

Disaster Management and Planning for in libraries in Sri Lanka: An Urgent Need

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Abstract

Literacy is more important than ever in the modern world. Literacy creates global citizens who can comprehend the all sort of subtleties in the world they live. Libraries, the repositories of human memory are one of the cornerstones of literacy. Libraries are the knowledge-hub of countries. It is evident of their history. Resources in libraries reflect the wealth of a nation. Thus, these treasures of knowledge should be protected in all times, especially for the future generation. However, as all other man made edifices library buildings and materials are prone to disasters. Humans, insects, animals, biological elements, chemicals, environmental factors as well as natural phenomenon might adversely affect libraries and their resources. Adverse impact on libraries by some elements like natural disasters cannot be controlled. However, there is a possibility to controlled or avoid some elements caused by human and other disasters. The aim of this paper is to identify some important aspects of preventing and minimizing disasters on libraries. Further, some issues related to risk management in the field of libraries have been discussed.

Keywords: *Man-made and natural disasters, Risk management, Disaster management, Disaster planning.*

Introduction

Literacy of people is more important than ever to read, write and understand and it leads to be a global citizen. Libraries really are the gates to the future and the knowledge-hub of any country. It has evident of their history, culture, economy, literature and many other resources. Such resources indicate the wealth of a nation. Accordingly, libraries are the resources and it should be protected for the present as well as future generation. Adverse impact on libraries by some elements like natural disasters cannot be controlled. In fact there is no library that is free from risk and disaster- whether natural or manmade can happen any time in any part of the world (Kingor, 2014).

A disaster is a sudden, calamitous event that seriously disrupts the functioning of a communities or society and causes human, material, and economic or environmental losses that exceed the community's or society's ability to cope using its own resources. Disasters often caused by nature, man-made or man

and nature made. All types of disasters occurs when a hazard impacts on vulnerable people or vulnerable places where human activities happening.

The WHO defines disaster as any occurrence that causes damage, destruction, ecological disruption, loss of human life, human suffering, deterioration of health and health services on a scale sufficient to warrant an extraordinary response from outside the affected community or area. According to the Geographical perspectives, natural disasters are caused by the presence of destructive elements such as floods, rains, Tsunami, strong winds, tornado, volcanic lava, earthquake, fire, snow, mud, heat, cold, thunder, abundant water, or lack of water in vulnerable places with a high damage potential. Disasters are being frequently happened in the world, with different human activities. In particular, many areas where located within the equators of the World, disasters have recently becoming more and more destructive and causing loss of lives and properties. Hundreds of people either loss or damage their normal lifestyle while material damage costing higher and higher. Specially, unfavorable weather conditions have been causing damage in normal day to day life and materials.

The objectives of this paper are to identify the types disasters related to libraries and suggest measures to overcome or manage such risk on libraries. In addition, attention will also be paid to plan and activate a 'disaster management plan' within the libraries in Sri Lanka.

Types of Disasters in Libraries

Libraries are being susceptible by some factors which are governed by human or physical factors of the World. These disasters are caused by natural, man-made or man-made and natural disasters. Some of disasters are discussed here.

1. Negligence of environmental conditions: Construction of library buildings without considering the environmental condition is one of the major causes for disasters. Architectures who design library building must consider the rainfall pattern, wind direction, temperature, moisture and other climatic factors to avoid adverse impact. If the library is facing to wind direction, the readers face difficulties while the safety of books and other reading materials in the library may not be assured. One of the best examples of such a library that constructed without considering the environmental condition is the main library of the University of Kelaniya.

It has been constructed to face the monsoon rain direction from the South-western to the North-western. It is natural that the angle of the monsoon rain is about 20 to 35 degrees during the May to June. Due to the reason, the physical asset including reading materials of the library has been adversely damaged. The University has been spent additional expenses to cover-up the building from the rain.

2. Floods: The libraries where located in the flood prone areas, specially in the tropic are vulnerable for flooding. Flooding in libraries occur either from the intrusion of rainwater after heavy storms or from plumbing faults. It is necessary to consider measures to minimize the effects of floods.

3. Fire: Safety violation and poor maintenance of libraries are the most common causes of fire in libraries. Oldest buildings and buildings which do not modified with fire protections will be in trouble if fire breakout. The structural integrity of the library building can easily be breached at roofs, windows, basements, walls, and doors. They are also more likely to have electrical wiring in which the insulation has deteriorated and become a fire hazard.

The use of open fire near the library or archives collections is also highly dangerous. The risk of fire is greatly increased when cleaning the surrounding area and maintenance work requires the use of welding or repairing equipment. It also dangers to use of such elements like electronic devices, lights on extension cords, hot plates, and are also fire hazards.

4. War and riots: Sri Lanka has been terrible experiencing in War during the last three decades till 2009. It has been seriously affected to smooth functioning the libraries in the North and Eastern province of the country. Due the normal life style of the country which has been erupted by the War and resulting to give priority to survival of life than reading. Not only were the readers away from the libraries but also physical assets of the libraries including reading materials and buildings also destroyed by the War.

5. Inadequate safety: Safety in libraries, has always been a concern, but may be more keenly felt in light of certain recent events. A productive and effective library is one in which its staff and patrons feel more secure.

Inadequate safety measures in exterior and interior entrances, archive and special collection storage spaces, special collection reading areas or rare section, children's library area, critical building component locations such as electrical switchgear, communication and security equipment, counters, toilets, lending areas, staircases, and office locations may be caused problems.

Inadequate in securing the building as well as computer software and e-resources in library are causing unexpected problems. Available some basic components typically provide alarm notification to the authority and entry control. Absence or improper electronic security system include burglar protection, collection security, access control, and video surveillance, include architectural considerations, the use of security personnel, and security hardware would create many problems.

Man-made disasters in Libraries of the World

Libraries are also vulnerable for different types of disasters in the World. Available literature reveals that some libraries were being threatened or destroyed by different groups or rulers in the World. It can be identified as man-made disasters. Some of such disasters were recorded with evidence or information. Following disasters have adversely affected to the reading community as well as overall education system of the respective countries. The Encyclopedia of Wikipedia has showing the following disasters during the human history (See: <http://en.wikipedia.org/wiki>).

- In 206 BC Epang Palace (or Xianyang Palace) and State Archives in China had been destroyed by the Xiang Yu, rebelling against Emperor Qin Er Shi, led his troops into Xianyang. He ordered the destruction of the Epang Palace by fire. Qin Shi Huang had ordered the burning of books and burying of scholars earlier.
- Library of Alexandria in ancient Egypt destructed.
- Library of Antioch in Ancient Syria was burnt by the Emperor Jovian in 364 AD.
- Library of the Serapeum in ancient Alexandria was burned and looted at the decree of Theophilus of Alexandria, who was so ordered by Theodosius I in 392 AD.
- Library of Ctesiphon in ancient Persia was destroyed by Arab Invaders in 651 AD. Books of the library had thrown into the Euphrates.

- Library of Rayy in ancient Persia was burned the library and all books deemed as heretical by Sultan Mahmud of Ghazni in 1029 AD.
- Library of Ghazna in the Ghurid Empire was burned by the Ala ad-Din Husain in 1151 AD.
- Library of Nalanda including the University of Nanalda complex in India was destroyed by Turkic Muslim invaders under Bakhtiyar Khilji. This event is seen as a milestone in the decline of Buddhism in 1193 AD in India.
- Imperial Library in ancient Constantinople was destroyed and its contents burned or sold In 1204. The great part of the library that was saved later became absorbed into the Ottoman Sultan's library after the Muslim forces of Mehmed II, Sultan of the Ottoman Turks, captured Constantinople at the end of the siege of 1453.
- House of Wisdom (library) in ancient Baghdad was destroyed by the Mongol Invaders during the Battle of Baghdad (1258 AD), but this is disputed by modern scholars, who point to the library's loss of importance after the capital moved to Samarra in the ninth century, to the fact that several of the other famous libraries allegedly destroyed at the same time were authoritatively reported to still exist over a hundred years later, and to the foundation of an important library in Persia using books collected by the Mongol King responsible for the city's capture.
- Madrassah Library in ancient Crown Castile was attacked by troops of Cardinal Cisneros in late 1499 AD, the books were taken to the Plaza Bib-Rambla, where they were burned in public.
- Bibliotheca Corviniana in ancient Ottoman Empire was destroyed by Ottomans in 1526 AD.
- Library of the Glasney College was smashed and looted by the Royal officials of the Cornish colleges at Glasney and Crantock. They have brought an end to the formal scholarship which had helped to sustain the Cornish language and the Cornish cultural identity.
- Library of the Maya codices of the Yucatán in Mexico and Guatemala was destroyed by Diego de Landa in 1562 AD. The Bishop De Landa, a Franciscan monk and conquistador during the Spanish conquest of Yucatán, wrote: "We found a large number of books in these characters and, as they contained nothing in which were not to be seen as superstition and lies of the devil, we burned them all, which they (the Maya) regretted to an amazing

degree, and which caused them much affliction." Only three extant codices are widely considered unquestionably authentic.

- Raglan Library in Wales was destroyed by the parliamentary Army in 1646 AD. The Earl of Worcester's library was burnt during the English Civil War by forces under the command of Thomas Fairfax.
- Library of Congress was also destroyed when the British forces set fire to the U.S. Capitol during the Burning of Washington by the troops of the British Army in 1814 AD.
- Library at the University of Alabama was destroyed by the troops of the Union Army during the American Civil War, Union troops destroyed most buildings on the University of Alabama campus, including its library of approximately 7,000 volumes in 1865 AD.
- Royal library of the Kings of Burma in Burma at present Mynmar, was looted and burned down by the British at the end of the 3rd Anglo-Burmese War the royal library (1885-1887 AD).
- Library of the Catholic University of Leuven in Belgium was burnt by the Germans in 1914 AD.
- Public Records Office (Library) of Ireland was disputed by the Anti-Treaty IRA or accidental ignition of their stored explosives due to shelling by Provisional Government forces in 1922 AD.
- Institut für Sexualwissenschaft was burned by the Nazi forces at Berlin in Germany in 1933 AD. The Forces made an organized attack on the Institute of Sex Research. A few days later, the Institute's library and archives were publicly hauled out and burned in the streets.
- National University of Tsing Hua, University Nan-k'ai, Institute of Technology of He-pei, Medical College of He-pei, Agricultural College of He-pei, University Ta Hsia, University Kuang Hua, National University of Hunan including libraries in China were destroyed by the Japanese Troops during World War II. National University of T'ien-chin (totally destroyed, 224,000 books lost), Institute of Technology of He-pei, T'ien-chin (completely destroyed), Medical College of He-pei, Pao-ting (completely destroyed), Agricultural College of He-pei, Pao-ting (completely destroyed), University Ta Hsia, Shanghai (completely destroyed), University Kuang Hua, Shanghai (completely destroyed), National University of Hunan (completely destroyed).

- Library of the Catholic University of Leuven in the Belgium was caught fire during German invasion of Louvain by the German Troops in 1940 AD.
- The National Library of Serbia was Destroyed by the Nazi forces of Germany during the World War II (1941).
- Załuski Library at Warsaw in Poland was burned down during the Nazi suppression of the Warsaw Uprising of 1944 by the Nazi forces in 1944. The burning of this library was part of the general setting on fire of a large part of the city of Warsaw.
- National Library of Cambodia was burnt most of the books and all bibliographical records by the Khmer Rouge during 1976 - 1979. However, 20 percent of materials survived.
- Sikh Reference Library in Panjab in India was destroyed by the troops in 1984. Before its destruction, the library contained rare books and handwritten manuscripts on Sikh religion, history, and culture.
- Central University Library of Bucharest in Bucharest in Romania was burnt down during the Romanian Revolution in 1989 AD.
- Oriental Institute in Sarajevo in Sarajevo, Bosnia and Herzegovina destroyed by the shellfire during the Siege of Sarajevo, by the Bosnian Serb Army in 1992. National and University Library of Bosnia and Herzegovina was also completely destroyed during the same period
- Abkhazian Research Institute of History, Language and Literature & National Library of Abkhazia in Abkhazia were destroyed Georgian Armed forces during the War in Abkhazia in 1992 AD.
- Pol-i-Khomri Public Library in Afghanistan was destroyed by the Taliban militants in 1998. The library held 55,000 books and old manuscripts.
- Iraq National Library and Archive, Al-Awqaf Library, Central Library of the University of Baghdad, Library of Bayt al-Hikma, Central Library of the University of Mosul and other libraries in Baghdad, Iraq were looted, set on fire and destroyed by unknown members of Baghdad population during the 2003 Iraq War.
- Ahmed Baba Institute (Timbuktu library) in Mali was burned down by Islamists militants in 2013. The library contained of 20,000 manuscripts.

- Saeh Library in Tripoli, Lebanon was burned down by unknown in 2014. It contained over 80,000 manuscripts and books.
- 35 National Archives of Bosnia and Herzegovina was also destroyed by unknown people in 2014.

Disasters in the Sri Lankan Libraries

As we have discussed earlier, libraries in Sri Lanka are also vulnerable for unforeseen disasters. Followings are some of disasters happened during the last a few decades.

Public Library in Jaffna was destroyed in 1981 by unidentified group. At least 95,000 volumes – the second largest library collection in South Asia were destroyed by the incident. During the 3 decade long War in the Northern and Eastern part of the country has

It was reported that more than 35,000 people who were living at the coastal areas of the Eastern, Southern and South-western coastal areas of Sri Lanka were killed and another 516,000 people displaced by the tsunami in 2004 (UN Office of the Special Envoy for Tsunami Recovery, 2006). Not only people, but also man-made environment such as libraries were damage or destroyed by the tsunami. It was estimated that 1.2 million books and other reading materials were also destroyed by the disaster. Amarasiri has done a study and found out of 950 libraries in Sri Lanka, 55 libraries were completely destroyed (Amarasiri, 2005). Some of libraries were used as refuge centers or hospitals in the aftermath of the disaster.

The report further says that 182 out of 9,790 school libraries in the country were directly affected by the tsunami. Most of the schools were located within the tsunami affected region had been used for refugee camps and has resulted further damage of school libraries (Gemage and Cotera, 2005). Thousands of school text books, other books and other physical asset such as furniture were destroyed by the disaster.

Several libraries which were affiliated with the religious institutions were damaged by the tsunami. Most of them were attached to the Buddhist temples. According to the report of Gemage and Cotera (2005) 68 libraries affiliated to Buddhist temple and three were museums were damaged by the disaster. The libraries and museum contained valuable

palm leaf manuscripts which are relating to indigenous medicine practices of the country.

These disasters reveal the necessity of an action to overcome the unfavorable events. If it is not possible to control the disasters, attempt should be focuses on mitigating or risk management.

Need for a Disaster Management Plan (DMP)

Disaster Management Plan (DMP) is important to protect physical and human resources of libraries which can be affected by disasters. Some disasters can be avoided easily while some can be controlled in a systematic way. The DMP should be started from planning stage of building construction to reader usage stage. In that sense DMP consists of properly structured and systematic and should be known by all the people who serve to the library and use the library.

According to Matthews and Eden (1996) the most important step in disaster preparedness is to draw a written DMP. 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 DMP

American Society for Industrial Security (ASIS) and revised under the auspices of the Safety and Security of Library Buildings Committee of the Buildings and Equipment Section of the Library Leadership and Management Association (LLAMA), a division of the American Library Association. LLAMA and Safety & Security of Library Buildings Committee have provided better guidelines for construction of libraries. In addition Library Security Guidelines Document (LSGD) in 2010 and Library Security Guidelines (LSG) documents by Mark Mc Comb (2004) are also important for planning and constructive stages of libraries.

It is necessary to conduct a Survey on Risk Assessment (SRA) of each library to identify the types of risk/ disasters that they will be faced in future. A team appointed by the Management Board, Professionals or Officials could be carrying out the task. A thorough SRA of the building would be able to reveal the physical integrity of the structure and the collection. Security, physical

plant, maintenance staff, library staff and even police and fire brigades are the key groups to be considered when conducting the SRA. In addition, infection of pest and funguses are also considered. Birds are another types of risk/disaster within the library in the country. They may destroy the environment by building nests, making sounds and latrine in the libraries. The assessment of the team will be able to identify the risk and suggest measures to overcome or mitigate the risk. Further, it can save time and ensure that proper steps are taken for salvage and recovery of library materials.

Data and information are another vital component for planning a good DMP. It can be identified the types of disasters and probability to occurrence the disasters. Analyzing the rainfall, temperature, wind, cyclones and floods etc., and its pattern, the planners can prepare an ideal plan for construction of libraries. In addition, this information is useful in creating awareness not only to the management but also to employees and readers on the possible threats.

Tiogo, (2003) has pointed out several important aspects on data and information which are important while activating libraries. He estimated that leading cause of data and information loss and damage due to (a) hardware or system malfunction (44%), (b) human error (32%), (c) software corruption or program malfunction (14%), (d) computer viruses (7%) and (e) natural disasters (3%). A good DMP would be able to prevent such damage and strengthen the safe of human as well as physical asset of libraries.

According to Matthews and Eden (1996) there are four stages in DMP which a library or related information centers can incorporate as (a) Prevention, (b) Preparedness, (c) Reaction and (d) Recovery. The outbreak of a sudden fire in a building which appears to have a good fire prevention action plan in operation is most often traceable to deficient electrical wiring. It is, therefore, extremely important that defective wiring be replaced quickly and that precautions be taken to ensure that wiring is not damaged when maintenance work is underway close to the wiring. In addition, a good DMP should cover every institution which is either big or small should have detailed fire precautions. Small institutions can work together to share the few resources available. This includes aspects of fire precautions, staff awareness and training in the use of firefighting equipment. Further, such a good DMP should include the fire

detection equipment which easily identifies smoke and over heat conditions to quick response for controlling fire related disasters.

Prevention and preparedness are most important parts of the DMP. The plan should be identified the possible measures to minimize or avoid risk/ disasters by keeping rare materials in the upper floors due to the high mode of flooding if a disaster occurs. In the other hand the materials can also be affected by dampness or moisture. It should not be placed over the walls in the basement and should be placed in an appropriate place.

The DMP should be also consisted of reaction and recovery plan if disaster happened. A list of recovery expert and supplies of other emergency services and equipment are necessary for contact after a disaster. List of names, address and telephone numbers are vital in this regards. At least a copy of rare materials should be kept in safe separate locations such as safe cabinets or another library if disaster happened. In addition, as a recovery measures there should be a backup copy of software and files in the computer system in libraries. Such materials can be placed outside the building or safer place.

Conclusion

“One should act beforehand towards certain issues, situation etc. rather than looking for its situation later on”. This principle can be applied to mitigate or avoid risk and uncertainty of disasters happening past, present and future. A comprehensive DMP of library is a vital component to take measures to safe the human and physical assets of libraries. Even some natural disasters may not be controlled, but it is possible to control the adverse impact on libraries. Planners, Architectures and Managers should be thoroughly considered the environmental conditions of the area before constructing a library. After constructing the library, the librarian or Manager should prepare a DMP for mitigating or avoid possible risk in library. Such DMP provides better protection framework for human and physical resources of libraries. Adoption of guidelines set by different organizations such as Library Security Guidelines (2001), Library Security Guidelines Document (2010) and Safety in Libraries (2004) would be able to create safer and favorable environmental in the libraries and people who serve and use libraries.

References:

"Amarasiri, Upali. (2005). "Tsunami affected libraries in Sri Lanka: Rebuilding process and challenges."(PDF). [Online web] Accessed 12 October, 2014, URL: <http://www.ndl.go.jp/en/iflapac/pdf/amarasiri.pdf>

Kingori, G. M. "Measures to be put in place to avoid library disasters in Research organizations in Africa" [Online web] Accessed 12 October, 2014, URL: <https://www.mu.ac.ke/informationsscience/images/Publications/kingori%20-%20disaster%20management%20in%20research%20libraries.pdf>

LLAMA BES Safety & Security of Library Buildings Committee (2001) "Library Security Guidelines" Safety and Security Committee, Building and Equipment Section, Library Administration and Management Association (LAMA), a division of the American Library Association, Merri Hartse, [Online web] Accessed 10 October, 2014, <http://www.ala.org/llama/sites/ala.org.llama/files/content/publications/LibrarySecurityGuide.pdf>

Library Security Guidelines Document: (2010) [Online web] Accessed 12 October, 2014, URL: <http://www.ala.org/llama/sites/ala.org.llama/files/content/publications/LibrarySecurityGuide.pdf>

List of destroyed libraries [Online web] Accessed 14 October, 2014, URL: http://en.wikipedia.org/wiki/List_of_destroyed_libraries

Matthews, G. and Eden, P. (1996). "Disaster management in Libraries". Library Review Vol. 45 No. 1 pp. 30-38.

Premila Gemage and Maria Cotera. (2005). Rising from the rubble: The Sri Lanka Library Association rehabilitation project. *Impact*: 50-52.

Safety in libraries - Library Security. (2004) Mark Mc Comb, RLS Inc., San Francisco. [Online web] Accessed 13 October, 2014, URL: <http://www.librisdesign.org>

Toigo, J.W. (2003). Disaster Recovery Planning: Preparing the unthinkable. 3rd ed. New Jersey. Prentice Hall.

UN Office of the Special Envoy for Tsunami Recovery. *Sri Lanka*. [Online web] Accessed 12 October, 2014, URL: <http://www.tsunamispecialenvoy.org/country/srilanka.asp>
World Health Organization (WHO) "Coping with Emergencies: WHO Strategies and Approaches to Humanitarian Action" Geneva, 1985