**Disaster management approaches for Social Science Research libraries at Kolkata: a Survey**

Basana Das

Student of M. Phil. in Library and Information Science

*University of Calcutta*

and

*Dr. Arabinda Maity*

*Department of Library and Information Science*

*University of Calcutta*

**Abstract:**

Disaster is an event or series of events which seriously disrupts normal activities. It can strike anywhere, anytime and cause havoc to lives of people and property. Disaster management is very important for any library. Good disaster management can help to prevent events such as these happening; and, if they should happen, help to minimize their effects. Library and information academics and professionals should feel concern about the issue of risks and disasters that threaten libraries and information services due to a wide number of man-made and natural causes. In this work I shall provide an overview of the most important approaches to disaster management. I shall stress the urgent need for an effective formal disaster management implementation within Kolkata Social Science research libraries, in order to improve the level of preparedness for potential hazardous events.

**Keywords:** Disaster management, preparedness, Mitigation, Prevention and Risk reduction.

**1. Introduction:** The word “Disaster” derives from the Latin words “dis” and “aster” meaning “apart” and “star”. The current use of the word reflects the notion of an unlucky star and is “anything that befalls of ruinous or distressing nature; a sudden or great misfortune, mishap, or misadventure; a calamity.” A disaster is an overwhelming ecological disruption occurring on a scale sufficient to require outside assistance. Disasters are of two type 1.Natural disaster (example –earthquakes, floods, landslides, storms, tsunami, drought, fire etc.) and 2.Man-made disaster (example- technological, chemical, wear and tear, theft etc.) Disaster management is the discipline of dealing with and avoiding risks. It is a discipline that involves preparing, supporting, and rebuilding society when natural or human-made disasters occur.

 A disaster can be anything or event which directly or indirectly affects the normal administration of the library i. e. the disruption of services to readers on either a short-time or a long-time basis. This is different from the normal nature of events that are termed or described as disasters. Natural events like earthquakes, flood, and volcanic eruption are termed disaster because of the effects they have on human beings as well as their normal way of occurrence. Also, man-made events like fire, acts of war and terrorism, structural (building) deficiencies and chemical spills are termed disaster; because of their effects on materials and properties of the library. However, criminal acts, like book theft and mutilation are also termed as physical disasters.

Library and information academics and professionals are concerned about the issue of risks and disasters that threaten libraries and information services due to a wide number of man-made and natural causes. In this work I shall provide an overview of the most important approaches to disaster management. I shall stress the urgent need for an effective formal disaster management implementation within Kolkata Social Science research libraries, in order to improve the level of preparedness for potential hazardous events.

Documents are very important which are stored in library. If the libraries lost a piece of art, a manuscript forever during a disaster, whose second copy is not available. This loss never be calculated in terms of money. Buildings can be built again, computers, equipment can be purchased but pieces of art, literature cannot be produced again, if lost forever. So the library should have a policy that protects the rare art, literary works by keeping copies at off site locations or by making multiple copies of them.

**2. Components of Disaster management**

 Disaster management activity comprises certain key components as indicated in the Figure below:

Disaster

A graphic representation of the Phases in Disaster Management

**Prevention:** avoiding and reduce the chances of disaster, usually the impact and damage of disaster.

 **Preparedness:** plans or preparations made to save lives or property, and help the response and rescue service operations. This phase covers implementation/operation, early warning systems and capacity building so the population will react appropriately when an early warning is issued.

**Mitigation:** any activity that reduces either the chance of a hazard taking place or a hazard turning into disaster. Examples: building codes and zoning; vulnerability analyses; public education.

**Risk reduction:** anticipatory measures and actions that seek to avoid future risks as a result of a disaster.

**Response:** includes actions taken to save lives and prevent property damage, and to preserve the environment during emergencies or disasters. The response phase is the implementation of action plans.

 **Recovery:** includes actions that assist a community to return to a sense of normalcy after a disaster.

**3. Objectives of the study**

The objectives of the study are the following:

1. To find out the disaster management system available in the library of Institute of Development Studies Kolkata (IDSK).
2. To find out the disaster management system available in the library of Centre for Studies in Social Sciences Calcutta (CSSSC).
3. To find out the disaster management system available in the Central Library of the Anthropological Survey of India (the Central library of ASI ).
4. To make comparative study regarding disaster management of these institutions.
5. To find out the different problems regarding disaster management faced by the Social Science Research Libraries in Kolkata.
6. To give the probable suggestions for solving the problems.

**4. Importance of the study**

In any research library documents can be expensive and rare including print, manuscripts and e-resources. Of course, it is a fact that saving human life is the first priority but, in addition, the library should get priority to be saved in case of a disaster. Because disasters are generally unexpected events with destructive consequences to a collections. These have been increasing in frequency and intensity over the past few decades and also in recent years. The primary reason for this is the fact that human settlements and activities are interfering with natural systems, and populations are being increasingly exposed to hazards. So disaster management is very important for any library. Good disaster management can help to prevent events such as these happening; and, if they should happen, help to minimize their effects. It makes the staff aware of the various disasters possible in a library, prevention procedures, training in disaster management. Therefore it is vital for any library to take every possible precautions to prevent the occurrence of an unavoidable disaster to protect people (user, employee etc.), materials, systems, equipments and building; reduce possibility of disaster and effect if a disaster happens; expedite response and recovery efforts in an organized and systematic manner and raise the awareness of all staff regarding everyday safety and security issues. After a disaster, local officials and relief workers will be on the scene, but they cannot reach everyone immediately. We could get help in hours, or it may take days. So we should be aware and prepared to cope with the emergency until help arrives. Disaster management needs to be carefully considered and properly planned, and all staff needs to be made aware of the various risks to the items in their care and what is expected of them in a disaster situation.

**5. Scope & Coverage of the study**

The three Social Science Institution libraries situated in Kolkata are covered in this study. These are

a) The Central library of Anthropological Survey of India (ASI libraries)

1. The Institute of Development Studies Kolkata (IDSK), Salt Lake Campus
2. Centre for Studies in Social Sciences, Calcutta (CSSSC).

**6. Methods used:**

The field survey method will be chosen using combination of techniques like questionnaire, interviews and participant observation. For evaluation purpose parametric/standard be formed to get the required information properly. Later on, a comparison be also made by putting the variables and objectives among the libraries studies in this work. By personally meeting with the librarians or In-charge of the social science institution libraries, the data will be collected and then the data will be tabulated and analyzed accordingly with the help of the statistical appliances such as chart, diagram etc.

**7. Comparative study regarding disaster management of the three Social Science Research Libraries**

**Table 1: Information about building in the Social Science Research libraries**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name of the library | Shape of the building | No. of Emergency doors | No. of Entry & Exit Points | Width of the Entry & Exit | No. of Stairs case | Width of the Stairs case |
| CSSSC | Square | 3 | 2 | 25 ft | 3 | 5ft |
| IDSK | Square | 2 | 2 | 6 ft | 2 | 4 & 6 ft |
| ASI | Square | 2 | 2 | 6 ft & 10 ft  | 2 | 8 & 6 ft |

The table 1 shows that the shape of the library of Centre for Studies in Social Sciences, Calcutta (CSSSC) is square. It has 3 emergency doors and 2 Entry & Exit Points whose width is 25ft; 3 stairs case whose width is 5ft.The shape of the library of the IDSK is also square. It has 2 emergency doors and 2 Entry & Exit Points whose width is 6ft; 2 stairs case whose width is 4ft and 6ft. The shape of the Central library of ASI is square. It has 2 emergency doors and 2 Entry & Exit Points whose width is 6ft and 10ft; 2 stairs case whose width is 8ft and 6ft.

**Table 2**: **Precaution has been taken for protecting the different aspects of disaster in the Social Science Research libraries**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **CSSSC** | **IDSK** | **ASI** |
| **Yes** | **No** | **Don’t Know** | **Yes** | **No** | **Don’t Know** | **Yes** | **No** | **Don’t Know** |
| Follow local Building codes for earthquake resistant construction | **√** | **-** | **-** | **√** | **-** | **-** | **√** | **-** | **-** |
| Large overhangs | **-** | **√** | **-** |  | **√** |  |  | **√** |  |
| Gap between the stairs & library room | **-** | **√** | **-** | **√** | **-** | **-** | **√** | **-** | **-** |
| Regular inspections of building and equipment | **-** | **-** | **√** | **√** | **-** | **-** | **-** | **-** | **√** |
| Earthquake recovery plan | **-** | **-** | **√** | **-** | **-** | **√** | **-** | **-** | **√** |
| Check for fires and other damages | **-** | **-** | **√** | **√** | **-** | **-** | **√** | **-** | **-** |
| Shut of electric mains, switches, gas etc. | **√** | **-** | **-** | **√** | **-** | **-** | **√** | **-** | **-** |
| Whether Regular Preservation & Conservation done or not | **√** | **-** | **-** | **√** | **-** | **-** | **√** | **-** | **-** |

Table 2 shows that the library building of the CSSSC, IDSKand ASI follow local building codes for earthquake resistant construction. They have no large overhangs in any floor in the building. There is no gap between the stairs case & library room in the library of CSSSC but in the building of IDSK, there is a gap between the stairs case & library room. In the building of ASI, there is a gap between the stairs & library room and in the gap, there are 8 shelves whose height is 8 ft each and the shelves are with binding journals. These shelves are not attached with wall and in front of the gate, there are new arrival display racks and deposit of property racks. They have an electrician and a contractor who check buildings and equipments regularly. During disaster, the staff shut down electric mains, switches and pulls out the plugs. All rare collections and valuable documents such as Insurance policies, Reports, list of Clientele(s) & staff etc. are stored in the separate area of these three libraries which are protected from fire. These libraries also take necessary steps for preservation.

**Table 3: Availability of systems for fire in the Social Science Research libraries**

|  |  |  |  |
| --- | --- | --- | --- |
| Systems | CSSSC | IDSK | ASI |
| Heat and smoke detectors | - | - | - |
| Audible alarms signals | - | √ | - |
| Pull or break-glass-style alarms | - | √ | - |
| Sprinkler systems | √ | √ | - |
| Access points to building( Fire Brigade) | √ | √ | - |
| Store and supply of water for Fire Brigade | √ | √ | - |
| Operational Fire extinguishers | √ | √ | √ |
| Operational smoke and monoxide detectors | - | - | - |

Table 3 shows the availability of systems for fire in the Social Science Research libraries. The library of CSSSC has been taken different protection system from fire such as sprinkler system and has operational fire extinguishers. It has access points for entering the fire brigade to the building and also can supply the water whenever necessary. Different protection systems from fire such as sprinkler systems pull or break-glass-style alarms and also operational fire extinguishers have been taken for the library of IDSK. It has access points for entering the fire brigade to the building and also can supply the water whenever necessary. The Central library of ASI has operational fire extinguishers only. So the library should be installed sprinkler system, pull or break-glass-style alarms, heat and smoke detectors, audible alarms signals, and operational smoke and monoxide detectors.

**Table 4: Different awareness programmes conducted by the Social Science Research libraries**

|  |  |  |  |
| --- | --- | --- | --- |
| Different Programmes | CSSSC | IDSK | ASI |
| Fire extinguisher use | √ | √ | √ |
| Automated external defibrillator | - | - | - |
| Emergency Preparedness | - | - | - |
| First aid | √ | √ | √ |
| Building evacuation | √ | √ | - |

Table 4 shows different awareness programmes conducted by the Social Science Research libraries. The library of CSSSC conducted different awareness programme such as fire extinguisher use, first aid and building evacuation and both the staff professional and non professional are attend the programmes. The library of IDSK and the Central library of ASI has operational fire extinguishers and conducted different awareness programme such as fire extinguisher use, first aid and building evacuation and both the staff professional and non professional are attend the programmes.

**Table-5**: **Distribution of fire extinguishers in the Social Science Research libraries**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Name of the library | Operational the fire extinguishers | Operate persons | Changing date of last cartage | Next Refill date | Material  | No. of reservoirs | Quantity of waters | Total Fire extinguishers |
| CSSSC | 4 | 5 | 10.08.12 | 9.08.2013 | Dry powder,Water CO2 ,Gas | 3 | 500 gallon each | 28 |
| IDSK | 3 | 2 | 2009 | - | Same | 1 | 1500 gallon | 32 |
| ASI | 6 | 4 | 20.06.2011 | 19.6.2012 | Same | 1 | 1000 gallon | 45 |

The table 5 shows that the library of CSSSC has 28 fire extinguishers. Out of which 4 are readily available per day which has operated by 5 Staff. Changing date of last cartage is 10.08.12 and next refill date is 9.08.2013.The date of last cartage is not expired. The cartage is stored with dry powder, water CO2, gas etc. In the CSSSC, there is one reservoir which contained 1500 gallon of water and also has a generator. The library of IDSK has 32 fire extinguishers. Out of which 3 are readily available per day which has operated by 2 Staff. Changing date of last cartage is 2009. The cartage is stored with dry powder, water CO2, gas etc. In the IDSK, there is one reservoir which contained 1500 gallon of water and also has a generator. The library of ASI has 45 fire extinguishers. Out of which 6 are readily available per day which has operated by 4 Staff. Changing date of last cartage is 20.06.2011 and next refill date is19.6.2012. The date of last cartage is not expired. The cartage is stored with dry powder, water CO2, gas etc. In the ASI, there is one reservoir which contained 1000 gallon of water and also has a generator.

**Table 6: Distribution of disaster occurred in the Social Science Research libraries during last 10 years**

|  |  |  |  |
| --- | --- | --- | --- |
|  | CSSSC | IDSK | ASI |
| Extreme cold / Snow / Frost | - | - | - |
| Heavy rain / Hail / Floods | √ | - | - |
| Fire | - | - | √ |
| Strong wind / Tornado | √ | - | √ |
| Infrastructural damage | - | - | - |

The table 6 shows the distribution of disaster occurred in the Social Science Research libraries during last 10 years. The library of CSSSC has faced heavy rain and strong wind but the library was not seriously affected. The library of IDSK does not face any disaster. The Central library of ASI faced fire due to short circuits which was damaged some collection of the library and also strong wind / Tornado which was not damaged the library.

**Table 7: Precaution has been taken for protecting the different aspects of disaster in the Social Science Research libraries**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **CSSSC** | **IDSK** | **ASI** |
| **Yes** | **No** | **Don’t Know** | **Yes** | **No** | **Don’t Know** | **Yes** | **No** | **Don’t Know** |
| a copy of an emergency telephone tree with contact information and detailed instructions | **√** | **-** | **-** | **√** | **-** | **-** | **√** | **-** | **-** |
| Store Library Data backups off-site regularly | **√** | **-** | **-** | **√** | **-** | **-** | **√** | **-** | **-** |
| buildings, collections and equipment’s covered by insurance | **√** | **-** | **-** | **√** | **-** | **-** | **-** | **√** | **-** |
| Attach furniture ,**pictures, mirrors, shelves and light fixtures** to the walls or the floor by calm | **-** | **√** | **-** | **-** | **√** | **-** | **-** | **√** | **-** |
| Digitize valuable, rare and/or important items | **√** | **-** | **-** | **√** | **-** | **-** | **√** | **-** | **-** |
| Should maintain a record of all disasters happening, their frequency and consequences | **-** | **√** | **-** | **-** | **√** | **-** | **√** | **-** | **-** |
| Has the library any anti theft systems | **-** | **√** | **-** | **√** | **-** | **-** | **-** | **√** | **-** |
| use signs to alert and communicate with patrons and other offices | **√** | **-** | **-** | **√** | **-** | **-** | **-** | **√** | **-** |
| Budgetallocation | **-** | **-** | **-** | **-** | **√** | **-** | **-** | **√** | **-** |
| Installed Lightning arrester | **√** |  |  | **√** |  |  | **√** |  |  |

Table 7 shows different precautions have been taken for protecting the different aspects of disaster in the Social Science Research libraries. A list of library staff members was prepared along with their telephone numbers who stayed in the campus and would be available during day and night in case of any emergency. Computer systems, software and files must be backed-up wherever possible. Duplicate copies of software and files also stored off-site. This work has done by the Assistant Librarian of CSSSC, IDSK and ASI. The library building, collection and the equipments of CSSSC and IDSK have also been insured. Both libraries get discount from Insurance Company, because both libraries installed Sprinkler systems. But the library building, collection and the equipment of ASI has not insured. All furniture, **pictures, mirrors, shelves and light fixtures are not** attached to the walls or the floor by calm of CSSSC, IDSK and ASI. In these three libraries, there was no proper prevention from theft. During any disaster, the staff shut down electric mains, Switches and pulls out the plugs. The directional signs to alert and communicate with patrons and others are used in the library. The three libraries have been installed lightning rods which will carry the electrical charge of lightning bolts safely to the ground, greatly reducing the chance of a lightning-induced fire.

**Table 8: Availability of Disaster kits in the Social Science Research libraries**

|  |  |  |  |
| --- | --- | --- | --- |
| Disaster Kits | CSSSC | IDSK | ASI |
| Face masks | √ | - | - |
| Rubber boots | - | - | - |
| Plastic gloves/sheets | √ | √ | - |
| Flashlights | √ | √ | - |
| Batteries | √ | - | - |
| Weather radios | - | - | - |
| Mike | √ | - | - |
| Generator | √ | √ | √ |
| Fire blankets | √ | - | - |

Table 8 shows that availability of disaster kits in the Social Science Research libraries. The library of Centre for Studies in Social Sciences, Calcutta (CSSSC) has different type of disaster kits such as face masks, plastic gloves, flashlights, batteries, mike and generator and fire blankets etc, IDSK library has plastic gloves, flashlights and generator but the Central library of ASI has only generator and the library should keep face masks, plastic gloves, flashlights, batteries, mike and generator and fire blankets etc.

**Table 9: Distribution of different aspects of disaster management for which the three different libraries prepared the plan**

|  |  |  |  |
| --- | --- | --- | --- |
| Items | CSSSC | IDSK | ASI |
| Building collapse | √ | √ | - |
| Book worm | √ | √ | - |
| Faulty lightning system | - | √ | √ |
| Gas leak  | - | √ | - |
| Fire | √ | √ | √ |
| Terrorist activities | - | - | - |
| Sabotage | - | - | - |
| Electrical Circuits | √ | √ | √ |
| Leaking water pipes | - | - | - |
| Air conditioning system | √ | √ | √ |
| Burst heating pipes | - | - | - |
| Theft | √ | √ | - |
| Vandalism | - | - | - |
| Paper decay | √ | √ | - |
| Insect raids | - | - | - |
| Cyclone Threat | - | - | - |
| Collapse of shelving in the library | √ | √ | - |

Table 9 shows the distribution of different aspects of disaster management for which the three different libraries prepared the plan. The library of Centre for Studies in Social Sciences, Calcutta (CSSSC) has a disaster plan which included different aspects of disaster management such as building collapse, faulty lightning system, gas leak, book worm, fire, electrical circuits, air conditioning system, theft, paper decay, collapse of shelving in the library etc. Other possible causes of disasters in the library of IDSK include building collapse, book worm, fire, electrical circuits, air conditioning system, theft; paper decay, collapse of shelving and the Central library of ASI also include building collapse, book worm, fire, electrical circuits, air conditioning system, theft, paper decay, collapse of shelving etc.

**8. Problems regarding disaster management faced by three Social Science Research libraries at Kolkata.**

**8.1 Different problems in the Central library of ASI**

1. In the building, there is a gap between the stairs case & library room and in the gap, there are 8 shelves whose height is 8 ft each and the shelves are with binding journals. These shelves are not attached with wall and in front of the gate, there are new arrival display racks and depository of property racks. So if any disaster will be happened then all racks fall down and closed the entry and exit point.
2. The windows of the library are covered by glass.
3. It does not use any directional signs to communicate patrons, staff and others.
4. The building of the Central library of ASI is not equipped with a Sprinkler system or fire alarm and has only fire extinguishers to protect fire.
5. No such Fire drills training methods were present in the ASI library.
6. It has only Fire extinguisher which operates in Silent Drill mode.
7. The electrical wiring system is not good condition.
8. The library building, collection and the equipments of ASI has not insured.
9. All furniture, **pictures, mirrors, shelves and light fixtures are not** attached to the walls or the floor by calm.
10. In these three libraries, there was no proper prevention from theft.
11. It conducted the different training programme occasionally.

The Central library of ASI faced fire due to short circuits which was damaged some collection of the library. The fire brigade used the water to put off fire which could cause enormous damage in its collection. So it could not take action to fight the disaster immediately.

Of course, it is a fact that saving human life is the first priority but, in addition, the library should get priority to be saved in case of a disaster.

 **8.2 Different problems in the library of IDSK**

1. In the building, there is a gap between the stairs case & library room. But the entry and exit point should be clear.
2. The canteen is situated on the 5th floor in the building.
3. Absence of training to face the risks among the staff and patrons.
4. It conducted the different training programme occasionally.
5. In case of emergency, the staff and patrons do not response promptly.
6. Lack of unity among the staff of libraries.
7. They are not aware about the changing date of cartage.
8. Negligence is giving priorities set for emergency response.

**8.3 Different problems in the library of CSSSC**

1. The library of CSSSC has faced heavy rain and strong wind. The windows of building are covered by glass. So some glass of windows has been broken by strong wind.
2. The stack rooms are situated on the ground floor and the books of stacks
3. In case of emergency, the staff and patrons do not response promptly.
4. Lack of unity among the staff of libraries.
5. Delayed action to fight the disaster.
6. Lack of planning at all levels, lack of mitigation planning,

**9. Conclusion**

The library of CSSSC has been taken different measure to protect earthquake and fire but they are not aware about flood. The library of IDSK has been taken essential measure to protect library from different disaster. But the Central library of ASI has also different protection systems such as potable fire extinguishers, fire prove doors etc. Libraries and information centres should be taken practical measures to minimize the risk of disaster and be prepared to react quickly and effectively if a disaster occurs.

**10. Suggestions**

**10.1 Suggestions for the Central library of ASI**

1. It is being recommended that there should be an emergency exit clearly with directional signs showing members of staff where to pass in order to avoid confusion and stampede. So the entry and exit point should be clear.
2. There is the need for the library to install fire detector, water sensing alarm and more portable 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.
3. The library should mark, clearly, fire escape routes and exits and also hold regular fire drills to practice emergency procedures.
4. 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.
5. Short-circuit must be prevented from destroying the whole library .So it should be install the Automatic fire sprinkler system and more extinguishers. So the electrical wiring system should be changed and separate main switch should be established in each floor of the building which should be on in the working hours and off after office hours regularly.
6. The library should have comprehensive insurance scheme over the library and its contents so as to reduce and share the possible risk of loss.
7. All furniture, **pictures, mirrors, shelves and light fixtures should be** attached to the walls or the floor by calm.
8. Sunlight should be prevented from falling directly on papers because the sun is a great emitter of ultraviolet rays. The windows must be provided with colour curtains, which will prevent falling of direct light as well as absorb ultraviolet rays. Lemon yellow or green coloured glass panes should be fitted in window panes as these are more effective in blocking ultraviolet rays. It is extremely good to fit acrylic plastic sheet in the panes of window because it filters out UV rays to a greater extent than coloured glass.The windows should be covered by wood or Fiber.
9. There was no proper prevention from theft. For checking thefts, CCTV has been installed in the library and daily recordings are made.
10. Library staff should be given training in different types of treatments with which the wet books can be saved.
11. There should be clear and concise notices pasted at very strategic areas in the library showing how occupants (staff, patrons and visitors) should react to disasters when they strike.
12. Disaster management tips should be incorporated into the orientation programmes which are usually organized for new staff and patrons.
13. Preventive procedures should be the part of maintenance program of the library.
14. Special precautions should be taken during usual period of increased risk such as building renovation.
15. Use of match stick or open flame and smoking should strictly prohibited inside the library. Inflammable materials and chemicals should not be stored inside the stacks.
16. The telephone number of the fire office should be visibly and clearly exhibited.
17. 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.
18. The electrical defects and faults should be set right in time.
19. Do not use the lift but take stair case to reach in open place.
20. As high humidity and high temperature are more hazardous for library materials it is advisable to maintain ideal room temperature (200-250c) and relative humidity of (RH 45- 55%) for preservation of documents.
21. Libraries should maintain a record of all disasters happening, their frequency and consequences.
22. Maintain cooperation with local police and fire fighting station.

However, libraries seem to ignore that disaster management can actually support cost reduction in the long run, by avoiding costly damages. For instance, proper shelving protects books from falls and thus spine breakage, proper electrical wiring protects from fires, safe water pipes against flooding, anti theft systems discourage thieves etc. Apart from these proactive measures the most important precaution in a library is staff and user training in order to use the library material properly. For example, handling photographs with cotton gloves protects them against staining, carrying books on trailers protects them against accidental dropping, avoiding writing on books, even in margins, sustains books in a better condition, avoiding the use of metal paper clips protects against oxidation etc. Additionally, if the library tries to make life easier for users it earns their respect. Finally, multiple copies of popular books and cheap photocopying machines are known ways in order to avoid micro vandalisms (such as torn pages and petty thefts).

**10.2 Suggestions for the library of IDSK**

First of all the library and information professionals need to change their attitude and take cognisance that disasters can happen anytime and they have to be prepared to deal with them. “Prevention is better than cure” and preventive measures are required to be taken by the Social Science Research libraries right from the stage of planning the building for the library. These measures are useful for the daily management of the library. Short-circuit must be prevented from destroying the whole library. Regular checking of the building regarding water leakages, etc. can be carried out. Fire extinguishers should be checked and staff members have to be trained in handling the equipments in case of emergency. The changing date of last cartage was 2009. It should be changed the cartage properly. It should be installed the heat and smoke detector system inside the building because the canteen is situated on the 5th floor in the building. There was no proper prevention from theft. For checking thefts, CCTV has been installed in the library and daily recordings are made. Do not use the lift but should take stair case to reach in open place. The library should have comprehensive insurance scheme over the library and its contents so as to reduce and share the possible risk of loss. All furniture, **pictures, mirrors, shelves and light fixtures should be** attached to the walls or the floor by calm. Sunlight should be prevented from falling directly on papers because the sun is a great emitter of ultraviolet rays. The windows must be provided with colour curtains, which will prevent falling of direct light as well as absorb ultraviolet rays. Lemon yellow or green coloured glass panes should be fitted in window panes as these are more effective in blocking ultraviolet rays. It is extremely good to fit acrylic plastic sheet in the panes of window because it filters out UV rays to a greater extent than coloured glass.The windows should be covered by wood or Fiber. There should be clear and concise notices pasted at very strategic areas in the library showing how occupants (staff, patrons and visitors) should react to disasters when they strike. Disaster management tips should be incorporated into the orientation programmes which are usually organized for new staff and patrons. Preventive procedures should be the part of maintenance program of the library. Special precautions should be taken during usual period of increased risk such as building renovation. Use of match stick or open flame and smoking should strictly prohibit inside the library. Inflammable materials and chemicals should not be stored inside the stacks. The telephone number of the fire office should be visibly and clearly exhibited. 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.

**10.3 Suggestions for the library of CSSSC**

1. The layout of the library building should be such that ground floor does not have any valuable

 reading material that can be lost in floods – particularly in floods prone area.

2. There should be clear and concise notices pasted at very strategic areas in the library showing

 how occupants (staff, patrons and visitors) should react to disasters when they strike. It should

 not use the glass, should be used the wooden cover.

3. It is being recommended that there should be an emergency exit clearly with directional signs

 showing members of staff where to pass in order to avoid confusion and stampede. So the

 entry and exit point should be clear.

4. There is the need for the library to install fire detector, water sensing alarm and more portable

 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.

1. The library should mark, clearly, fire escape routes and exits and also hold regular fire drills to practice emergency procedures.
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. Short-circuit must be prevented from destroying the whole library .So it should be install the Automatic fire sprinkler system and more extinguishers. So the electrical wiring system should be changed and separate main switch should be established in each floor of the building which should be on in the working hours and off after office hours regularly.
4. The library should have comprehensive insurance scheme over the library and its contents so as to reduce and share the possible risk of loss.
5. All furniture, **pictures, mirrors, shelves and light fixtures should be** attached to the walls or the floor by calm.
6. Sunlight should be prevented from falling directly on papers because the sun is a great emitter of ultraviolet rays. The windows must be provided with colored curtains, which will prevent falling of direct light as well as absorb ultraviolet rays. Lemon yellow or green coloured glass panes should be fitted in window panes as these are more effective in blocking ultraviolet rays. It is extremely good to fit acrylic plastic sheet in the panes of window because it filters out UV rays to a greater extent than coloured glass.The windows should be covered by wood or Fiber.
7. There was no proper prevention from theft. For checking thefts, CCTV has been installed in the library and daily recordings are made.
8. Library staff should be given training in different types of treatments with which the wet books can be saved.
9. There should be clear and concise notices pasted at very strategic areas in the library showing how occupants (staff, patrons and visitors) should react to disasters when they strike.
10. Disaster management tips should be incorporated into the orientation programmes which are usually organized for new staff and patrons.
11. Preventive procedures should be the part of maintenance program of the library.
12. Special precautions should be taken during usual period of increased risk such as building renovation.
13. Use of match stick or open flame and smoking should strictly prohibited inside the library. Inflammable materials and chemicals should not be stored inside the stacks.
14. The telephone number of the fire office should be visibly and clearly exhibited.
15. 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.
16. The electrical defects and faults should be set right in time.
17. Do not use the lift but take stair case to reach in open place.
18. As high humidity and high temperature are more hazardous for library materials it is advisable to maintain ideal room temperature (200-250c) and relative humidity of (RH 45- 55%) for preservation of documents.
19. The library and information science curriculum also needs to be modified keeping in view the importance of disaster management for library and information centres, because libraries world over act as service agencies and librarians as service and information handling managers.

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