

Measures for Disasters in Libraries

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Abstract

The paper discusses the meaning and different types of disaster situations which damage the library system and its services. Here main focus is given on the different phases of disaster management system in the libraries. In these phases, different measures described shows the salvage of material and human life. List of necessary equipment required in emergencies are given here which can be included in emergency kit. In case if libraries are unaffected then it plays a different role for the salvage of society. The paper also explains the contribution of international organizations.

Keywords: Disaster, Preparedness, Mitigation, Emergency Kit

1. Introduction

In the last few decades, the frequency of disasters is increasing continuously due to which various parts of the society are suffering. Libraries are also an important component of society, which plays a vital role in the development of a society and transmits cultural heritage among different generations. Due to a disastrous situation, lots of precious and valuable information material, staff, library building and other infrastructure can be damaged. Therefore, libraries need safeguard and preservation activity to overcome disasters.

Normally libraries are functioning for the present generation and preserving information for future generations. But at the time of disaster, libraries and information centres get paralyzed. To face a disastrous situation, planning is a very important factor in the perspective of the library. A disaster is an unexpected event or an unpredictable incident which disrupts normal activities of the library.

Various ancient libraries have fully or partially been destroyed due to facing different types of disasters e.g. Ancient Nalanda library-Dharmaganja, Library of Alexandria, University Library of Bosnia and Herzegovina, Library of the University of Louvain (Belgium) etc. A huge amount is being spent for the progress of a university library, it is important that a satisfactory arrangement should be done to preserve the materials from disaster.

2. Meaning of Disaster

Disaster is a catastrophic event which disrupts the normal life of the library. Librarians and other staff have to put extra efforts for providing normal activities of the library at that time. Generally, it occurs suddenly and its effect is experienced over a long period. Various experts and institutes define disaster in different ways which are given here.

As per "United Nations", a disaster is a serious disruption of the functioning of a community or a society. Disasters involve widespread human, material, economic or environmental impacts, which exceed the ability of the affected community or society to cope using its own resources.



“Eden and Mathew (1996)” define disaster as an incident which threatens human life/ or/ and damages or threatens to damage a library building, collections, equipment and systems.

“Chambers twentieth-century dictionary, (1990)” - A disaster has been defined as ‘an adverse or unfortunate event, a great and sudden misfortune, [a] calamity.

“Oxford English Dictionary” defines disaster as anything that befalls of ruinous or distressing nature; a sudden or great misfortune, mishap, or misadventure; a calamity. (Disaster, 1989, p. 713).

“Harrison (1979:7) defines” a disaster is what happens only if you are not prepared for it.

“Ngulube and Magazi, (2008)” Disaster defined as an unexpected event that may drastically threaten the lives of humans or buildings, destroy the information infrastructure, disrupt and render documentary materials inaccessible to users.

It is clear that a disaster is an unexpected event which collapses the whole system along with library.

3. Types of Disasters

Generally, libraries face different types of disaster events which can categories into natural and man-made disaster. Natural disaster is occurring in the form of rain, flood and cyclone, earthquakes, volcanic eruptions, cold and heat wave, thunderstorms, tsunamis, avalanches, landslides, cloudbursts, dust storms, wildfires etc. and damage the libraries. Libraries can also be damaged through the activities of humankind which are found in the form of war and terrorism, fires, water leakage, building deficiencies, biological damages, micro-organisms, insects or bug infestation, system failure,

collapse of shelving, indoor structural accident, vandalism and arson, theft and burglary, electric short circuits, riots, social and political unrest etc. Print materials, Computer systems, valuable information and records of the libraries can be damaged due to these disasters. Present day libraries are growing as the digital libraries and may also suffer from technical disaster in the form of power cuts, breakdown of computer network, cooling/heating/ventilation system failure, telecommunication failure, elevator failure, etc.

4. Management of Disasters by Libraries

Disaster management is a dynamic process which includes various phases of management. Disaster events cannot be prevented but different measures can be adopted by the libraries for reducing the possibility of trouble. It is a part of the disaster prevention programme. The first phase is prevention. Libraries can prevent the damage of disaster after adopting preventive steps. The second phase is preparedness a disaster plan is a necessary and important factor along with other steps. The third phase is a response. During the time of disaster, it is important for the librarian and others to know how to handle and react against disaster. Fourth and final phase is recovery. After facing a disastrous situation, Library staffs put extra efforts to bring normal situation. Prevention, preparedness, response and recovery are those steps which are done in the period of “before, during and after situation”. Libraries can follow different measures in these steps and save the library’s materials, staff and users.

4.1. Prevention

It means the managing the disaster risk. Libraries adopt various preventive steps for handling any disastrous situation. These steps are taken before

the situation. These measures are necessary to overcome the damages of disaster incidents. In this phase, libraries predetermine the situations of disaster, and prepares for the prevention of damages of materials and human-being. Some steps are given here which can be adopted by libraries for prevention:

- ❖ Identify and prepare the list of probable risk factor which can damage the libraries.
- ❖ Regular inspection and maintenance of the building, especially its roof & drainage. This work should be done by a construction engineer.
- ❖ Regular sorting and cutting of trees around the library building. This work should be done by cleaning staff.
- ❖ Installation of external security lighting and its regular inspection and maintenance. Security is an essential part of libraries. So, it is important to prepare and follow single security policy regarding issue/return of key, minutely checking of users/outside in the time of entering/leaving of the library,
- ❖ The arrangement of full-time human security who should patrol and check entire library building.
- ❖ Installation of the alarming system and its regular checking.
- ❖ Racks should be kept at least 150 mm above of the floor and also avoid long height. Proper space should keep between two racks.
- ❖ Regular checking of humidity sensitive area in the building. Regular maintenance should be done for all water carrying equipment.
- ❖ Regular checking system should be followed for the electric circuit, equipment as to avoid fire

incidents. one should ensure that all electric equipment are shut down at the time of closing. Fire extinguisher equipment or suppression system should be installed at different places in the library and are to be regularly checked and maintained.

- ❖ Libraries should be covered through insurance policy which can cover all types of damage cost such as repair of the building structure, replacement of shelves, electrical equipment etc.
- ❖ Every library should have emergency gate. Regular inspection and cleaning should be ensured.

4.2 Preparedness

All disasters cannot be prevented. This phase means ready for disaster incidents. Libraries should prepare to handle any disaster situation. Following measures should be adopted in this phase:

- ❖ Prepare a disaster plan. It should be in written form. Regular review and revision of disaster plan should be made every three months. It should be widely distributed to all staff, administration, insurer and other relevant agencies. The librarian should consult other Institute's disaster plan, emergency expert etc. before preparing own disaster plan.
- ❖ Establish a disaster team. All members of the team should be trained to handle disaster incidence. They should also have the capacity to deal with media/press, the insurer for the claim, supplier for purchasing equipment and contact preservation experts. The responsibility of every member of the response team should be pre-decided.

- ❖ Organise training program on regular basis and it should compulsion for all staff to attend it regularly. Press clippings, pictures, and videos of prior disaster incidents should use as a teaching tool in this training secession. Mock drill program should organize to train the staff for using equipment in disaster incidents.
- ❖ Take the decision about the priority material for salvage. This information should also be shared with emergency agencies.
- ❖ Take back up regularly of all electronic data
- ❖ Prepare a list of contact details such as phone no., email address, home address etc., of all members of the response team. It should be regularly updated. Contact numbers of the suppliers of emergency equipment should also be kept available.
- ❖ It should ensure that emergency kit is to be kept in different places in the library. All staff should have knowledge about these places.
- ❖ In an emergency situation, funds are a necessary element. So, every institution should maintain a separate budget for facing disaster.
- ❖ Maintain a recovery area where the response team can carry and keep salvaged materials.

4.3 Response and Reaction

This phase is active when a disaster comes. In this phase, priority is given to human safety instead of salvage material. Following activities should be done in this phase:

- ❖ Firstly, contact with the leader of the emergency team and other emergency services and convey information about the situation.

- ❖ Raise alarm and inform to all human being which are working in different Parts of libraries to evacuate the premises.
- ❖ Assessment of destruction of disaster and decide the position of re-entering in the site. If a few portions of the building is found danger then this place should be restricted for human being.
- ❖ Take the photographs of destruction for an insurance claim. The video should prepare for all activities regarding salvage material.
- ❖ Maintain proper records of all expenses which are incurred for salvage material.
- ❖ Ensure that all electrical equipment are turned off, remove the water by pump and maintain the temperature and humidity level to save the material.
- ❖ Keep undamaged material in safe place.
- ❖ The arrangement of fans, dehumidifiers, heater etc to achieve the appropriate humidity level for salvage materials. If disaster occur due to water, then librarian should be aware about the different variety of hazard which occurs after a disaster incident. Wet material is very fragile so needs to be handled carefully. One should also ensure that fungus should not grow on the wet books.
- ❖ Give proper treatment damaged material as soon as possible. These materials should be transported and restored at a different place. Before transportation, these materials should be wrapped in plastic bags and kept in plastic boxes. Prepare a list of materials fore very disaster situation, it should be ensured that the disaster plan is fully followed by disaster team.

- ❖ Establish a control room with necessary equipment such as phone, office equipment etc.

4.4 Recovery

In this phase, libraries tries to restart normal working condition to provide services to their users. In this phase, the following measuring steps should be adapted to re-establish the library:

- ❖ Take expert advice for repair of damages of the building. In this regard, cost should be estimated and funds can be acquired from available sources. If expert gives advice about instability of the building then the alternative place should be searched.
- ❖ Windows and doors should be kept open. In case of a water disaster, wet carpet, furniture, curtain etc., should be remove. Fans and dehumidifiers should be installed.

- ❖ Take advice from conservation expert for salvages the wet materials.
- ❖ The conversation should be done with the insurer for real cost of damagebased on the photographs and videos which were taken during the response phase.
- ❖ Cleaning should be done after the procedure of insurance claim.
- ❖ Analysis of the disaster plan and needful change should be made in light of previous and current experience.
- ❖ In case of the fire incident, recovery of damaged material is a very difficult task. Skills and expensive equipment are required for such type of recovery.
- ❖ Rearrange and replace damaged books from new or gifted books.

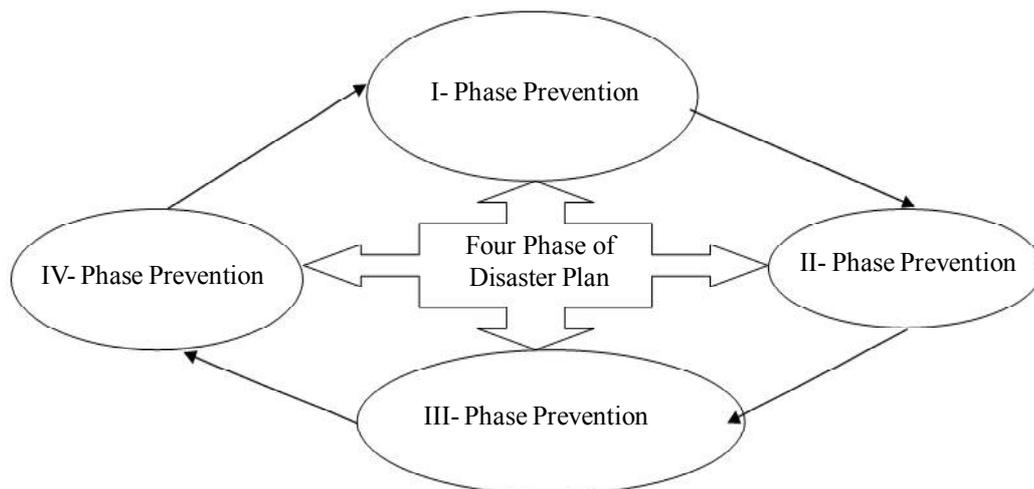


Figure 1:Management of disaster by library

5. Necessary emergency equipment

Every library should maintain an emergency kit in which the following equipment should be included:

- ❖ Torches
- ❖ Helmets and headlights
- ❖ Plastic aprons/protective cloths
- ❖ Rubber boots and gloves
- ❖ Face masks and goggles
- ❖ First aid boxes
- ❖ Electric extension cable
- ❖ Hand-operated water pumps.
- ❖ Electric fan.
- ❖ Wet/dry vacuum cleaner.
- ❖ Water spray bottle.
- ❖ Polythene sheet, polythene bags
- ❖ Plastic crates and boxes.
- ❖ Portable tables and trolleys
- ❖ Hammer and screwdriver
- ❖ White blotting paper, sponges, kitchen towels.
- ❖ Permanent marker pen, water proof adhesive tape and label.
- ❖ Camera, video camera, Tape recorder.

An emergency kit should be always properly maintained and updated.

6. Role of unaffected libraries in disaster incidents

When Libraries escape from disaster incidents then it can play a different role for the society as:

- ❖ Libraries can provide temporary shelter to the affected people.

- ❖ Provide telephonic service to those peoples who are separated from their family and want to inform about them.

- ❖ Provide CD/DVD, light reading materials, toys etc for the entertainment of children.

- ❖ Provide computer facilities to affected persons to do start proceedings with the insurance company, banks, employers etc.

7. Contribution of International Organization

Several international organizations such as UNESCO, IFLA etc. are working for the preservation activities of libraries, museum etc. at international level. These organizations provide guidelines to the library staff that how to save reading materials for future generation. International Committee of Blue Shield (ICBS) is a non-governmental organization, established in 1996 involved in the protection and safeguard of cultural heritage during a disaster situation. These organizations create awareness amongst the people for the protection of cultural heritage.

8. Disaster Management Act 2005 in India

In India, Government of India passed disaster management act 2005 in parliament. In compliance of the act, a separate department of disaster management has been set up by the Government of India have the single framework set up at the national, state, district level. National Emergency Management Authority prepared draft guidelines for the museum in March and May 2017, guidelines are also prepared by the National Emergency Management Authority for flood, earthquake, fire, cyclone, Tsunami, biological and chemical disaster etc. These guidelines are important for saving the library and its material. It is necessary for the Indian

libraries to follow these guidelines for saving its material for future.

9. Conclusion

We know that libraries are an important part of society. It collects serves and preserves the material for the current as well as future generation. But in case of disaster it suffers from interruption of service.

In Indian perspective, it is important to preserve the reading materials for future generation because our literature is very ancient, rich and valuable. If these materials are destroyed due to disastrous situation then its recovery will be impossible. It is necessary for the libraries to follow the measures of different phases of disaster management and save the human being and reading materials for future.

Further Reading

1. ABAREH, H. M. (2014). Survey of Disaster Preparedness by Heads of Academic Libraries in North-Eastern Nigeria. *Global Journal of Academic Librarianship*, 3 (1). (pp.45-57).
2. AHENKORAH-MARFO, M., & BORTEYE, E. M. (2010, July). Disaster preparedness in academic libraries : The case of the Kwame Nkrumah University of Science and Technology Library, Kumasi , Ghana *Library & Archival Security*, 23 (2), (pp.1-27)
3. ARIZONA STATE LIBRARY, ARCHIVES AND PUBLIC RECORDS. (2004). Disaster Planning fo Rural Libraries in Arizona. Retrieved june 9, 2016, from <http://www.azlibrary.gov>
4. ARORA, J. (2009). Disaster planning, preparedness and recovery for libraries of national importance in delhi. 1-149. Gwalior, m.p., india: school of studies in library and information scince, jiwaji university.
5. AUSTRALIAN LIBRARY AND INFORMATION ASSOCIATION. (2010). ALIA Guide to Disaster Planning, Response and Recovery for libraries. Blue Sheild Australia.
6. BISWAS, B. C., & CHOUDHURI, S. K. (2012). Digital Information Resources for Disaster Management of Libraries and Information Centres. *Bangladesh Journal of Library and Information Science* , (pp.12-21).
7. BUCHANAN, S. (1981). Disaster: Prevention, Preparedness and Action. *Library trends* , (pp.241-252.)
8. COLLINS, M. L., & KAPUCU, N. (2008). Early warning systems and disaster preparedness and response in local government. *Disaster Prevention and Management: An International Journal*, 17 (5), (pp.587-600).
9. ECHEZONA, R. I. [et.al] (2012). Disaster management in university libraries: Perceptions, problems and strategies. *International Research: Journal of Library & Information Science* , Vol. 2 (No. 1), (pp.56-64).
10. KAUR, T. (2009). Disaster planning in university libraries in India: a neglected area. *New Library world*, 110 (3/4), (pp.175-187).
11. KHALID, S. J., & DOL, N. (2015). Disaster Preparedness for Academic Libraries in Malaysia: An Exploratory Study. *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, 9 (10), (pp. 3304-3310).

12. LYALL, J. (1995). Disaster Planning for Libraries and Archives: Understanding the Essential Issues. National Preservation Office for the Pan-African Conference on the Preservation and Conservation of Library and Archival Materials, Nairobi, Kenya: 21-25 June 1993. Nairobi: National Library of Australia Staff Papers.
13. MADHYA PRADESH, NIDM. (n.d.). Madhya Pradesh National Disaster Risk Reduction Portal. Retrieved sept 5, 2016, from www.nidm.gov.in.
14. MCILWAINE, J. (2006). IFLA disaster preparedness and planning -A Brief manual. Paris: IFLA-PAC (Preservation and Conservation).
15. NATIONAL DISASTER MANAGEMENT AUTHORITY, GOVERNMENT OF INDIA (2017) .National Disaster management guidelines for museums, 2017.
16. RATTAN, P. (2013). Role Of Library and Information Centres in disaster Management. Library Philosophy and Practice (e-journal) libraries at University of Nebraska - Lincoln , (pp.1-10).
17. REHMAN, A.U.(2014). Importance and measures of disaster management in libraries. European Scientific Journal, 1,(pp.319-329).
18. SATPATHY, K. C. (2007). Role of Libraries in Disaster Management: Experience from North East India. Library and Information Services in Astronomy V ASP Conference Series , Vol. 377,(pp.313-316).
19. SRIGANESH, V., & IYER, P. (2013). Information Resources and systems for Disaster management. Retrieved from qmed.org.in/wp-content/uploads/2013/02/pi_info_sys_disastermgnt.pdf.
20. UNESCO. (1992). Disaster Planning : prevention, preparedness, response, recovery. Retrieved June 11, 2016, from http://webworld.unesco.org/safeguarding/en/txt_sini.htm
21. ZAVERI, P. (2014, Aug). Damage to Libraries due to Water Related Disasters. Retrieved from <http://digitalcommons.unl.edu/libphilprac> (Accessed on 15/06/2016)

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