University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

April 2023

A Literature Survey of Disaster Management Strategies in Library and Information Centres

Peter Olubunmi Olubiyo Adeyemi College Education, Ondo, olubiyopeter@gmail.com

Follow this and additional works at: https://digitalcommons.unl.edu/libphilprac



Part of the Scholarly Communication Commons

Olubiyo, Peter Olubunmi, "A Literature Survey of Disaster Management Strategies in Library and Information Centres" (2023). Library Philosophy and Practice (e-journal). 7577. https://digitalcommons.unl.edu/libphilprac/7577

A Literature Survey of Disaster Management Strategies in Library and Information Centres

by

Peter Olubunmi OLUBIYO,

College Library,
Adeyemi College of Education, Ondo, Nigeria.
+2348166392038, <u>olubiyopeter@gmail.com</u>
ORCID: https://orcid.org/0000-0001-7340-1866

Abstract

Disaster is any incident which threatens human safety and damages or threatens to damage a building, collection or items, equipment, systems and services. Disaster can also be defined as an event whose timing is unexpected and whose consequences are seriously destructive. Disaster can have serious financial implication and also cause disruption of services. In fact there is no library in the world that is free from risk and disaster, whether natural or man-made. As a result, there is need to sensitize senior managers of libraries so that their institutions can be prepared. Thus, in order to avoid disasters in library and information centres, it is necessary to have a disaster management plan and strategies

Key Words: Disaster, Disaster Management, Disaster Management Strategies, Library and Information Centres

Introduction

According to Barua (2018), libraries are important institutions that provide information to users. Therefore, libraries should guide against disaster to avoid getting the resources destroyed in an occurrence or prevalence.

It is vital for the management of a library to make sure that the building and library premises are safe for public to come, for the staff to work and provide services. Actually, disasters in libraries are not new. Disaster threatens human safety or endangers a library building and its resources - human, documents, equipment and services. So, Disaster management and planning should be one of the most important aspects of library management. What then is diasaster?

Disaster is any incident which threatens human safety and damages or threatens to damage a building, collection or items, equipment, systems and services. Disaster can also be defined as an event whose timing is unexpected and whose consequences are seriously destructive. Disaster can have serious financial implication and also cause disruption of services. In fact there is no library in the world that is free from risk and disaster, whether natural or manmade. As a result, there is need to sensitize senior managers of libraries so that their institutions can be prepared. Thus, in order to avoid disasters in library and information centres, it is necessary to have a disaster management plan (Rehman, 2014).

Kinds of Disaster

Disasters or emergencies can be caused or produced by a variety of natural and manmade agents. The natural agents or reasons of disasters can be climate and weather with their different phenomena such as clouds, precipitation, avalanches, blizzards, dust storms, drought, earthquakes, floods, tsunamis, hurricanes, landslides, wildfires, tornadoes, volcanic eruptions and many more. The man-made disaster may result due to poor design and quality of the buildings to no or very poor maintenance, leakages, electric short circuits, burglary, vandalism, arson, wars etc (Rattan, 2013).

Chakrabarti and Pramanik, (2017) explained that disaster is synonymous to peril, hazard or threat. Hazards mean critical situation that can cause damage to property, manpower, etc. Hazard can be categorized in the following way--

Natural Hazard:-

- Bushfire (or wild fire)
- Cold wave and extreme cold
- Drought
- Earthquake
- Flood, avalanches, and tidal waves
- Heat wave and sand storms
- Landslide
- Tropical cyclone(Typhoon ,Hurricane)
- Tsunami
- Volcanic eruption

Unnatural Hazard:-

- Bio terrorism
- Civil unrest
- Cyber terrorism

- Emission of Hazardous materials and toxic
- Major Accident
- Mine explosions
- Nuclear power accident
- Oil spills
- Power failure
- Residential and industrial fires
- Violence in the workplace
- War and terrorism

The world has faced a great many disasters in the last couple of decades. Some of the disasters like floods, cyclones and earthquakes, terrorist attack, Tsunami, etc have occurred in the region-prone environment. No one knows when and how disasters come. It can strike at any time and at any place. Natural disasters like earthquakes, floods, storms, etc. and technological disasters like gas explosion, biotechnological disaster, etc. kill too many people all over the world. In recent times many libraries within and outside India had been affected either by manmade or natural disasters (Chakrabarti and Pramanik, 2017).

Cases of Disaster in Academic Libraries

According to Chakrabarti and Pramanik (2017), the following Library and Information Centres have been affected by either natural or man-made disaster--

a) The Library of Alexandria, established by Ptolemy I, around 300 B.C. was believed to have been wiped out in a fire 1600 years back. Recently it was reconstructed and was officially opened in Egypt.

- b) In 1813, three thousand books from the Library of Congress were burnt to ashes by the British forces.
- c) National Library of Iraq, National Archives of Iraq and National Museum of Iraq staff were attacked by militants. The books, artifacts, furniture and other important documents are looted and burnt.
- d) People know the damage done by Hitler to Berlin Library in America in May 11, 1933.
- e) An accidental electrical fire and its consequences at the Port mouth Public Library, Virginia in 1988.
- f) Thousands of manuscripts, rare books are severely damaged by the followers of Sambhaji Brigade in Bhandarkar Oriental Research Institute, Pune on 6th January 2004.
- g) Recently Nandigram Pataspur Library in the district of Medinipur (East) of Bengal is affected by some hooligans.
- h) In the West Bengal Balpai library of Hooghly; Lenin Pathagar of Bargarchumukpur; Anandamohan Library, Calcutta; Jagoroni Sadharan Pathagar of Nadia and Gana Sangha Library of Mathabhanga, Coachbehar, Sangrahasala of Calcutta University (Alipur Campus) were recently attacked by hooligans.
- i) On the 27th March, 2013 a fire incident occurred at the Bauchi Road Campus Library of University of Jos, Nigeria. The fire which started at night, engulfed part of the Library's facilities and resources. Fortunately the fire was brought under control by the help of the Fire Service Men before it could spread further. Again, on the 8th of October, 2016 another fire broke out at dusk at the Naraguta Campus Library but unlike the first incident, this fire ravaged the entire facilities

and resources inside the Library building; thus burning most of them to ashes (Nwokedi, Panle and Samuel, 2017).

j) According to Chawinga and Majawa (2018) in Okoye and Echedom (2022), the Mzuzu University Library in Mzuzu, Malawi, was damaged by fire in December, 2015, which was thought to be caused by a defective electric connection, burning approximately 45,000 books as well as numerous other computers. The library could not have been destroyed if the firefighters were active and trained, according to the scholars, because they did not extinguish the fire that destroyed the university's library at the same time, despite being purportedly called twenty times before responding.

Challenges to Disaster Management of Library Resources

In disaster management, there are situations that hinder the proper and smooth management of disaster in any organization, library not exempted. Some of the problems encountered in disaster management in libraries include lack of adequate facilities, inadequate fund allocation to libraries and lack of interest on the part of some librarians on disaster management issues (Echezona, Ugwu and Ozioko, 2010). In a study by Rasaki (2019) on disaster management practices in selected university libraries in Nigeria, it was investigated and major findings revealed that there were no planned disaster management policies in place in the libraries that responded. Loss through theft, storm damage, computer crashes, pest infestation and vandalism all featured with a high level of occurrence.

Also, Ilo, Ngwuchukwu, Michael-Onuoha and Segun-Adeniran (2019) in Patrick, Ferdinand and Efe (2020) studied challenges of disaster management among federal and state university libraries in Nigeria. It was found that inadequate disaster facilities and equipment as

well as poor funding were the greatest challenges confronting disaster management and training in the libraries. In a study conducted by Ayoung, Boatbil and Baada (2015) in Patrick, Ferdinand and Efe (2020) on disaster preparedness of libraries as revealed through insights from polytechnic librarians in Ghana; findings revealed that lack of security policy, poor physical security presence, poor power supply, lack of fire-fighting apparatus, lack of fire/disaster drills for staff, poor cooperative networks, and lack of funding are all challenges mitigating proper disaster preparedness in academic libraries in Ghana.

As shown in a result from the research carried out by Nwokedi, Panle and Samuel, (2017) on the fire disaster of University of Jos Library, Nigeria, majority of the respondents agree that lack of enough fire-fighting equipment is a constraint in managing disaster in the Library. Furthermore, majority of the respondents strongly agree that lack of modern fire-fighting equipment 56 (53.84%) and lack of a functional disaster management plan 54 (51.92%) were the constraints encountered in disaster management practices in the library. Finally, some of the respondents strongly agree that lack of training on how to use the fire-fighting equipment, 56 (53.84%), is also a major constraint in managing disaster in the library.

Strategies to Disaster Management in Libraries

Disaster Management is the programme that deals with risk reduction. It covers preparation, support and restructuring the system against any type of disaster. It is an unending process and by no means ends after the disaster hits a place. Disaster Management is a multidisciplinary activity, and often crosses departmental boundaries. From an organizational point of view, effective disaster management depends on proper disaster planning and cooperation and communication between authority and members of the staff of a particular organization. Libraries are the store houses of valuable information. In order to preserve

information for future use, libraries need to effectively manage and properly guide resources against disaster (Chakrabarti and Pramanik, 2017).

Ability to safeguard and preserve treasures in library holdings will go a long way in reducing the damage of the collections to the barest minimum no matter how the threats appear (Fabunmi, 2013). Strategies for effective disaster management in university libraries in South Eastern Nigeria were analyzed by Echezona, Ugwu and Ozioko, (2010) as to include development of disaster preparedness plan, vulnerability analysis and risk assessment should be conducted to evaluate the types of emergencies that might affect library collection, personnel and building; backing up library websites regularly, staff training and raising awareness of the need to protect documents from disaster. It was recommended that modern facilities to avert disaster should be provided for government. Training of librarians and other staff on disaster control and prevention should be carried out as well as adequate funding of the libraries by the government.

Also, Bansal (2015) as cited in Patrick, Ferdinand and Efe (2020) opined that hazards or disasters in libraries can be mitigated or avoided altogether through meticulous and elaborate disaster planning. It was asserted that libraries should: follow an effective disaster control plan; carry out periodic full scale mock drill; ensure Library buildings, equipment, collections and computers are completely insured; provide good drainage and flood-proof structures; carry out regular checks on library building regarding water leakages system; maintain library building and properties and also ensure that regular inspections of buildings and equipment are conducted. Also, staff are to be trained on checking fire-extinguishers for expiration and in handling of equipment in case of emergency; fit electrical installations in a safe mode and install single switch control; periodically carry out check against termite damaging the materials and make

sure that digitization of library materials are done. These are all good strategies that can be employed to prevent disasters in libraries.

Chakrabarti and Pramanik, (2017) explained and elaborated that proper disaster planning is necessary to forestall damages against library resources. Disaster planning of a Library and Information Centre is a complex process. Protecting employees and resources of the Library and Information Centre during a disaster requires planning. They must take steps to lessen the damage done by hazards. These steps must be taken before, after or during disaster.

To chalk out a plan the following steps must be followed:

- The first step is to assign responsibilities to Disaster Management Team
- Second step is to conduct the preliminary research on Disaster Management Strategies
- Third step is to identify and then to assess the potential hazards
- Fourth step is to identify the resources available to combat disasters
- Fifth step is to create contact with local emergency agencies
- Six step is to document the overall financial assessment of the disaster if it happen

To maintain the plan with certain modifications as at when necessary, disaster planning team should know about salvaging techniques. Salvage is an integral part of the overall disaster planning process which comprises the following phases:

Phase One- Before (Prevention and Mitigation): In this phase Library and Information Centre authority have to assess and correct or reduce any hazards that might cause damages. So library authorities should anticipate what might happen. Accordingly they should put into place systems and emergency supplies that would enable the authority to combat against disaster.

Phase Two: During (Response and Preparedness) Using a predetermined plan, the library and information centre authority can start actions and perform functions immediately after disaster, to save life and resources of the library and information centre. These involve saving lives and resources of the library and reducing the possibility of damage through quick recovery operations. The management team has to deploy emergency response personnel to rescue employee and users of library resources. Effective communication and proper co-ordination is the main criteria for response. Response measures are being done immediately prior to and following disaster impact.

Phase Three: After (Recovery, Reconstruction and Development) --- The reconstruction and recovery means restoration of library in a disaster situation to what is used to be, but it takes too much of time to restore like before.

Phase Four: Prevention helps to avoid the repetition of past mistakes by reducing reoccurrence of disasters. Personal preparedness and protection against library and information centre resources are included in the precautionary activities at the time of a disaster. Individuals who work in a library and information centre and also users can take steps that that will assist them to minimize structural hazards. Common precautionary measures include the proper maintenance and implementation of warning methods.

Conclusion and Recommendations

With huge responsibilities on librarians or the information scientists, one has to safeguard and preserve the variety of precious and invaluable information sources and tools in print and non-print form and other infrastructure, from any potential disaster or any risk. Disasters, either man made or natural can completely or partially damage information sources preserved for the

use of generations and for posterity. Thus, it is in this light that disaster management strategies is needed to face any potential disaster that could rage against libraries (Rattan, 2013).

References

- Bansal, J. (2015). Disaster Management in Libraries: An Overview. *The Journal of Library and Information Management*. Available at: https://www.researchgate.net/publication/313327897
- Barua, N. (2018). Disaster Management in College Libraries: a study in India. *International Journal of Innovative Knowledge Concepts (IJIKC)*. Available at: DOI 11.25835/IJIK-31
- Chakrabarti, A. and Pramanik, A. (2017). Disaster Management Methods and Techniques for Library and Information Centres: a framework. *International Journal of Academic Library and Information Science*. Available at: http://www.academicresearchjournals.org/IJALIS/Index.htm
- Echezona, R. I., Ugwu, C. I. and Ozioko, R. E.(2010). Disaster Management in University Libraries: Perception, Problems and Strategies. Available at: 10.1136/ip.2010.029215.129
- Fabunmi, B.A (2013). An Investigation into the Awareness, Occurrence and Preparedness for Disaster Management in Selected Academic Libraries in Tanzania, East Africa. *Journal of Library, Educational Media And Information Studies (OLEMIS)* 5(1)
- Nwokedi,G.I., Panle,P.P. and Samuel,N. (2017). Disaster Management and Preparedness: A Case Study of University Of Jos Library. *Library Philosophy and Practice (e-journal)*. Available at: http://digitalcommons.unl.edu/libphilprac/1590
- Okoye, C. N. and Echedom, A.U.(2022). A Survey of Disaster Mitigation Strategies Adopted in Academic Libraries in Enugu State. *Global Review of Library and Information Science* (*GRELIS*), 18 (1). Available at:https://www.grelis.com.ng
- Patrick, I.O., Ferdinand,O.A. and Efe, R.T. (2020). Disaster Preparedness and Prevention Strategies of university libraries in Nigeria. *Library Progress (International)*. Available at: www.bpasjournals.com
- Rasaki, O.E (2019). Disaster management practices in selected university libraries in Nigeria Available at: https://doi.org/10.1080/19455224.2019.1604395
- Rattan, P. (2013). Role of Library and Information Centres in Disaster Management. Library Philosophy and Practice (e-journal). Available at:https://digitalcommons.unl.edu/libphilprac/886

Rehman, A. (2014). Importance and Measures of Disaster Management in Libraries. European Scientific Journal