

# Information Services & The School Library Media Centre



Edited by



**Emem P. Udofia**

# CHAPTER Twenty-seven

## RISK AND DISASTER MANAGEMENT STRATEGIES FOR SCHOOL LIBRARIES

Nse Emmanuel AKWANG PhD & Inlobong AKAI  
Akwa Ibom State University, Obio Akpa Campus,

### Introduction

The primary function of school libraries is to provide human and various learning resources to support and enhance learning, teaching, and leisure needs of the school community. In realization of this function, school library is expected to be housed in a good building with adequate infrastructure and fixtures, qualified personnel, adequate and current information resources, and quality services delivery, among others. The changes in information handling precipitated by ICTs has altered or enhanced the provisions of school libraries. They are moving beyond performing traditional functions to digital functions using sophisticated tools and strategies. The material, human, and electronic resources in school libraries should be valued, protected, secured and sustained. That means, the security and sustainability of school library resources should be a concern as they might be predisposed to various risks and disasters.

Risks and disasters often times are used interchangeable by many people. Although, both have negative connotations in the human consideration but each of them has a different meaning and implications. Risk is a potential occurrence caused by natural, technological, or other situations that have the capability of destroying library facilities and loss of life. Disaster is a sudden adverse situation which threatens human safety and damages or threatens to cause damage (Eden & Matthews in Velasquez, Evans & Kaeding, 2016). Risk is an event that has the potential to occur, but a disaster is an event that has happened. Both risk and disaster could threaten the safety of library buildings, collection, equipment, library users and staff.

Risk and disaster management in school libraries is the concern of all stakeholders – the school authority, library staff, pupils, students,

teachers, etc. This is because of the cost involved in setting up the library, and the consequences associated with the risks and disasters. This however is not to be treated with levity and iciness as Bansal (2015) asserts. The author notes that no library is entirely free from risks and disasters. Finley (2001) claims “every library needs a disaster plan and that plan needs to plan for the worst”. That means school librarians or teacher librarians need in-depth knowledge on risks and disasters management to prevent the ugly, the bad, and the undesirable in their libraries. This chapter therefore presents a comprehensive discussion on concept and types of risk, and the strategies in risk management. It explains the concept and types of disasters, and the strategies in disaster management. The chapter also presents the application of ICTs to risk and disaster management and provides guidelines for preparing a Disaster Management Plan (DMP) for school libraries.

### Concept and Types of Risk

Risk is simply the chance of something happening that will have an impact on organizational objectives. It is the situation with an unpredictable and uncontrollable outcome which could lead to human, infrastructural, financial, or other losses. According to Piney (2014), risk comprises three major parameters which are: (i) the state of uncertainty (ii) the likelihood of occurrence of the risk (iii) the negative impact of the occurring risk. A school library, like other types of organizations is not free from risk. The entire library environment can suffer different types of risks that might cause injury and death of workers/users, destruction of library collection and facilities if immediate measures are not taken. There are several types of risks associated with school libraries but the common and well-known are explained below:

**Environment Related Risks:** A school library environment connotes the library itself and the surroundings which can be a reason of risk to staff, users, and library facilities. Unguarded holes in floors, fragile surface, and water leaks in the library building could lead to injuries from falls, slips, sprains, and trips. A practical example is using ladder or safe-step stool in climbing up to shelves and shelf-read books. The situation can also lead to damage of library collection and facilities. Wall cracks, blackout, electrical faults, and defective equipment are potential risks to school libraries. They can cause fire outbreak, criminal damage, burglary, loss of



life, etc. Hazardous substances like dust and bacteria can be very dangerous to health. Unkempt library surrounding could harbour dangerous snakes, rodents, and other unwanted animals. Poor drainage system around the library is a serious threat that can even lead to flooding. These situations could be regarded as school library environment risks.

**Users Related Risks:** Most primary and secondary schools except the privately owned are open access which allows both the genuine library users (pupils, students, teachers, non-teaching staff, and parents) and less desirable persons to walk in without let or hindrance. This set of less desirable persons or unwelcome users who are intruders could exhibit unwelcome behaviours like rowdyism, hooliganism, theft, and other abusive behaviours. Some genuine users can also display bad behaviours such as mutilation, pilfering, aggressiveness, and other undesired behaviours. These behaviours are considered as risks because they can disrupt the activities of the library and cause destruction of library facilities and collection.

**Collection Related Risks:** The school library collection come in various types and formats such as fiction, textbooks, reference materials, serial publications, audio visual media, and other information resources. Related risks faced by these materials include mutilation, brittle pages, weak spine, old age, among others. These risks are mostly ignored in most school libraries because their effect on the library collection takes a gradual process to manifest. School librarians must be mindful of the fact that the outcome of such risks at the long run can be devastating and sometimes unalterable.

**Facilities Related Risks:** Facilities in school libraries are broadly classified under library furniture (shelves, circulation desk, catalogue stand, etc.), library stationery (administrative records, cards, slips, registers, etc.), library equipment (computers, photocopying machines, printers, scanners, etc.), and library fittings (air-conditioning, fans, lights, close-circuit device, etc.). These facilities are not free from risks arising from poor maintenance, misuse, heavy usage, and spills. Bad electrical connection, power outage, old age, viruses attack, and defective parts are also potential risks to library equipment and fittings. Other risks include rodents, insect infestation, water spills and rain leaks, moulds, etc.

#### **Strategies for Risk Management in School Library**

Risk management in libraries as noted by Rehman (2014) is the process

of identifying and measuring or assessing risk and developing strategies to manage them. The process involves collective efforts of all the library staff and other stakeholders but primarily it depends to a large extent on the school librarian's ability to harness different ideas for the purpose. The Library of Congress (n.d.) outlines the following risk management strategies which could be useful for school libraries.

- i. **Risks Identification:** Situations which can cause risks in school libraries must be properly identified. This is the first step to solving a problem that could as well result in disaster if not properly handled. The school library staff irrespective of his or her level should have at least a fair knowledge of potential risks within the location where the library is situated. Other library stakeholders could also contribute ideas that could help in risks identification. However, the following steps can be useful.
  - Identify the past and potential risks in the location where the library is situated (e.g. floods, storms, oil spillage, etc.).
  - Identify the potential risks in the library building and immediate surroundings (e.g. water leaks, wall cracks, bad wiring, etc.).
  - Identify the potential risks within the library collection space (e.g. ingress routes for pests, broken water pipes, liquid sprinkles, moulds, etc.).
- ii. **Risks Assessment:** When the risks are identified, the next step is to assess the risks. The following steps serve as guide to effective risks assessment in school libraries.
  - Assess the vulnerability of the library building, collection, and facilities to each of the above identified risks.
  - Determine the potential damage of the identified risks whether they will be catastrophic or manageable.
  - Revisit the previous risks encountered and the frequency of occurrence.
  - Ascertain the extent of damage and the measures that were taken to manage the risks.
- iii. **Risks Prioritization:** At most times, managing risk involves money and with the paucity of funds available to school libraries, it might be difficult to manage many identified risks at a time. This calls

for risks prioritization depending on the envisaged severity and urgency. The steps below could assist in the process.

- Determine among the risks identified, which is most likely to be realized.
- Determine which among them might pose most negative impacts on the library.

iv. **Risk Impacts Reduction:** Once the risks are identified, assessed and prioritized. The next action is to minimize the impacts of such risks. Risks impacts reduction involves adopting some measures to be able to minimize, spread, and transfer some of the costs of the potential risks. Such measures are explained as follows:

➤ **To minimize risks**

- Ensure the school library building is well constructed with adequate space.
- Make prompt repairs and replacement within and outside the school library building.
- Install disaster prevention facilities (e.g. fire detection, thunder arrestor, etc.)
- Take extra precautions in advance of bad weather and be extra vigilant when it happens.

➤ **To spread risks**

- Decentralize library collection especially the most important collection items.
- Make copies of important documents that belong to the library (e.g. acquisition list, accession list, insurance policies, etc.).

➤ **To transfer risks**

- Have insurance and understand terms of coverage (e.g. types of materials the insurance will replace, salvage expenses or reimburse, and necessary documentation for submitting claims).
- Form mutual assistance networks with relevant agencies.

### Concept and Types of Disasters

Disasters are happenings that can disrupt the normal functioning of a society or an organization. Modh in Bansal (2015) defines disaster as

catastrophe, mishap, calamity, or grave occurrence affecting any place and resulting in substantial loss of life or property. To Ottong & Ottong (2013), disaster is any incident which threatens human safety and/or damages, or threaten to damage a library's building, collection (or items therein), equipment and system. Disasters could be more damaging than risk because they are often inevitable with devastating outcome.

Disasters, according to Biswas & Choudhuri (2014) and Heginbotham (2018) have such characteristics as unpredictability, unfamiliarity, speed, urgency, uncertainty, and threats. The results of all disasters could be a combination of deaths, injuries and illness, degradation of environment, human suffering and property damage. The nature and magnitude of disasters differ based on the circumstances that lead to the disasters. Some could be very destructive, beyond the coping capacity of the library and some could be mild but with destructive tendencies. Disaster has a wide scope which could be classified as natural disasters, man-made disasters and technological disasters.

**Natural Disasters:** Natural disasters are naturally occurring physical phenomena caused either by rapid or slow onsets events that have immediate impacts on human health and secondary impacts causing death and suffering. The University of North Carolina (2019) categorizes natural disasters into the following five categories:

- Hydrological Disasters - heavy rains, erosion, avalanche, floods, storm, etc.
- Meteorological Disasters - hurricanes, cyclones, tornadoes, typhoons, etc.
- Geophysical Disasters - earthquakes, landslides, tsunamis, volcanoes, etc.
- Climatological Disasters - heat waves or extreme heat, wildfires, etc.;
- Biological Disasters - disease epidemics and pandemics, plagues, insect swarms, animal stampede, etc.

**Man-Made Disasters:** Man-made disasters are adverse or unfortunate events that are caused by human beings which occur as a result of war, human error and negligence. Laskshmi & Kumar (2015) note that man-made disasters, otherwise known as anthropogenic disasters are events created largely due to accidents, negligence or sometimes by human

design, which could result in loss of life and property. Man-made disasters threats could emanate from social or political unrest. Jha (2010) classifies man-made disasters into two broad groups as follows:

- Technological Disasters
  - engineering or structural failures
  - accidents involving machines or equipment, nuclear and chemical particles (hazardous materials)
  - environmental disasters (e.g. building collapse, environmental degradation, pollution, oil spillage etc.)
- Sociological Disasters
  - riots, extensive violence, and war
  - criminal acts and malicious vandalism, etc.

### Disaster Management Strategies for School Libraries

Disaster management is a process of how we prepare for, respond to and learn from the effects of natural and man-made disasters. Bansal (2015) reiterate that school libraries should engage in disaster management because they are not exempted from disasters and the rate of disaster occurrences across the globe is alarming. The need to prevent the eruption of disasters and minimize their negative impacts on library and its resources is also a concern.

Disaster management in school libraries encompass activities directed towards meeting disastrous situations. It is the organization and management of resources and responsibilities in order to lessen the impact of disasters. The strategies for disaster management in school libraries are discussed under the following: disaster prevention, disaster preparedness, disaster response and relief, and disaster recovery.

- **Disaster Prevention:** Disaster prevention is defined by Physiopedia (2020) as the process of engaging in activities which intend to prevent or avoid potential adverse impacts of disasters. This process which is taken in advance aims at providing protection from the occurrence of disasters. The practical means for achieving disaster prevention in school libraries lies on the identification and reduction in the risks posed by school library building, its equipment and fittings, and the hazards of the area. To ensure outright avoidance of adverse impacts of disasters, school libraries must adopt the following strategies.
  - Inspect school library vicinity to identify and alter factors which

- constitute a potential hazard or risk like poor drainage, flood proof, deterioration of library collection, etc.
- Establish routine housekeeping and maintenance measures to withstand disaster in school library building and surrounding areas.
- Install automatic fire detection, extinguishing systems, and water-sensing alarms.
- Take special precautions during usual periods of increased risk such as library building renovations, etc.
- Make special arrangements to ensure the safety of library materials.
- Have insurance policy for the library and its contents.

• **Disaster Preparedness:** Disaster preparedness refers to a set of pre-disaster activities that are undertaken in anticipation of a disaster to ensure appropriate and effective actions in the aftermath. It refers to the school library readiness to respond constructively against the threats from the disaster in order to minimize the negative consequences for lives, collection, and facilities. School libraries are expected to take the following disaster preparedness measures:

- Develop a written plan for disaster management and revise the plan regularly.
- Stockpile and maintain equipment and tools required in a disaster situation.
- Request for permission to create and train an in-house disaster response team. Members should constitute library staff and other relevant volunteers.
- Prepare and keep an up-to-date set of documentation on inventory of the school library holdings, insurance policies, recoup procedures, emergency funding agencies, etc.
- Keep contacts of the in-house disaster response team members.
- Establish and maintain a good rapport with available disaster control services and volunteer organizations like Fire Service, Community Emergency Response Teams, Local Emergency Management Agency, Red Cross Society, etc.
- Communicate the plan and documentation to relevant persons using simple and clear terminologies and methods.
- Provide more than one evacuation doors (exit doors) with proper signage.



- Develop procedures to notify the appropriate or relevance persons and agencies of any disaster and assemble them when need arises.
- **Disaster Response:** Disaster response is also known as disaster relief. It is a set of activities undertaken to deal with the effects of a specific disaster. Disaster response involves search and rescue, evacuation, medical care, removal of debris, stabilization of unsafe sections, provision of emergencies and relief. It is the provision of emergency services and assistance during and immediately after a disaster in order to save lives and reduce the negative impacts of the disaster. It is necessary that school librarians ensure the following steps are taken to minimize or alter the effects of any type of disaster.
  - Follow established emergency procedures for raising alarm and evacuate the staff, library users, library collection, and facilities from the disaster site.
  - Contact immediately and brief the disaster response team directly or through their leader.
  - Make a preliminary assessment of the extent of damage, and the equipment, supplies, and services required.
  - Provide the equipment, tools, and services needed in the process.
  - Monitor and review the situation and the actions taken as need arises.
  - Stabilize the school library environment to prevent further damages and injuries.
  - Take photographs of damaged materials for insurance claims purposes.
  - Set up a safe area or unit for recording and packing library materials which require minor treatment like drying, binding or re-binding, etc.
  - Keep comprehensive records of information received, decisions taken, and actions carried out.
- **Disaster Recovery:** Disaster recovery refers to those efforts which go beyond the provision of immediate relief to guarantee full recovery from the impacts of a disaster. According to Isife & Ugwuanyi (2012), recovery efforts are primarily concerned with

actions that involve rebuilding the destroyed building, re-employment and repairs of other essential resources. It is recommended that school librarians consider the following strategies to ensure desired recovery.

- Establish a programme to restore both the disaster site (school library and its environs) and the damaged materials to a stable and usable condition.
- Determine priorities of what is to be restored and best methods and options to take.
- Prepare a list of items not worth retaining in the school and ensure that such items are replaced.
- Contact the insurance company through appropriate office or unit.
- Clean and rehabilitate the areas that were affected by the disaster.

#### **Application of ICTs in Risk and Disaster Management in School Libraries**

Information and Communication Technologies (ICTs) are basically information handling tools which can be used to produce, store, process, distributes and exchange information. The tools include traditional ICTs such as radio, television, and telephone and modern ICTs such as computers, satellites and wireless technology and the Internet. According to Wilson, Wilson & Wilson (2018), ICTs can be used in combination of other channels of communication for effective management of risk and disasters at various levels. Some commonly used ICTs are highlighted below.

- **Mobile Phone and Land Phone:** Mobile and land phones can be put to maximum use in communicating risk events to the appropriate authorities, individuals, agencies, and professionals for necessary intervention and aid. Mobile phones are used to send immediate information on disaster occurrences to school management and relevant persons through voice and video calls, pictures and text messages. Issues relating to the disaster such as emergency needs, safety measures, professional advices, and relief activities could be communicated easily through phones.
- **Television and Radio:** Television and radio are effective devices

used for the purpose of informing, educating, and training school librarians, pupils, students, teachers, school administrators, and parents on necessary approaches ought to be taken to minimize or prevent risks and disasters. Different TV and radio programmes on disaster management could be recorded and disseminated to the public for enlightenment and education that could help in the reduction of damages and calamities from disasters.

- **Computers and Internet:** Computers and Internet help in diverse ways in disaster management especially in the dissemination and delivery of disaster related information. Computers with corresponding technology made digitization of library materials possible. This makes access and retrieval of such materials where hard copies might have been destroyed as a result of disaster occurrence like flood, firebreak, theft, or war. A school library that has Internet connectivity offers to its users the opportunity to search, generation, utilization, and sharing of information on risk and disaster management among interest groups.
- **Closed Circuit Television (CCTV):** This is a device that helps in risk and disaster management. It is installed at strategic locations within and around the library building to monitor the activities and all happenings. It could see through all corners to identify smokes, electric spark, and any other abnormalities within and around the library. With CCTV, danger could be detected immediately for prompt intervention. Library users who aimed at theft, mutilation, pilfering, and other vandalism practices could be seen, identified, and captured through this security system.
- **Social Media:** Social media is increasingly significant in the management of risks and disasters. Social media are interactive Internet-based applications like Facebook, YouTube, WhatsApp, Snapchat Instagram, and a lot more. These social media applications enable people to communicate and share disaster related data and information. With social media tools, school libraries can disseminate relevant information and receive feedback via messages, and wall posts. conduct emergency communications and issue warnings, forward requests for assistance, establish situational awareness, monitor the impacts of the disaster, use postings and loaded images to create damage estimates, among others.
- **Remote Sensing and GIS:** Remote sensing and GIS, according

to Westen (2000) are computer-based tools that are used for monitoring, forecasting, predicting, measuring and mapping of various impending disaster events. Remote sensing and GIS are excellent tools for disseminating early warnings. They provide a database of past and present geospatial information that can be read, interpreted, and combined with other information to arrive at hazard maps which indicates areas that are potentially dangerous. The information provided through remote sensing and GIS is mostly useful for disaster planning, assessment, and recovery.

Other ICTs that can be applied in school libraries for risk and disaster management include electronic mails, fire signal/alarm, Radio Frequency Identification (RFID), Unmanned Aerial Vehicles (UAVs), Big Data, Smart Grids, among others.

#### **Guidelines for Preparing a Disaster Management Plan (DMP)**

A Disaster Management Plan (DMP) is a written document prepared to guide school library, school management, staff, users, individuals and those responsible for the protection of the library building and its resources. The school library should consult the National Emergency Management Agency (NEMA) Act 50 of 1999, the State Emergency Management Agency (SEMA), and other agencies for useful technical information and incorporate them into the plan. The plan should be updated regularly to bring in new ideas and expunge outdated ideas. The plan should have the following components/subheadings:

1. **Cover Page** – The cover should be designed with the name of the school library and motto; the name of the document; the name of the compiler; and compilation date (month and year).
2. **Vision and Mission Statements** - The school librarian/teacher librarian should write vision and mission statements for the library after due consultations.
3. **Table of Contents** - The school librarian/teacher librarian should prepare a comprehensive table of contents for the documents
4. **Introduction** - Introduction should contain brief information about the school library - year of establishment, size of collection, staff strength, user population, available facilities, scope of service, partnership, among others. The considerations of the school as

regards risk and disaster management and the importance of DMP to the library should be included as brief as possible. Brief descriptions of possible disaster events or known disaster that has occurred in or within the school library and measures that were used to reduce its impacts should be highlighted. The outline or sections of the DMP and any relevant information should be mentioned briefly in the introduction.

5. **Goal and Objectives of the Plan** - The school library should clearly indicate the goal and objectives of the DMP
6. **Organizational Framework (with Organogram)** - The school library should highlight details of the organization framework which describes the organizational structure for implementation of the plan and coordination with all agencies and donors. The organogram must be in the form of flowchart which defines hierarchy of actions, jurisdiction arrangements, area of operations/responsibilities, and communication plan.

### Conclusion and Recommendations

School library, like any other place is vulnerable to many risks and disasters which can threaten human safety, damage library building and collection, and destroy facilities and equipment. Although, disasters and more damaging than risks but both needs to be managed to avoid devastating outcome in school libraries. School librarians/teacher librarians and other stakeholders should wake up to this reality and always get prepared for these inevitable occurrences. With the rapid advances in ICTs, risks and disasters can be managed effectively to prevent or reduce the gravity of disastrous occurrences. Hence, this chapter provided an overview of risks and disasters and types. It further discussed various strategies for risk and disaster management that could be adopted in school libraries. The application of ICTs in risk and disaster management and guidelines for preparing a DMP for school libraries were also discussed. The chapter equally achieved its primary objective of emphasizing on risk and disaster management in school libraries which can be further consolidated through the following recommendations:

- i. School management should make budgetary allocation for risks and disasters in order to take immediate intervention as they occur.
- ii. Quality equipment and tools for disaster management should be

provided and maintained for positive results.

- iii. All school librarians/teacher librarians should take a proactive step to prepare a comprehensive DMP and implement it as need arises.
- iv. School librarians/teacher librarians and other interested persons should be trained and retrained to acquire competence needed for risk and disaster management through regular sponsorship to workshops and other training opportunities.

### References

- Bansal, J. (2015). Disaster management in libraries: an overview. *Gyankosh* 6(1), 9-13.
- Biswas, B. C. & Choudhuri, S. K. (2014). Digital information resources for disaster management of libraries and information centres. *Bangladesh Journal of Library and Information Science*, 2(1), 12-21.
- Finley, M. (2001). Effective disaster plans: response, mitigation, and continuity. Accessed on April 15, 2020 at [www.fdlp.gov/home/repository/cat\\_view/177-outreach](http://www.fdlp.gov/home/repository/cat_view/177-outreach)
- Heginbotham, C. (2018). The difference between hazards and disasters. *Knowledge Nuts*. Accessed on April 14, 2020 at <https://knowledgenuts.com/differencehttps://www.loc.gov/insurancemain>
- Isife, C. T. & Ugwuanyi, R. O. (2012). Emergency management and disaster risk reduction as tools for sustainable development in Nigeria. *Journal of Environmental Management and Safety*, 3(4), 57-71.
- Jha, M. K. (2010). Natural and anthropogenic disasters: an overview. In: M. K. Jha (Ed.) *Natural and Anthropogenic Disasters*. Springer, Dordrecht. Accessed on April 12, 2020 at [http://doi.org/10.1007/978-90-481-2498-5\\_1](http://doi.org/10.1007/978-90-481-2498-5_1)
- Lakshmi, M. R. & Kumar, V. D. (2015). Anthropogenic hazard and disaster relief operations: a case study of GAIL pipeline blaze in East Godavari of A. P. *Procedia-Social and Behavioural Science*, 189, 198-207.



- Ottong, E. J. & Ottong, U. J. (2013). Disaster management of library materials in federal universities in Cross River State, Nigeria. *International Journal of Educational Research and Development*, 2(4), 98-104.
- Piney, C. (2014). 3 essential elements of risk. Health Jobs Nationwide. Accessed on April 10, 2020 at <https://exclusive.multibriefs.com/content/3-essential>
- Physiopedia (2020). Disaster management. Accessed on April 12, 2020 at <http://members.physio.com>
- Rehman, A. (2014). Importance and measures of disaster management in libraries. *European Scientific Journal*, Special Edition 1, 319-329.
- The Library of Congress (n.d.). Risk management. Accessed on April 14, 2020 at <https://www.loc.gov/insurancemain>
- The University of North Carolina (2019). Natural disasters: home. Accessed on April 12, 2020 at <https://uncg-libguides.com/c.php?g=943638>
- Velasquez, D., Evans, N. & Kaeding, J. (2016). Risk management and disaster recovery in public libraries in South Australia: A pilot study. Accessed on April 14, 2020 at <https://files.eric.ed.gov/fullt...>
- Westen, C. N. (2000). Remote sensing for natural disaster management. *International Archives of Photogrammetry and Remote Sensing*, 33 (Part B7), 1609-1617.
- Wilson, J., Wilson, F. & Wilson, J. (2018). The use of ICT in disaster risk management: A case study of Nema Borno State. *Journal of Remote Sensing GIS & Technology*, 5(1), 44-66.