria. *Procedia Engineering* 212, pp. 1054-1061.
- Alonso, W., Schuck-Paim, C. & Asrar, G. (2014). Global Health and Natural Disaster Alerts: Preparing Mobile Phones to Endure the Unthinkable. *Earth Perspectives - Transdisciplinarity Enabled*. 1. 10.1186/2194-6434-1-24.
- Amodu, O. (2019). National Archives Ibadan and Archival Management in Nigeria: Challenges and Prospects. *Kashere Journal of Humanities, Management and Social Sciences*, 3(2): pp. 8-19
- Borthakur, A. (2016). Health and Environmental Hazards of Electronic Waste in India. *Journal of Environmental Health*. 78(8), pp. 18-23
- Cabinet Office (2013). Guidance Emergency response and control. Accessed on January 20, 2021 from <https://www.gov.uk/guidance/emergency-response-and-recovery>
- Centre for Disease Control and Prevention (CDCP) (2014). *Disaster Preparedness and Response: Complete Course*. Facilitator guide, first edition. Atlanta (GA): CDC.
- Cook, T. (1997). The Impact of David Bearman on Modern Archival Thinking: An Essay of Personal Reflection and Critique. *Archives and Museum Informatics*, 11, pp 15-37. <https://doi.org/10.1023/A:1009035121019>
- Erickson, C.A. (2010) Earthquake recovery: a Struggle for Chile's Public Library Services. *American Libraries*, 41(4), pp 18-19.
- Federal Ministry of Health (2020). National Public Health Multi-Hazard Emergency Preparedness and Response Plan. Retrieved on April 12, 2021 from [https://ncdc.gov.ng/themes/common/docs/protocols/289\\_1634040134.pdf](https://ncdc.gov.ng/themes/common/docs/protocols/289_1634040134.pdf)
- Flaherty, J. (2010). *Floodlines: Community and Resistance from Katrina to the Jena Six*. Haymarket Books, pp 1-292 11
- Glaudemans, A., G, Jonker, R & Smit, F. (2017). *Archives in Liquid Times*. The Hague: Stichting Archiefpublicaties. Netherland. pp. ix-xiii.
- Hallegatte, S. and Przyusky, V. (2010). The Economics of Natural Disaster: Concepts and Methods (The World Bank, Sustainable Development Network Office of the Chief Economist, 2010) Policy Research Working Paper 5507. Accessed on January 20, 2021 from <http://econ.worldbank.org>
- Heap, S. (1991). The Nigerian National Archives, Ibadan: An Introduction for Users and Summary of Holdings. *History in Africa*, pp. 152-172
- Hlabaangani, K & Mnjama, N. (2008). Disaster preparedness in information centres in Gaborone, Botswana. *African Journal of Library, Archives and Information Science*, 18(1), pp 63-73.
- Idaho, B.A. (2012). E-waste management: a Case Study of Lagos state, Nigeria. Master's Degree Thesis, Social and Public Policy, Department of Social Sciences and Philosophy, University of Jyväskylä, Finland.
- Karen, L.L. (2009). Management Strategies for Disaster Preparedness. *The ALA Yearbook of Library and Information Science* 14 (1). Chicago: ALA: 1-6.

- Kolade-Faseyi, I. (2018). An appraisal of Archival Management and Legislation in Nigeria. *Elizade University Law Journal*, 1, pp. 281-282
- Miceli, R., Sotgiu, I. & Settanni, M. (2008). Disaster preparedness and perception of flood risk: A study in an Alpine Valley in Italy. *Journal of Environmental Psychology*, 28(2), pp. 164-73.
- Mishra, D.K. (2010). Activity and responses to natural disaster management. *Civil and Military Law Journal*, 46(2), pp. 145-148.
- National Archives of Nigeria (1995). *Guide to Sources of Nigerian History*, Lagos, ISBN 978-9783343801
- National Archives of U.S.A. (2016). What's an Archives? Retrieved on May 10, 2021 from <https://www.archives.gov/about/info/whats-an-archives.html>
- NEMA (2009). Nigeria: NEMA Appeals to States to Establish Disaster Agencies. National Emergency Management Agency Report from the Government of Nigeria. Retrieved on 15 February 2021 from <http://reliefweb.int/report/nigeria/nigeria-nema-appeals-states-establish-disaster-agencies>
- NEMA (2018). National Disaster Risk Management Policy. National Emergency Management Agency Retrieved July 20, 2021 from <https://nema.gov.ng/download-documentations/>
- Ngulube, P., Modisane, K. & Mnkeni-Saurombe, N. (2011). Disaster preparedness and the strategic management of public records in South Africa: Guarding against collective cultural amnesia. *Information Development*, 27(4), pp 239 - 250. <https://doi.org/10.1177/0266666911417641>
- Ntsala, M., & Mahlatji, M.R. (2016). Service delivery protests resulting in the burning of libraries: a study of selected public libraries in South Africa.
- Ogungbuyi, O., Nnorom, I.C., Osibanjo, O. & Schlupe, M. (2013). E-waste Country Assessment Nigeria. E-waste Africa Project. Final report of component 3 of the UNEP SBC. E-waste Africa project of the Secretariat of the Basel Convention. Retrieved June 06, 2020 from <http://ewasteguide.info/>
- Ogunsola, K. & Shobajo, J.A. (2017). Determinants of Electronic Waste Management Practices among Information and Communication Technology Artisans in Ibadan, Nigeria. *African Journal of Sustainable Development*, 7(1), pp. 89-114.
- Onyeneke, C.O. (2017). Impact of disaster on access to records of National Archives of South East, Nigeria. *Collection Building*, 36(2), pp. 63-68. DOI: 10.1108/CB-12-2016-0033. ISSN 0160-4953.
- Queensland Government. (2021, July 19). Prevention, Preparedness, Response And Recovery Disaster Management Guidelines. Retrieved on August 20, 2021 from <https://www.disaster.qld.gov.au/dmg/Pages/DM-Guideline-2.aspx#5>.
- Salau, M. (2016). National Archives Kaduna collection. Endangered Archives. London: British Library.
- Savindra, S. & Singh, S. (2013). Disaster management. Allahabad: Pravalika publications.
- Sinha, A. & Srivastava, R. (2015). Concepts, objectives and challenges of disaster management. *International Journal of Science and Research*, 6(7): pp. 418-424.
- Solomon-Uwakwe, B. (2019). Disaster awareness and preparedness of academic libraries at Michael Okpara University of Agriculture Library, Umudike, Abia State, Nigeria *Library Management*, 1, pp. 1-15.
- Tavakoli, N., Mohammad H., Reza, S. (2015). Role of Health in Effective Response to Disaster. *International Journal of Health System and Disaster Management*. 3 (3), pp 129. doi:10.4103/2347-9019.157363. ISSN 2347-9019

- Uhlig, E. (2008). Water emergency at Lane College Archives. *Oregon Library Association*, 14(4), pp 12-14.
- Uthman, R.O. & Ogunsola, K. (2017). Factors Affecting the Use of Information and Communication Technology in Emergency Management: a Case Study of Government Agencies in Lagos State, Nigeria. *Nigerian Journal of Sociology and Anthropology*, 15(1), pp. 34-54.
- Vanguard (February 8, 2022). Crude oil spillage in Nigeria rises 22%. Retrieved on March 1, 2022 from <https://www.vanguardngr.com/2022/02/crude-oil-spillage-in-nigeria-rises-22/>