



# Disaster Management in the area of Library and Information Centers

# Sharmistha Mitra<sup>\*</sup>

## Abstract

Disasters are on rise, globally as well as in India. The losses of life and property due to disasters have increased substantially during last two decades. Significant natural and man-made disasters in recent years have reinforced the need for libraries and archives to be prepared for and respond to disasters. There is urgent need to adopt multidimensional, multi disciplinary and multi-sectoral approach to reduce the losses of culture, losses of property. A proper planning of disaster management can prevent the losses and reduce the losses.

Current literature on disaster management will be reviewed to determine the new trends in this field. The study focuses the major disasters in the recent past in Indian and world libraries. The article discusses library professionals' role in managing the emergencies for the local community in particular and for the library and information centers in general. Having a federal system of Governance, India has integrated administrative machinery for management of disasters at the National, State, District and Sub-District levels. Various norms and policies have been formed by the government and non-government organizations. Initiatives have been taken by UNESCO for educating and spreading awareness among people regarding reduction in the impact and effects of any potential disasters or any emergencies. The steps and initiatives taken by the other parts of the world excluding India are also discussed. The future vision from the librarian's point of view in making a disaster reduction plan successful through the awareness of society, also suggested at the end of the article.

#### Introduction

When we open a newspaper and no matter what part of the world we happen to be in, we are bound to read reports of all sorts of natural and manmade disasters.

Disasters, in whatever form they take, rob us of our sense of well-being, our security, our community, our loved ones, and our homes. Disasters forever change life as we know it and seriously impact our ability to function. We may rebuild buildings and replace the property to some extent but the impact on human being, their families and loved ones, and their communities, their culture linger. Eden and Mathew (1996) define disaster as an incident which threatens human life/ or/ and damages or threaten to damage a library building, collections, equipment and systems. Disaster can have serious financial implication and also cause disruption of services. No library can be excluded from or is immune to the possibility. In fact there is no library in the world that is free from risk and disaster.

There are three types of disasters:

- Natural disasters
- Man- made disasters
- Technical disasters

<sup>\*</sup>Research scholar, IGNOU, New Delhi. *E-mail Id:*sharmi.mitra2011@gmail.com

| Natural disasters                               | Man – made disasters  | Technical disasters                   |
|---|---|---------------------------------------|
| Rain  | Acts of war and terrorism   | Collapse of shelving and other indoor |
|   |   | structural accidents                  |
| Flood and cyclone                               | Fires   | Computer system failure               |
| Earthquake & Drought                            | Water (broken pipes, leaking  | Elevator failure                      |
|   | roofs, blocked drains)  |                                       |
| Biological damages                              | Explosions  | Power failure                         |
| Micro- organisms, insects or vermin infestation | Liquid chemical pollution   | Heating and cooling system failure    |
| Volcanic eruptions                              | Building deficiencies<br>(Structure, design, environment,<br>maintenance) | Telecommunication failure             |
| Cold wave and thunder                           | Power failures  |                                       |
| storms  |   |                                       |
| Heat waves and mud slides                       |   |                                       |
| Air quantity: temperature and                   |   |                                       |
| humidity  |   |                                       |
| Sinkholes, etc                                  |   |                                       |

**Table1.Types of disasters** 

# **Objectives of the Study**

- To prevent potential disasters
- To minimize the impact
- To enhance its capability in preventing, preparing and responding to disasters effectively and efficiently.
- To generate confidence among stakeholders
- The article aims to spread awareness among people and sensitize the library professionals in particular for their prospective roles in case of any emergency
- The broad objective of the study is to examine the possible causes and prevention of disaster in the Library and its preparedness
- Highlight the importance of Disaster Plan, Disaster Response Team, and structured staff training programs on disaster preparedness;
- To make useful of the availability of insurance policy of libraries for their resources.

#### The Reasons of Increasing Disasters

The occurrence of natural disasters increased after 2002. The reasons are:

Climate change, increasing urbanization, including growing concentrations of people in unplanned and unsafe urban settlements and exposed coastal areas, poverty, HIV prevalence, and inadequate attention to changing risk patterns, are placing more and more people in disaster-prone locations.

#### **Effect of Disasters**

In libraries, there is a likely-hood of fire as the collections are mostly organic in nature. Once fire

starts, it is difficult to save those materials which get fire. Items not directly engulfed in flames can be charred by soot and smoke. Heat emitted from fire causes bindings to shrink and warp and plastic base materials to melt. Water used for fighting fire can cause enormous damage. Besides fire, floods, high winds, cyclones, earth quakes are also agents of deterioration for the library collections. These will lead documents to absorb water, swell, warp and become extremely vulnerable to physical damage. Dyes and ink may bleed and book pages stick together. Leather bindings seriously warp and change shape. Effects of disasters on library collections are too obvious to comprehend.

#### **History of Disasters**

It is very important to provide an historical perspective on disasters in the context of this study.

- The great library at Alexandra established in the third century BC, was destroyed by fire first in 47 BC, during the time of Julius Caesar and then finally in 373 AD. (Ngulube, 2004).
- The 1966 Florence flood destroyed 2 million volumes of cultural objects in the Bibliotheca Nazionale Centrale (Feather, 1991).
- The Public Records Office of Ireland was burnt down during the 1992 civil war leading to the loss of Irish Cultural Heritage from the Middle Age to 1790. (Bohem, 1996).
- In November 1998, a tornado swept through Colombia destroying some records of the University of Missouri (Morris, 2000).

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- In 1999, the invading force of Slobodan Milosevic systematically destroyed records pertaining to land, financial, citizenship and genealogical entitlements of the Albanian community in Kosovo (Ngulube, 2005).
- On September 11, 2001, terrorists bombed the World Trade Centre and the Pentagon libraries in the United States of America, destroying records, books and other documentary materials (Buchanan, 2002).
- The National Library and Archives, a priceless treasure of Ottoman historical document including the Royal Archives of Iraq, were turned to ashes in 3,000 degrees of heat on 14<sup>th</sup> April, 2003 during the United State's invasion of Iraq (Buchanan, 2003).
- Fire caused extensive damage to records of the Secretarial Office in Nairobi, Kenya, in 1939, destroying a vital portion of the central government records. Valuable records relating to one of the major cities in Africa were destroyed.

In Pujchum town in Sierra Leone, 250,000 governments records were lost to fire in 1991 just as a hurricane destroyed valuable records and private manuscripts at the National Archives of Swaziland in 1984 (Alegbeleye, 1993).

- Though it has been observed that West Africa seems to be relatively free from disaster, Alegbeleye (1993) highlighted prominent disasters within the West African region to include the fire at the library of the Nigeria Institute of Policy and Strategic Studies, Kuru, Jos; the 1988 arson by students, which destroyed books in the Nigeria Forestry Research Institute Library and the destruction of documents in the National Library of Nigeria in 1990.
- Similarly, records indicate that Ghana has experienced a series of floods, earthquake, fire and arson related disasters over the years (Pepra, 1998 and Adinku, 2005).
- Ramsgate public library in UK was burnt down in August 2004 with the loss of thousands of books. (Matthew 2005).
- The disaster at the library of the Academy of Science of the Soviet Union, (now Russia) in

Leningrad (now St Petersburg) in 1986. The fire destroyed 400,000 volumes and caused water and smoke damage to a further 11,100,000 volumes.

- National and international associations are beginning to address the restoration of library services affected by the Tsunami disaster of 2005. (Matthews 2005).
- Stanford University where 400,000 books were damaged by water flooding the library. The method used for restoration was the use of a vacuum chamber the same one used to test the moon over machine.

Conclusively, large or small, natural or man-made disaster or emergencies put an institution's staff and collections in danger.

- Kapur et al. (2005, 2) say India should hang her head in shame. With the Bengal famine, Orissa Super Cyclone, Latur earthquake, Bhopal chemical disaster, Andhra cyclone, Gujarat earthquake, Tsunami (2005), recurring floods, Mumbai 2008 bomb blasts and many other disasters there is no foyer in the world with space large enough to exhibit the collective pain on the face of India.
- The 2015 Nepal earthquake (also known as the Gorkha earthquake),which killed more than 7,000 people and injured more than twice as many, occurred at 11:56 NST on 25 April, with a moment magnitude (Mw) of 7.8Mw or 8.1Ms and a maximum Mercalli Intensity of IX (Violent). Its epicenter was the village of Barpak, Gorkha district, and its hypocenter was at a depth of approximately 15 km (9.3 mi). Kathmandu Valley Public Library, Nepal National Library Keshar Library, Madan Puraskar Library were affected by the disaster.

Tribhuvan University Central Library, which serves as the only UN depository library in Nepal, suffered extensive damage from the massive earthquake which hit Nepal on 25 April 2015. The Library is currently closed as it assesses the damage and begins repairs.

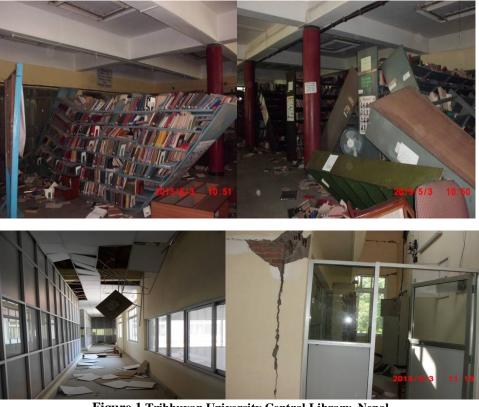


Figure 1. Tribhuvan University Central Library, Nepal

#### Disaster Management Plan

"Disaster management" includes disaster control planning. It also encompasses broader issues such as risk assessment, training and finance for a successful implementation. Recently the term "risk management" has been used to highlight the need of tackling the problems of known risks at source.

A formal written plan enables an institution to respond efficiently and quickly to an emergency, and to minimize damage to the building and its contents.

Disaster management plan is a must be incorporated in initial planning of establishing a library and information centre.

Several smaller pointers for a comprehensive disaster management plan, which are independent of each other but are interlinked, as parts of whole plan are set forth. Each disaster plan must cover whole of the library and information centre including staff, readers, sources of information, equipment and infrastructure and it must be a team effort.

#### **Basic Elements of Preparing a Plan**

Since a disaster plan must apply to the building and all its contents, including people, collections, records and equipment, it is highly desirable that the plan be prepared by a team rather than an individual. There are five main steps in preparing a disaster plan:

- Conducting a risk analysis
- Identification of existing preventive and preparedness procedures
- Making recommendations to implement additional preventive and preparedness procedures
- Allocating responsibilities
- Devising procedures to respond to and recover from disasters.

Recommendations must be achievable and will depend on many factors including those below.

#### **Availability of Funds**

Some recommendations such as building improvements and improved maintenance usually require additional money. If funds are not available such recommendations cannot be implemented. However, a recommendation could be made to obtain funds.

#### **Availability of Facilities**

If certain facilities are not available there is little point in developing a plan which relies on them. For example, there is no point in recommending that wet material be frozen if freezing facilities are not available.

# **Availability of Trained Personnel**

Many countries do not have trained conservators. In these cases it is necessary to train staff to carry out emergency treatments and to seek professional advice.

When making recommendations it is important to remember that every disaster is unique; the occurence and nature of actual disasters can rarely be predicted. Plans therefore must be flexible. With the implementation of a satisfactory plan day-to-day disasters cease to be disasters: they become minor incidents. According to Eden and Matthews (1996) there are four stages in disaster control planning which a library or related information centers can incorporate as follows:

This usually involves four stages:

- 1. Prevention
- 2. Preparedness
- 3. Reaction
- 4. Recovery

The following guide to producing a disaster plan outlines recommended action in all four stages, but prevention is the best protection against disaster, natural or man-made.

#### Prevention

#### **Disaster Prevention**

The old saying that prevention is better than cure is quite applicable here. It means taking preventive measures to reduce the risk to both collection and the building in a disaster.

A number of libraries and information centers cannot afford sophisticated and detailed plans for protection of their collection.

| Serial | Task                    | Description  |  |
|--------|-------------------------|--|--|
| no.    |                         |  |  |
| 1      | Identifying<br>risks    | Identifying risks posed by buildings, equipment and fittings, natural hazards (climate) of the area. Check part of buildings known to be problematic. Hazardous materials (gas cylinders, chemicals).  |  |
| 2      | Inspections             | Carrying out regular inspections of library buildings (building safety checklist) and alter factors that constitute a potential hazard.  |  |
| 3      | Housekeeping            | Establishment of routine housekeeping and maintain measures to withstand potential hazards.  |  |
| 4      | Building<br>Maintenance | Regular maintenance of plumbing, electrical, automatic fire / smoke detection/<br>safety devices, fire extinguishing systems (automatic and manual), water-<br>sensing alarm systems, generator, alarm systems (fire and intrusion),<br>emergency exits, emergency lighting, fire doors. |  |
| 5      | Enforce policy          | Enforcement of library policy on food and drink in designated areas.   |  |
| 6      | Stack<br>Maintenance    | Maintaining scheduled program of stack maintenance involving dust control, cleaning and managing stack capacity.   |  |
| 7      | Environment<br>Maintain | A stable climatic environment in buildings.  |  |
| 8      | Fire-prevention         | Establishment and maintenance of a good fire-prevention program (in consultation with fire brigade).   |  |
| 9      | Building<br>renovations | Taking special precautions during unusual periods of increased risk, such as building renovations.   |  |
| 10     | Exhibitions             | Making special arrangements to ensure the safety of collections when exhibited.  |  |
| 11     | Insurance               | Considering comprehensive insurance for the library, its contents, the operations, and potential replacement, rebuilding and restoration of damaged items.   |  |

| 12 | IT             | Checking out the IT infrastructure components including the application          |
|----|----------------|--|
|    | infrastructure | software; servers and operating systems; data and data storage systems; local    |
|    |                | and wide area networks; and client systems including PCs, thin client devices    |
|    |                | and terminals. Key peripheral devices such as printers should also be identified |
|    |                | according to Toigo (2003).   |

#### Table 2.Disaster prevention

# Information technology for disaster prevention

The technological advancements especially in the information and communication sector have provided a real yardstick to warn, prepare, share, respond, quickly to a disaster for minimizing its impact and in some cases it is even possible to avoid the damages by a natural disaster .Following technologies can be helpful in the reduction of damage by a disaster:

- 1. Remote Sensing Technology,
- 2. Geographic Information System,
- 3. Global Positioning System,
- 4. Forecasting and Warning System,
- 5. Communication Technology,
- 6. WWW and Internet.

**Remote Sensing** technique can be helpful to read possible threats of any weather disturbances through its weather and other observation satellites. It helps in gathering data by means of radiation from electro-magnetic spectrum.

Geographic Information System integrates stores, edits, analyzes, and shares geographically referenced data and is helpful during floods, landslides, earthquakes.

**Global Positioning System** is a technology by means of which one can pinpoint the exact place where disaster has struck. The exact damage site then can be visited to start rescue operations. This can be very effective for search and evacuation of displaced people or people buried under debris.

**Warning and Forecasting System** plays a vital role in determining the possible action of a disaster. The potentially affected area can be evacuated and people can be moved to safer places even before the disaster. It is effective for floods, cyclones. Earthquake Warning System is being used these days to warn people against its possible strike.

**Communication Technology** is particularly effective in mitigation, preparedness, response and recovery. Internet, Fax, Mobile phones, E mail, Radio and Television can all be used to spread and share information relevant during and before any disaster.

**WWW and Internet** provide a global platform for instant and automatic sharing of information regarding a disaster and its management. The latest tools, methods, technologies, weather forecasting, satellite images and other relevant data can be put on web for sharing and exchange.

#### **Disaster Preparedness**

A disaster plan or disaster response in a set of procedures and processes where a team of trained individuals responds to a disaster and determines how to best recover the damaged materials so that "business as usual" can resume as possible (Kahn 1998) as quoted by Austin (?)

A disaster plan guides the main players when a disaster strikes. It can save time and ensure that proper steps are taken for salvage and recovery of library materials.

According to Muir and Shenton (2002), the management need to "foster a disaster management culture" through the organization (M 25 Consortium 2001) as quoted by Muir and Shenton (2002).

According to Eden and Matthews (1996) the most important step in disaster preparedness is to draw a written disaster control plan. The written plan should include the floor plan with details of the evacuation routes, assembly points, fire extinguishers, users and stop corks. In addition, it should also contain contact numbers, priorities, list of disaster supplies, salvage techniques and revision procedure are seen as crucial in a disaster plan (Ferguson 1998) as quoted by Muir and Shenton (2002).

The disaster control plan is designed by a committee or team of professionals and support staff selected from various areas or departments of the library. Some of the following should be included in the plan; security, physical plant, maintenance staff and even police and fire fighters. Eden and Matthews (1996) identify three key roles in disaster management i.e. the Disaster manager, Disaster reaction manager, and the Disaster recovery manager. The plans need to be revised after building alterations, staff changes or "dummy runs" to keep it up-to-date.

| Serial | Task                               | Description  |  |
|--------|------------------------------------|--|--|
| no.    |                                    |  |  |
| 1      | Planning                           | Development of a written preparedness, response and recovery plan.   |  |
| 2      | Disaster library                   | Keeping central disaster library and documentation store for dealing with various types of disasters.  |  |
| 3      | Co-operation                       | Consulting with local municipal disaster office and other cultural institutions (museums, archives) and libraries in the region.   |  |
| 4      | Review and testing                 | Review and update disaster plan regularly and test.  |  |
| 5      | Disaster supplies<br>and equipment | Maintaining and monitoring disaster supplies and equipment.  |  |
| 6      | Disaster Co-<br>ordinators         | Appointment of disaster co-ordinators at both campuses.  |  |
| 7      | Disaster Team                      | Establishment and training in-house disaster response team.  |  |
| 8      | Generator                          | Maintaining and test emergency generator   |  |
| 9      | Training                           | Training of disaster response techniques (involvement of staff).   |  |
| 10     | Critical switches,<br>equipment.   | Keep floor-plans with locations of cut-off main switches (water, sprinklers, electric) and valves, master key, radios, first aid, PA system, rescue equipment, portable pumps, generator, disaster library |  |
| 11     | Contacts: Disaster<br>Team         | Maintaining the list of contacts: disaster response team.  |  |
| 12     | Contact: Experts<br>and services   | Keeping the list of contacts: salvage experts and services, other institutions, disaster offices.  |  |
| 13     | Service<br>agreements              | Establishment of service agreements (e.g. freezing facility) with salvage services.  |  |
| 14     | Re-location site                   | Identifying the re-location site   |  |
| 15     | Budget and<br>Funding              | Ensuring that emergency funds are available (disaster supplies, equipment, services, consultants, refreshments, first-aid supplies).<br>Ensure that disaster accounting procedures are in place.           |  |
| 16     | Insurance<br>documents             | Keeping the copies of insurance policies (buildings and collections)   |  |
| 17     | Priority<br>collections            | Identify high risk collections: establish priorities.  |  |

# Table 3.Disaster preparedness

# Response

When disaster strikes, the following activities are on the way:

| Serial | Task                    | Description  |
|--------|-------------------------|--|
| no.    |                         |  |
| 1      | Emergency procedures    | Following the established emergency procedures             |
| 2      | Generator               | Activating the backup power generator where necessary      |
| 3      | Management Team         | Notifying Management Team. Providing regular status        |
|        |                         | reports to Management                                      |
| 4      | Coordinators            | Contact Disaster Coordinators                              |
| 5      | Declare disaster        | Making decision to declare disaster                        |
| 6      | Access to disaster site | Receiving notification that disaster site is available for |
|        |                         | access   |
| 7      | Assess damage           | Assess and estimate type and extent of damage,             |
|        |                         | equipment, supplies and services required                  |
| 8      | Human resources         | Estimate number of staff and time needed to complete       |
|        |                         | recovery work.   |
| 9      | Disaster teams          | Brief, activate, dispatch disaster teams to appropriate    |
|        |                         | locations  |

| 10 | Work schedules   | Establishment of time and work schedules for salvage operations  |
|----|--|--|
| 11 | Volunteers/ replacements   | Coordinating and monitoring the use of staff/ volunteers/<br>replacements  |
| 12 | Stabilize environment<br>Stabilize environment to prevent<br>growth of mould | Stabilizing environment to prevent growth of mould   |
| 13 | Photograph   | Photograph damaged materials for insurance claim purposes  |
| 14 | Security<br>Secure and protect the building's<br>contents.                   | Making secured and protected of the building's contents  |
| 15 | Priority collections   | Locating the high priority collections   |
| 16 | Salvage area   | Setting up the area for response and salvage activities  |
| 17 | Alternative storage  | Making necessary arrangements to remove books from<br>disaster site. Notifying alternative storage site and<br>estimate arrival times.                           |
| 18 | Transport teams  | Coordinate transport of disaster teams to alternate storage site.  |
| 19 | Inventory control  | Keeping the inventory control of items being removed or discarded  |
| 20 | Transport collections  | Transport water damaged items to nearest freezing facility   |
| 21 | Service providers  | Coordinate activities with major suppliers and service<br>Providers  |
| 22 | Health & Safety  | Handling health, safety and comfort (physical and<br>emotional) concerns, medical emergencies (staff/ visitors).   |
| 23 | Reporting  | Receiving periodic status reports from disaster teams  |
| 24 | Insurance  | Making contact and inform insurance company  |
| 25 | Communication  | Providing communication to staff. Ensuring that all media<br>contact is referred to Management. Ensure that all staff are<br>informed of progress of operations. |
| 26 | Media & public relations   | Handling all the public relations & the media:<br>Communications   |
| 27 | DAC & Board  | Interacting with DAC and the Board   |
| 28 | Finance  | Coordinating budget and administrative work.<br>Obtaining approval for purchases. Ensuring disaster<br>expense reports are being formulated and submitted.       |
| 29 | Expenses   | Compiling and maintaining the documentation of all expenses  |
| 30 | Insurance  | Assistance with submission of insurance claims.  |
| 31 | Reporting  | Preparing disaster report (including expenses).  |

Table 4.Reaction (Response)

# **Recovery (Restoration)**

Getting back to normal, things have to be restored.

| Serial | Task     | Description   |
|--------|----------|---|
| no.    |          |   |
| 1      | Planning | Establishment of the program of action to restore both disaster site<br>and damaged collections |
|        |          | and damaged conections  |

| 2  | Strategies                | Reviewing the recovery strategies which may be selected.  |  |
|----|---------------------------|---|--|
| 3  | Priorities                | Determining about the priorities for restoration work   |  |
| 4  | Technical recommendations | Seeking advice on best methods and options, media types and treatment (technical recommendations)                   |  |
| 5  | Costs                     | Estimating the costs  |  |
| 6  | Phased program            | Developing the phased conservation program for large quantities   |  |
| 7  | Discard                   | Discarding items not worth retaining, and replacing or re-bind items not justifying special conservation treatment. |  |
| 8  | Insurance                 | Contacting with insurers  |  |
| 9  | Disaster site             | Cleaning and rehabilitating the disaster site   |  |
| 10 | Move back                 | Coordinating return back collections from alternate storage site to library.  |  |

Table 5. Recovery (Salvage) Restoration

#### **Review** (Evaluation)

Then it comes for the review or evaluation:

| Serial | Task                 | Description  |
|--------|----------------------|--|
| no     |                      |  |
| 1      | Modification of plan | Analyzing the disaster and improve disaster plan in the light of experience. |

# Efforts of various government and nongovernment organizations

Croatian libraries have experienced direct and indirect consequences of disasters caused by the war in 1990s. However, this did not sufficiently change their preservation and disaster management practice this can be connected with the general perception of preservation that is seen as a technical issue, very staff and time consuming and financially demanding process. The first step should be raising the awareness and education about the importance of disaster management issues as а prerequisite for efficient, comprehensive and sustainable preservation of their library.

The Government of India has set up a National Committee on Disaster Management (NCDM) under the Chairmanship of the Prime Minister. The recommendations of this National Committee would form the basis of national disaster risk management program and strengthening the natural disaster management and response mechanisms.

The recurrent occurrences of different types of disasters compelled Government of India to take cognizance of the objectives of International Decade for Natural Disaster Reduction (1990-2000), Yokohama Strategy for safer world (1994) and the Plan of Action for Safer World (Istanbul, 1996), and set up a High Power Committee on Disaster Management (HPC) in 1999 to recommend strategies for preparation of Disaster Management plans. The High Power Committee gave its recommendations in October 2001 including a draft of the Disaster Management Act, a National Response Plan, and establishment of Disaster Management National Authority. Following one of the HPC recommendations, the Disaster Management function was transferred from Ministry of Agriculture to Ministry of Home Affairs. Based on the recommendations of HPC, UN agencies and Hyogo Framework of Action 39, the Government of India has brought about a paradigm shift in its relief centric to responsive preparedness approach to disaster and management.

UNESCO has provided its 2005 convention online "International Strategy for Disaster Reduction" and a portal for making aware the community as "Memory of the World". The Director General of UNESCO, in her massage on International Day for Disaster Reduction 2010, (Oct13, 2012) pointed out the need "to promote a culture of disaster reduction, placing the emphasis on pre disaster action rather than contenting ourselves with post disaster reaction." Matthews and Eden, 1996 in a research paper on Disaster Management Training in Libraries presents the findings of a research project that was undertaken by British Libraries covering libraries, information centers, museums, and archive centers. Certain policies and practices have been suggested which should be adopted in libraries for managing a disaster. Major emphasis is given on the points that libraries should work in cooperation, take practical measures to minimize disaster risk, preparedness for a quick response. A practical and regular training session is essential for any disaster management program.

As far as the Indian scenario is concerned, enacting Disaster Management Act in 2005 (www.rajyasabha.nic.in/bills-

ls/2005/LV\_2005.pdf), Govt. Of India established National Disaster Management Authority (ndma.gov.in). Earthquakes, floods, river erosion, cyclones, tsunamis, landslides, avalanches and forest fires are included under natural disasters and nuclear & chemical destructions, mine disasters, disasters, biological cyber terrorism and environmental disasters are covered under reasons because of human activities or interventions.20 guidelines have been issued from time to time since 29.6.2009 by NDMA covering natural & man- made disasters.

The Government of India allocates funds for disaster management in its budget and also makes special provisions under its five years plans .(India..., 2004 & 2011) Many State Governments have set up disaster management units to look after disaster management in their state. For example, Gujarat State Disaster Management Authority (Gujarat...,2011) and Maharashtra State Disaster Management Unit (Maharashtra..., n.d.) manage disaster related activities in the respective states .The Society for Research and Initiatives for Sustainable Technologies and Institutions (SRISTI), India initiated an effort to build a Disaster Management Information System. It has developed a database - driven information system for Disaster Management Authorities (DMA) in various states, Non - Government Organizations (NGO) and other organizations in India. NGOs, relief workers, DMAs and individuals share their experiences and volunteer services and resources to maintain this website which is initiated by the Indian Institute of Management, Ahmedabad. The website lists volunteers and organizations and institutions that are ready to help the country in case disaster strikes.(Society..., n.d.)

Another institution National Institute of Disaster Management (NIDM) functions as nodal centre for human resource development in the area of disaster mitigation and response. Capacity development, with other institutions is one of the major concerns of NIDM. Besides this training, research, documentation and development of a national level information base also comes under NIDM. It is to network other knowledge based institutions and closely work with them. International Strategy for Disaster Reduction (ISDR), in Hyogo Framework for Action 2005-2015 has suggested a plan for building the resilience of nations and communities to disasters with challenges posed by disasters and the Yokohama Strategy, 2004: Lessons Learned and Gaps Identified as the preambles.

National Library of Medicine (NLM), USA, has instituted Disaster Information Management Research Center (DIMRC) for preparing a long range plan, 2006-2016 to help the National emergency preparedness, response and recovery efforts. The Specialized Information Services (SIS) perform the task of collecting, organizing and disseminating the health information resources and information related to disaster of natural, accidental or deliberate origin. Many educative programs like seminars, symposia are organized for the librarians from time to time and many links to related databases, disaster related organizations, emergency response tools have been provide on the website of DIMRC (www.nlm.nih.gov).

The efforts and programs of Control Plan for any disaster which have been put online by the M25 Disaster Control Plan of United Kingdom and COOL (Conservation Online) by American Institute for Conservation, covering cultural, property, materials are worth mentioning.

Disaster Management Bureau under the Ministry of Food and Disaster Management have established a Disaster Management Centre in Bangladesh which provide information on current situation about weather related phenomenon like storms etc. , measures taken by different agencies for recovery, and latest weather situation. Satpathy, 2007 in his article Role of Libraries in Disaster Management: Experience from NE India has elaborated that during floods in 2004 in Barak Valley of Assam libraries acted as rehabilitation centre and in coordination with NGOs and rescue teams, the library staff also worked as rescue workers. Because all other networks failed library provided a base for information centre.

Nonprofit READ (Rural Education and Development) Global's network of community libraries in Nepal is starting to reopen and respond to the recent devastating earthquake in Nepal. Since its founding in 1991, the READ Global has established community library and resource centers in rural areas throughout South Asia, including the 59 centers currently serving READ Nepal. Each READ Center, owned and operated by the local community, holds a library, computer room, women's section, children's room, and training hall. In the wake of the earthquake, Tina Sciabica, READ Global's executive director told LJ, "Our solar-powered center in Panauti (just outside Kathmandu) is providing electricity so that community members can charge their mobile

phones-which is the only mode of communication for many people. They are also mobilizing youth groups to provide support for earthquake victims."

# Recommendations

- 1. The library should constitute a disaster management team/ committee, which will not only serve as disaster monitor within the library but also as a liaison between the library and the agencies concerned with disaster management in the community so as to be in constant touch.
- 2. The fire extinguishers should be checked at regular intervals, while the agency staff should be shown where to locate them and demonstrate how to use them.
- 3. The library should mark, clearly, fire escape routes and exits and also hold regular fire drills to practice emergency procedures.
- 4. There is the need for the library to install fire detector, water sensing alarm and more fire extinguishers as well as regular maintenance of drainage and plumbing system. There should be a regular building inspection so as to remedy the factors which constitute potential hazards.
- 5. The library should have comprehensive insurance scheme over the library and its contents so as to reduce and share the possible risk of lose.
- 6. Take special precautions during usual period of increased risk such as building renovation.
- 7. Installing emergency evacuation route sings for study rooms and other concerned departments of the library. Hang Tags Library should provide hang tags for evacuation procedures. Plastic Sheet Covers There should be purchased quality plastic sheet covers for library equipments and other materials (recommended 4mm thick) to protect from dust, water and humidity.
- 8. Harish Chandra (2009) stresses on importance of disaster planning and preparedness and gives a overview of how Indian Institute of Technology (IIT), Madras library is prepared for disaster.
- 9. The library funding agency/ parent institution should provide more funds to the library being an essential component of the community while prudent management of available resources is required from the library authorities in return.

#### Conclusion

Creation of a disaster management knowledge base related to different disasters occurred

anywhere in the world in a networked mode, including the counter and recovery plans is the need of the hour. Mobile libraries can help to a greater extent in educating the people to safeguard themselves against emergencies. The library and information science curricula also needs to be modified keeping in view the importance of disaster management for library and information centers and above all because libraries world over act as service agencies and librarians as service and information handling managers.

Disaster is a calamitous event causing great damage, losses and devastation of life and property. India is vulnerable to various types of natural disasters. Although the response to disasters is improving, a balanced and integrated approach encompassing all the stake holders needs to be planned in this regard. Along with preparedness and prevention, rehabilitation and developments are the important concerns which need to be addressed while planning. Today, Featherstone, Lyon, and Ruffin (2008) in their oral history project concluded that the librarians and other supporting staff acquired the role of planners, community supporters, information builders relating to different government schemes for recovery and rehabilitation etc.

#### Justification of the Study

Many disasters can be avoided-or at least their impact minimized-by taking the time to plan ahead. Since disasters are real and could happen anytime, therefore, all the factors militating against library materials required effective management of library materials against disasters.

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