A Study of Disaster Management Practices in Selected Libraries of Goa: An Evaluative Study

Dissertation submitted in partial

Fulfilment of the requirements of the

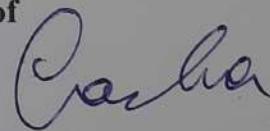Goa University for the degree of Master of Library

And Information Science

By

Miss Achala Shantaram Fal Dessai

Enrolment Number

22P034003

Under the supervision and guidance of

Mr. Rohan Parab

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<u>Certificate</u>

This is to certify that this dissertation entitled "A Study of Disaster Management Practices in Selected Libraries of Goa: An Evaluative Study" submitted by Miss Achala Fal Dessai in partial fulfilment of the requirement of the Degree of Master of Library and Information Science Programme of Goa University is her own work carried out under my Guidance and worthy of Examination.

Rohan Parab

Guide and Assistance Professor

Library and Information Science Programme

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Declaration

I declare that this dissertation entitled "A Study of Disaster Management Practices in Selected Libraries of Goa: An Evaluative study" submitted by Miss Achala Fal Dessai in partial fulfilment of the Degree of Master of Library and Information Science of Goa University, has been prepared by me and not previously formed the basis for the award of any degree or other similar titles.

Date: Achala Fal Dessai

Place: Library and Information Science Programme

                                                                                              Goa University

<u>Acknowledgement</u>

Chapter 1 Introduction

1.1 Introduction to Disaster Management

Disasters are unpredictable incidents which effects human life and property, with reference to libraries disaster can lead to a huge loss of academic, social, cultural knowledge along with the principal infrastructure of the library. Disaster mostly occurs in two forms natural and man-made. Natural disasters include floods, fires, earthquakes, storms etc., whereas man-made disasters include gas leak, fire through short circuits, electronic data crashing through malware, construction failure, wars, robbery etc. All these disasters disturb services provided by the library which affects users or visitors of library directly or indirectly. Therefore, a sound disaster management plan must cover all the areas of libraries or information centres including staff, readers, sources of information, equipment and infrastructure etc.

Disaster management is a process of effectively preparing for and responding to disasters. It involves strategically organizing resources to lessen the harm that disasters cause. It also involves a systematic approach to managing the responsibilities of disaster prevention, preparedness, response, and recovery. Disaster management involves examining and managing important factors and requires assessing the extent to which a community can withstand a disaster.

Disaster management also involves analysing exposure to loss. Disaster management is how we deal with the human, material, economic or environmental impacts of said disaster, it is the process of how we "prepare for, respond to and learn from the effects of major failures.

1.2 What is Disaster?

A disaster is defined as a disruption on a massive scale, either natural or man-made, occurring in short or long periods. Disasters can lead to human, material, economic or environmental hardships, which can be beyond the bearable capacity of the affected society. As per statistics, India is vulnerable to 30 different types of disasters that will affect the economic, social, and human development potential to such an extent that it will have long-term effects on productivity and macro- economic performance.

1.3 Definition

The World Health Organization (WHO) defines Disaster as "any occurrence that causes damage, ecological disruption, loss of human life, deterioration of health and health services, on a scale sufficient to warrant an extraordinary response from outside the affected community or area.

Paul Eden and Graham Matthews (1996) have defined disaster keeping the importance of library in society as, "any incident which threatens human safety and/or damages, or threatens to damage, a library's buildings, collections (or item(s) therein), equipment and systems".

1.4 Types of disasters

I) Natural disaster: Natural disasters occur as the result of action of the natural forces and tends to be accepted as unfortunate, and inevitable. Natural disasters which cause immediate impacts on human health, as well as secondary impacts causing further death and suffering from floods, landslides, forest fire, earthquake etc.

1. Floods: A flood is an overflow of water that submerges land, producing measurable property damage or forcing evacuation of people and vital resources. Floods are caused due to heavy rainfall and the inadequate capacity of rivers to carry the high flood discharge. Floods develop slowly as rivers swell during an extended period of rain. A flood occurs when water overflows over land that is normally dry. Mostly it happens when rivers or streams overflow their banks.

2. Landslides: Landslides occurs when masses of rock, earth or debris moves down a slope. Mudslides or Rockslides are common types of landslides in Goa. So, when libraries are established in sloppy areas, there should have adequate plans for any such disasters.

3. Forest fire: Forest fire is a type of disaster which is very difficult to control once it begins. This can take place in vegetated areas specially during summer or dry seasons, anywhere in the world. When libraries are set near a forested area they should have basic fire control plans.

4. Earthquake: Earthquakes are of short duration and usually affect a relatively small region

5. Droughts are slow to develop and fade away and often affect large regions.

6. Cyclones:

II) Man-Made Disasters: Man-made disaster occurs due to human negligence. Mostly caused by humans in or close to human settlements often caused as a result of environmental or technological emergencies.

1. Robbery – It is a crime and man-made disaster, something which is very such related libraries. It can be caused by users or staff. To avoid such kind of disasters CCTV surveillance is necessary and librarian should also work to avoid such kind of disaster.

2. Insects - Insects are known destroys the library resources such as books, newspapers, bound volumes etc. To avoid this regular clearing, and routine fumigation process should followed.

3. Electronic data crash - Destroys electronic data. This type of disasters can happen any time. To avoid this library should have sound backup plans.

4. Hacking- Hacking refers to any activities that seek to compromise and have unauthorized access to digital devices, such as computers, electronic devices and even network.

5. Human error – It refers to any accidental disaster. It can be caused due to human errors or negligence on the part of a person.

1.5 What is Disaster Management?

The disaster management Act of 2005 defines disaster management as an integrated process of planning, organizing, coordinating and implementing measures which are necessary for: Prevention of threats of any disaster, Reduction of risk of any disaster or its consequences, Readiness to deal with any disaster, Promptness in dealing with a disaster, Assessing the severity of effects of any disaster, Rescue and relief, Rehabilitation and Reconstruction, Agencies involved in disaster management etc.

Disaster management is mostly strategic planning and procedure that is administered and employed to protect critical infrastructure from severe damages when natural or human made calamities and catastrophic events occur. Disaster management is a process of effectively preparing for and responding to disasters. It involves strategically organizing resources to lessen the harm that disasters cause.

Some of agencies of disaster management are:

1. National Disaster Management Authority (NDMA): The National Disaster Management Authority, or the NDMA, is an apex body for disaster management, headed by the Prime Minister of India. It is responsible for the supervision, direction, and control of the National Disaster Response Force (NDRF).

2. National Executive Committee (NEC): The NEC is composed of high-profile ministerial members from the government of India that include the Union Home Secretary as Chairperson, and the Secretaries to the Government of India like Ministries/Departments of Agriculture, Atomic Energy, Defence, Drinking Water Supply, Environment and Forests, etc. The NEC prepares the National Plan for Disaster Management as per the National Policy on Disaster Management.

3. State Disaster Management Authority (SDMA): The Chief Minister of the respective state is the head of the SDMA. The State Government has a State Executive Committee (SEC) which assists the State Disaster Management Authority (SDMA) on Disaster Management.

1.6 Aspects of Disaster Management

1. Disaster Prevention - Disaster Prevention means a concept of engaging in activities which intend to prevent or avoid potential adverse impacts through action taken in advance, activities designed to provide protection from the occurrence of disasters.

2. Disaster Preparedness - Disaster Preparedness refers to measures taken to prepare for and reduce the effects of disasters, be natural or man-made. This is achieved through research and planning in order to try to predict areas or regions that may be at risk of disaster and where possible prevention of these from occurring and/or reduce the impact those disasters on the vulnerable populations that may be affected.

3. Disaster Response/Relief - The provision of emergency services and public assistance during or immediately after a disaster in order to save lives reduces severe health impacts, ensure public safety and meet the basic subsistence needs of the people affected. Rescue from immediate danger and stabilization of the physical and emotional condition of survivors is the primary aims of disaster response/relief, which go hand in hand with the recovery of the dead and the restoration of essential services such as water and power.

4. Disaster Recovery - Disaster Recovery refers to those entities which go beyond the provision of immediate relief to assist those who have suffered the full impact of a disaster and include the following activities such as Rebuilding infrastructure of library.

1.7 Components of Disaster Management

1. Planning —Plans to overcome accidental disaster should be considered in the development of emergency preparation plans.

2. Training - Training is important to help those responsible for executing the plan as that the personal become knowledgeable, confident, and prepared.

3. Mock Drills – Bring those plans to life with physical drills involving all service providers, security, engineering, fire wardens and tenant representatives. Your security team can help facilitate these drills.

4. Education – The integrators who install emergency systems need to actively participate in educating security and management on the accurate and efficient use of those systems.

5. Communication – Emergency plans should be communicated to anyone within your building as well as local authorities. Sharing plans will help ensure smooth execution in an emergency. This should include maps and signs pasted at different location of a building to ensure which direction to follow incase of any emergency situations.

1.8 Disaster Management of Libraries

Libraries should follow an effective disaster control plan. The plan should be periodically monitored and reviewed. Library buildings, equipment, collections, and computers should be completely secured. There should be good drainage so that water logging can be avoided incase of floods or excess rains. Library building should be built in such a way that it will be seismically safe. Regular checks of library building regarding water leakages should be carried out. Library building and resources should be properly maintained and regular inspections of buildings and equipment should be conducted. Fire-extinguishers should be checked and staff members should be trained in handling the equipment in case of emergency.

The lay-out of library building should be such that the ground floor does not have any valuable reading materials that could be lost in floods. Basement should be avoided in the library building. Electrical installations should be fitted in a safe mode and single switch control should be installed. Stacks should be properly shelved and cleaned. Termite treatment should be periodically done in the library.

Library building should be designed in such a way that when any disaster occurs, it may be any natural or manmade disaster minimizing losses to the maximum limit should be possible. Mock drills should be carried out periodically not only to check the equipment but also to give training to the library staff. The first priority in case of any disaster should be human safety. Disaster control plans should incorporate a list of all the members of the disaster team, clearly stating their responsibilities during all phases of a disaster.

Libraries are the centre of learning. They act as repositories of cultural heritage. Libraries collect, stock, process, organize, disseminate, distribute information/ knowledge recorded in documents. Libraries play a pivotal role in the educational process of formal and non-formal learning, in research and development, cultural activities, spiritual realms, recreation and entertainment. Libraries through their books, journals and other learning materials enable the readers to take an element of wisdom and knowledge accumulated, treasured, and enshrined in documents over the centuries.

Libraries act as the heart of an academic institution supporting, teaching, learning and research. They provide an environment in which creativity is facilitated and fostered. They help preserve the wealth of knowledge which symbolizes the onward march of mankind on the path of progress and enlightenment from the stage of primitivism to modernism.

1.9 Causes & Risks in Disaster Management

1. A poorly maintained system or other negligence can worsen the outcome of a disaster.

2. By addressing deferred infrastructure, maintenance and other causal factors, governments and organizations can often prevent, or at least reduce, the fallout of disasters.

3. Disaster management involves examining and managing causal factors. It requires assessing the extent to which a community can withstand a disaster. Some communities are more vulnerable than others.

4. Disaster management also involves analysing exposure to loss.

1.10 Scope of Disaster Management

1. Mitigation is the effort to reduce loss of life and property by lessening the impact of disasters

2. Preparedness: well-coordinated responses to disasters require prior planning. This helps ensure fast, effective response efforts and limits duplicated efforts. This involves planning for major emergencies, including training and practices. Preparedness is way of mitigating unwanted outcomes and it is one of the crucial actions in achieving safety and security in the event of calamities, disasters.

3. Response - During and immediately after an emergency, disaster management focuses on delivering help and interventions that can save lives, safeguard health, and protect buildings, animals, and community property. Following an initial response, efforts shift towards supporting communities as they rebuild emotionally, economically, and physically.

4. Recovery - Recovery is taken after a disaster to restore services and reconstruct loss. Recovery efforts are primarily concerned with actions that involve rebuilding destroyed property, re- employment, and the repair of other essential infrastructure.

5. Prevention- Prevention efforts aim to reduce the potential damage and suffering that disasters can cause. While disaster management cannot prevent disasters, it can prevent them from becoming compounded as a result of neglecting causal factors and manageable risks

1.11 Conclusion

Disaster management in libraries is a practice of control accidental disasters in libraries. It may be any disaster natural or manmade. Disaster can have a distressing impact on libraries and its services. Disaster management is a plan that outlines what hazards your library is facing, what you can do to avoid or manage them and how to get your library services back up and running should a disaster strike.

To control disaster necessary infrastructure for disaster management should be created and emergency response mechanism should be put in place and upgraded if required. Educating people and creating awareness among them regarding disaster management is crucial and has immense significance.

Libraries can share or pool their institutional resources in order to rescue from disasters. Library cooperation in disaster management can be ensued in different ways like joint training programmers, procuring and storage of emergency equipment, etc. The government bodies and professional associations should also guide the libraries and library professionals about disaster management through reading materials and training programmes etc.

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Chapter 2: Literature Review

1. (Morgan & Smith, 2014) Disaster Management in libraries: The role of a Disaster Plan. South African Journal of Libraries and Information Science. This article is based on research conducted by library science students in university of Cape Town, in partial fulfilment for the requirements of disaster management plans in Public, Academic and Research libraries in Metropolitan area. Disaster management is important aspects, but practical it has been found that it has neglected in the field of Librarianship, in South Africa.

Investigator in study suggests that all libraries should at list have formal disaster management plans as this would assist in preventing disasters. Management in libraries should recognize the under importance's of disaster management plans and should follow it. To make more aware about it special training, talks should be conducted.

2. (Barua, 2018) Disaster Management in College Libraries: a study in India .The article is about disaster management practices in college's libraries in Assam. Study has been undertaken to investigator the disaster preparedness in college libraries and institutions that provides information to users. Disaster affect library infrastructure, resources, but also human lives. It is vital for the management of a library to make sure that the buildings and library premises are safe for public to come, for staff to work and provide services to public. If libraries are prepared well in advances, it will help library to minimize the impact of a disaster and restore collections and resume service at the earliest. Majority of colleges libraries lacked disaster preparedness such as emergency exists, written disaster plans, fire alarms, emergency power supply, prohibition activities such as smoking, data backups and insurance etc.

3. (Echezona, Ugwu, & Ozioko, 2010) Disaster management in University Libraries: perception, problems and strategies. The study explores disaster management in terms of its perceptions, problems and strategies in University libraries in South Eastern Nigeria. Study revealed that some libraries are aware about disaster management, but have lack knowledge about sudden disaster in libraries. Disaster has been defined as an unexpected even that may drastically threatens the lives of human, destroy library building, infrastructure, information structure, disrupts and render documentary materials etc.

According to the study disaster cannot be prevented, but there is need to be prepared well in advance, so that their negative effects can be minimized. It is important that university libraries should take the issues of disaster preparedness and management very seriously, because university libraries carried huge amount of information resources, working staff, and students visiting libraries are more as compare to other libraries.so to avoid such kind of accident, disaster control measure should follow strictly.

4. (Stephen & Oghenekaro , 2020) Disaster Management in Libraries and Information Centres . The study aims to analyse and discuss some skills and principals of disaster management in libraries and information Centre as compared with the Biblical disaster management plan insights. It mostly looks at the applications of biblical disaster management plans and principals to contemporary disaster management in libraries. It's provides overview of disaster management in libraries and biblical insight. It focuses on disaster management plans which are essential for the library for the survival and even provides strategies for disaster recovery plan in place to return to normal after the disaster has struck, means disruption of all resources of particular institution, which may directly means revenue loss. Main purpose of this article is to saves all God resources as it is a biblical insight library, as god is a word to humanity on every situation of life.

5. (WAWERU, 2014) Assessment of Disaster Management Practices In School. University Of Nairobi, Research Archive. The study sought to carry out an assessment of disaster management practices in school libraries with Ago Khan Academy library used as the case study, where both quantitative and qualitative design was applied. It includes number of recommendations which includes institutions of a disaster management implementation. It consists of background information on disaster management information centres, especially school libraries and it was found that school libraries faced number of disaster problems, which need to be properly managed by putting in places the measures. Disaster problems faced by school libraries are fire, floods, wars, student's riots, negligence and poor maintained building etc. Disaster management plans should be practice in libraries, so that it's don't effect students and other members in school.

6. (Rattan, 2013) The study explores the possible roles the library professionals may assume in case of disaster in library, besides their regular or routine jobs. Disaster may be any natural and man-made. Libraries functioning 24 hours in todays technical world, so librarian or professionals have to safeguard and preserve their invaluable information sources and tools, it may be print or non-print form.

The main objective of study is to ascertain and suggest the roles a librarian and staff should follow or act during emergency, or study also aims to spread awareness among users and staff of libraries. Library and Information Science curriculum also needs to be modified keeping in view the importance of disaster management for library and information centres. Libraries nowadays act as service agencies and librarian as service information handing manager.

7. (Bansal, 2016)The paper highlights various disaster and natural calamities that can be fall upon libraries. Library poses threat to library equipment, building, collection and technical system. Library and information centres have to play a vital role in preserving their library collections and tools. It also focuses on how to plan, prepare, respond and recover from disaster.

Disaster causes a catastrophic loss to human life and property, which may be caused by natural or man-made disaster. Libraries acts as a cultural heritage. It collects stocks, process, organizes, disseminates and distributes information and knowledge among users. Libraries plays an private role in educational process it may be formal and informal learning, in research and development, cultural activities, spiritual realms, recreation and entertainment. Study has four stages prevention, preparedness, reaction and recovery. Different types of libraries should collaborate with each other's and national library should take a lead role in preparing a model for disaster planning.

8. (Iroeze, 2021)The study explores preparedness in disaster management among academic libraries in the South East geopolitical zone of Nigeria. It focuses on the current status of disaster preparedness in academic libraries of South Eastern Nigeria, as it identifies possible disaster threats in the libraries. Article is about a rules and regulation for preparedness by library staff in academic libraries in Nigeria. Disaster plans depend on three stages before, during and after disaster. All 3 States are important when planning disaster to minimize the impact and recovery out of potential emergency. Each disaster plan covers whole of the library and information sources, equipment, infrastructure etc. In conclusion, it proof that most of academic libraries in Nigeria do not have disaster management plans, preparedness among academic library staff is very less.

9. (Gohain, Tariang, & Saikia, 2021)The study has been undertaken to investigate the disaster preparedness among University libraries of Assam, it may be any disaster natural or man-made. It speaks about a contribution of libraries and library committee in planning of disaster management in libraries. What are preventive measures used in libraries and even to know the problems faced by libraries during the implementation of disaster management planning's.

In conclusion, it is said that disaster can cause major losses of library resources and disruption in library services. Since Assam is a prone area, libraries should prepare well in advance. Different preventive measures taken by libraries of Assam are CCTV cameras used for security purpose, emergency exists, fire alarm, emergency power supply, prohibiting activities such as smoking, data backup etc. It is however very needed to conduct further studies also that major factors for poor disaster management in the university libraries of Assam can bring into focus.

10. (Digital disaster management in libraries in India, 2015)The article is about a digital disaster management in libraries in India. It's mostly related to the growth in digital resources in libraries, it is necessary for libraries to understand and apply the ways of protecting digital data and the related equipment from disaster. The study highlights different digital disaster happening in libraries and everyone should be aware about it and strict measures should be taken to controls.

The study results also indicates that due to lack of knowledge about handling of digital data, and inadequate digital infrastructure setup in organization, the chance of loss of digital data are high in digital libraries. However to control it common measures like taking backup of data manually are mostly followed by all libraries in India. Librarian must be sensitized to the issue relating to data protection and to recovery from disaster. As librarian are not IT specialist, so training should be provided in digital data protection.

11. (Kostagiolas, Araka, Theodorou, & Bokos, 2011)The paper is about a disaster management approaches to academic libraries of Greece, as libraries in Greece are very limited. To preserve and conserve the resources for future use or for future generations it is needed to follow some disaster management preparedness.

Staff and committee of a academic library of Greece are trained as far as disaster management in concerned and the literature in Greek is very limited consisting of two rather absolute and out of print reference on preservation and conservation. The difficulty for a Greek librarian to get information on the subject is rather obvious. Overall disaster preparedness activities in Greek academic libraries are wrongly considered to be a luxury and the fact that disaster planning may actually save money in the long term, preventing major or minor destruction has not yet serving to the minds of those in charge.

12. (KUZUCUOĞL, 2014) Risk management in libraries, Archives and Museums building is a comprehensive study, where potential hazards that may turn into risks, if control measures are not taken on time. The risk may give damage to building, services, library resources, Archives and Museums material etc. strict measures should be taken in advance. The aim of this article is to increase awareness among libraries, archives and museums responsibilities and decision makers study results each risk should be defined not only for collection of library resources, archives museums for collection of library resources, archives, museums material, but also staff and users level. To have a successful risk management owes to teamwork among organization.

13. (Kolawole, Ogbuiyi, & Oriogu, 2015)Library and information Centre is a store house of culture. In past many libraries were attacked either by human or by natural disasters they were sometimes damaged or abolished. In recent times it is observed the library and information Centre are facing hazards either by nature or by human being. To improve and control it proper disaster management methods and techniques should be used. So it a high time for the library professionals to become aware about such matter and to make changes in disaster management in public libraries in south west Nigeria.

14. (L & Devi, 2017)The study is about a disaster management of flood affected public libraries of South Kerala in 2018-2019. Flood had affected 113 libraries in Pathanamthista, Alappuzha and Kottayam district, along with 95 libraries were selected for study. Samples were collected from 95 staff of libraries which were affected due to floods in Kerala. Study highlights how much 2018 floods had affected the public libraries of South Kerala and what were the measures the staff had followed to overcome such disaster. Most of libraries in Kerala were fully or partially destroyed. In conclusion, it is said that flood made a huge destruction in public libraries of South Kerala and almost 60 - 80% flood affected 85 % of the library.

15. (Kaur & Mahajan, 2021) this article is about a disaster control measures to save online information resources in libraries and Information Centres. As libraries and Information Centers is a collection, preservation, dissemination of Information and resources for future use. Libraries have always been and constantly under threat of destruction of their great treasure. Therefore the libraries take adequate measures to save their collection both in print and electronic format forms of disaster both in manmade and natural disasters. This paper therefore examine the depth pertaining to the types related concept, disaster management plans, the various database and Information system and mobile technologies for disaster management in libraries. An effective disaster management plan is essential for every library to protect its collection, infrastructure and service. The above mention database Information system websites and Indian resources for disaster management will basically help the library profession as an in formulating such plans for their libraries, apart from providing already reference tool in case of absence of a formalized plan.

16. (Grace, Panle, & Naomi, 2017) the study explores the level of staff preparedness towards fire disaster in university of Jos library. The data analysis results revealed that disaster management plan was developed some year ago in the library and the plan is still presently in use. It was therefore recommended among others that the library staff

should be informed by the library management of the availability of a disaster management plan in the library.

The present study was designed to examine the level of staff preparedness towards fire disaster management in university of Jos library. From the analysis of results obtained through the questionnaires it could be noted that staff was very aware of fire safety measures and the availability of fire fighting equipment in the library. However, they are not prepared towards using the fire fighting equipment. It could be also deduced that staff are not prepared towards salvaging partly damaged library resources in print and digital media. More so, there are constraints staff encounters in management disaster in the library.

17. (Onu, 2015)The paper is a theoretical discovers on the management of disaster in Nigeria Polyntechnic libraries of the 21 century. The paper tells panoramic view on disaster and disaster management and its historical overview. The paper also looks as disaster planning objectives and imperative of dm planning, prevention, preparedness and recovery in Polyntechnic libraries in Nigeria of the 21 century. The greatest disaster threats to the resources of Polyntechnic libraries are considered to be form fire and water. Physical damage is considered to be less likely. Therefore there is a demand that all stakeholders should be conscious and caution of them raises in the First place their ugly devastation heads to mankind. It is predicated on this overview that the under presented are enumerated as the way forward or recommendation for effective planning and management of disaster in polytechnic libraries of 21 century in Nigeria.

18. (Khalid, & Dol, 2015)Academic libraries in Malaysia are still not prepared for disaster even through several occasions have been reported the study sets out to assess the current status of preparedness in disaster management among Malaysian academic libraries in the state of Selangor and the federal territory of Kuala .

To obtain basic knowledge on disaster preparedness of current practices, a questionnaire was distributed to chief librarian or their assignees in charge of disaster or emergency preparedness at 40 academic libraries and 34 responses were received. The study revolved around the status of preparedness on various issues including existence of disaster preparedness plan among academic libraries in Malaysia, disaster experience by the academic libraries funding, risk assessment activities and involvement of library staff in disaster management. Some of academic libraries under study have experienced one form of disaster or the other. Most of the academic libraries do not have a written disaster preparedness plan.

19. (Kaur T., 2016) this study is about a disaster cause in university libraries of India and Pakistan. It's mostly highlights on economic loss a libraries suffer after disaster. Therefore disaster management in plan is very important in libraries to save the knowledge for future generations. In study it is found that disaster management concept was completely ignored concept in Pakistan libraries where as in India this was ignored but after tsunami, most of libraries started formal disaster management plans. Therefore

the similarities and gaps between the approaches to disaster management in university libraries of these two neighbouring countries has similar disaster management plans. Thus university libraries should formulate their disaster management programs to be prepared to face any emergency and save the knowledge for future generations.

20. (Wani & Hussain, 2017)The paper is about a damage suffered by the prominent libraries of Kashmir during 2014 floods. The work provides an insight about the response and recovery measures being taken during and after the floods respectively in 10 prominent libraries of Jammu and Kashmir. Study focuses on loss suffer by prominent libraries of Kashmir during 2014 floods, second to identify the steps taken during the floods to minimize the damage and third to evaluate the step taken after the floods to restore the library operation and services. To control libraries from disaster latest technology and planning should be implemented in libraries of Kashmir.

21. (Muir & Shenton, 2002) the article is about a disaster plans promoted in libraries and archives in UK. Sample of study was collected among 6 libraries and archives in UK about development and use of disaster plans. However disaster management plan is an important policy and training documents. Its required continued managerial commitment and should be supported by an management in libraries and archives, to have a safe services in their institutions.

The aim of this research was to evaluate the effectiveness of disaster plans for libraries and archives. The disaster management plan in libraries should be well in advance or beginning of the library established and plan should be well known by all library staff. Training should be provided to all staff on disaster management. Main reason for disaster plan is lack of staff awareness. It suggests that the disaster plan itself is more relevant as policy documents, which drives such issues as staff, awareness, ownership, training, and testing, rather than a manual for disaster response.

22. (Chakrabarti & Abhijit , 2017)This article explores to disaster management techniques and methods use in libraries and information centres to avoid different types of disasters. Libraries and information centres are store house for information resources it's may be print or digital resources. During hazards sometimes its damages some resources or abolishes completely. To control or avoid it, measures are needed. Article also say that most of accidents and hazards takes place outside India, reason is lack of disaster management plans.

Damage to library and information centre is damage to the country's information infrastructure and can stunt the growth and development of a country. Disasters in libraries destruct the valuable information which is too important for the development of future generation. It is an urgent need to ensure proper disaster management methods/ techniques. So it is the high time for the library profession to become aware of this matter.

23. (Dharmasiri, 2014)The article is about a disaster management planning for libraries in Sri Lanka, as there are lots of sudden natural or man-made disasters taking place is libraries. To avoid such kind of disasters, management planning is needed urgently. Aim of this paper is to identify some important aspects of preventing and minimizing disasters on libraries. A disaster is a sudden, calamitous event that seriously disrupts the functioning of a libraries and library materials. All types of disasters occurs in libraries, and there is hazard impacts on vulnerable people or vulnerable places where human activities happening.

Disaster management planning in library is a vital component to take measures to safe the human and physical assets of libraries. Even there are some natural disasters which cannot be control; to minimize the loss in advance planning is needed. 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.

24. (Rehman, 2014) the article explore to importance and measures that can be taken to avoid or minimize the man-made and natural disasters in libraries. Current article on disaster management will be received to determine the new trends in these fields. Disasters in libraries and other related information centres have become a common occurrence in the recent past in all parts of the world. These disasters are due to both man-made and natural causes. Disaster management is most important because of the value of the materials, services provided in the libraries and security measures which can be affected by them. Even library materials , physical facilities and human lives destroyed by the various disasters, in order to prevent great losses brought by disasters, it is necessary to take precautions well in advance.

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Chapter 3: Research Methodology

3.1 Research   Methodology

A questionnaire method was adopted for this study, but as it was noticed that responses were not being received google forms were used to collect data. Personal interview and telephonic conversations were also utilised for data collection from probable respondents. The number of questions in the questionnaire were 26. The questionnaire consisted of questions on various expects of disaster management in libraries.

Existing literature on topic was consulted to gain in depth information about the topic. Subsequently a questionnaire was prepared and distributed among the librarians of institutions under the study.

Data is analysed and interpreted according to the responses provided by the respondents by making use of data analysis tools like MS Excel. Suitable statistical techniques and tools are also used to draw charts, graphs, which will lead to clear understanding and conclusion.

3.2 Objectives

1. To ascertain the possibility different types of library disasters in libraries.

2. To determine physical facilities available and required at the library for disaster management.

3. To create awareness about best disaster management practises in libraries of Goa.

4. To identify ways and means through which libraries disasters can be avoided.

3.4 Hypothesis

 Most of time staff, students and faculty members are not aware about the different facilities provided by institutions related to disaster control.

Some libraries do not have any disaster management infrastructure in their libraries

Manmade disaster has more likely to happen than the natural disasters.

Electronic data not available is in some libraries.

3.5 Need of study

The study is to identify and highlight different disasters management control techniques adopted in selected libraries and to create awareness about the different disasters management techniques available for use to safeguard library resources and library management. It will also cover the viewpoints of library users, visitors, staff faculty member etc.

3.6 Limitation

In my study limitation was up to of 40 libraries, but only 36 libraries have responded to my questionnaire, which is sad sign.

List of libraries of Goa, who had helped me to carry out my study.

S. No	Name of Library	Name of Librarian	Location
1	Goa University	Dr.Sandesh Dessai	Taleigao
2	Government College of Arts and Commerce	Harsha Naik	Pernem
3	V.M.Salgaocar College of Law	Nalin Phal Dessai	Miramar Panaji
4	Narayan Zantye College of commerce	Bala Mandrekar	Bicholim
5	PESs Ravi Naik College of Arts,& Science	Milind Gauns	Ponda
6	Rosary College of Commerce &Arts	Pranay Sawant Desai	Navelim
7	Goa College of Home Science	Gopi Naik	Panaji
8	Parvatibai Chowgule College of Arts and Science	Poonam Joshi	Margao
9	DCTs SS Dempo College of Commerce and Economic	Anjali Bhide	Tiswadi
10	CES College of Arts and Commerce	Vishal Velip	Cuncolim

11	GVMs Dr. Dada Vaidya College of Education	Prayanghi Matonkar	Ponda
12	Dhyanprassarak Mandals College and Research Centre	Dr. Jayaprakash	Mapusa
13	Agnel institute of technology and Design	Atmaram Joshi	Assagao Mapusa
14	Ganpat Parsekar college of Education	Pramod Kerkar	Harmal Pedne
15	Goa State Central Library	Prashant Phadte	Panaji
16	Goa College of Agriculture	Miss. Sulochana Xete Dessai	Old Goa
17	S PES's Goa Multi-Faculty College,	Ajit Faras	Dharbandora
18	Vidya Prabodhini College	Nitesh Naik	Parvari
19	Government College of Commerce and Economics, Borda	Pravin V Kamat	Margao
20	GVM' s Dr. Dada Vaidya College Of Education	Sunil Madhukar Gauns	Ponda
21	Kala Academy Goa's College of Theatre Arts	Shushma Gaude	Panaji
22	Carmel College of Arts Science & Commerce for Women	Sr. Maria Samantha A.C.	Margao
23	Krishnadas Shama Goa State Library	Vijay L. Pawaskar	Panaji
24	Govt. College of Arts, Science & Commerce	Samir Fatte	Sanquelim
25	P. E. S's College of Education	Karishma K. Satarkar	Ponda
26	Goa college of hospitality and culinary education	Snehal Prabhu	Panaji
27	Fr. Agnel College of Arts & Commerce, Pilar - Goa	Janessa M. D'Mello	Pilar

28	VVM's Govind Ramnath Kare College of Law	Anand Salve	Margao
29	Vidya Prabodhini	Gauresh Bagli	Parvari
30	Government College of Arts, Science and Commerce	Akash A. Gaonkar	Quepem
31	Mandre college of commerce, economics and management	Jovita Lobo	Mandrem
32	Kala academy Goa's College of Theatre Arts	Prashila Gaude	Panaji
33	Padre Conceicao College of Engineering	Reshma Naik	Verna
34	MES College Of Arts And Commerce Zuarinagar	Sudhir B Halvegar	Vasco
35	Goa Institute of Management	Dr Takappa R	Parye
36	DPM's SHREE MALLIKARJUN & Shri Chetan Manju Desai College	Padmavati Tubachi	Canacona

3.7 Conclusion

Disaster Management practices is a necessary course of action that libraries must adopt in their institution. To conclude research methodology here an attempt is made to list out how the study was being conducted and the colleges which have been considered for this study.

4 Chapter Data Analysis and Interpretation

4.1. Qualifications of a librarian

A special skill or type of experience or knowledge that makes someone suitable to do a particular job or activity. In order to become a librarian, it important to have a qualification in library and information science.
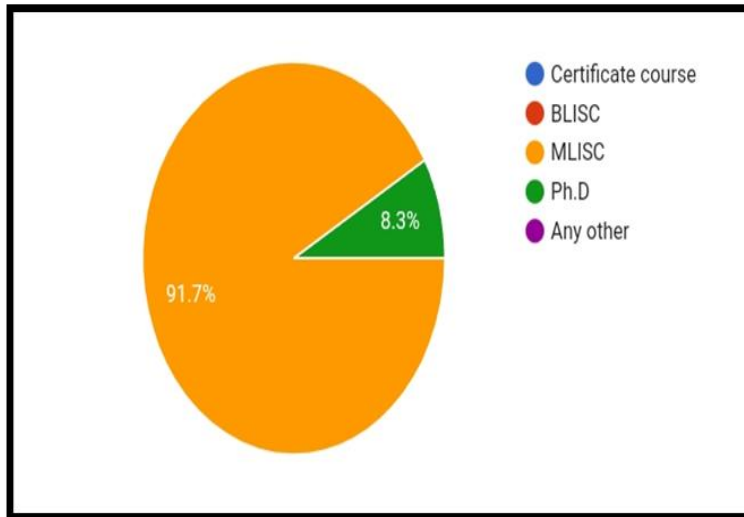

Fig 4.1: Qualifications of a librarian

Above figure speaks about the qualifications of librarians. The study is generally embedded to determine the educational levels of respondents. The data shows that 91.7% of the respondents are having a degree in masters in library and information science and just 8.3% of the respondents have completed PH. D in Library and information science. This shows that most of the respondents are qualified with master degree and only few are Ph. D holders.

4.2. Types of libraries

A library can be defined as a storehouse of information that is accessed with the intention of retrieving the knowledge present there at will and as required. Human knowledge can be recorded and preserved in different media.

Type of libraries	No of Libraries	Percentage
Academic library	31	84%
Public library	3	10%
Technical Library	2	6%
Special Library	0	0%
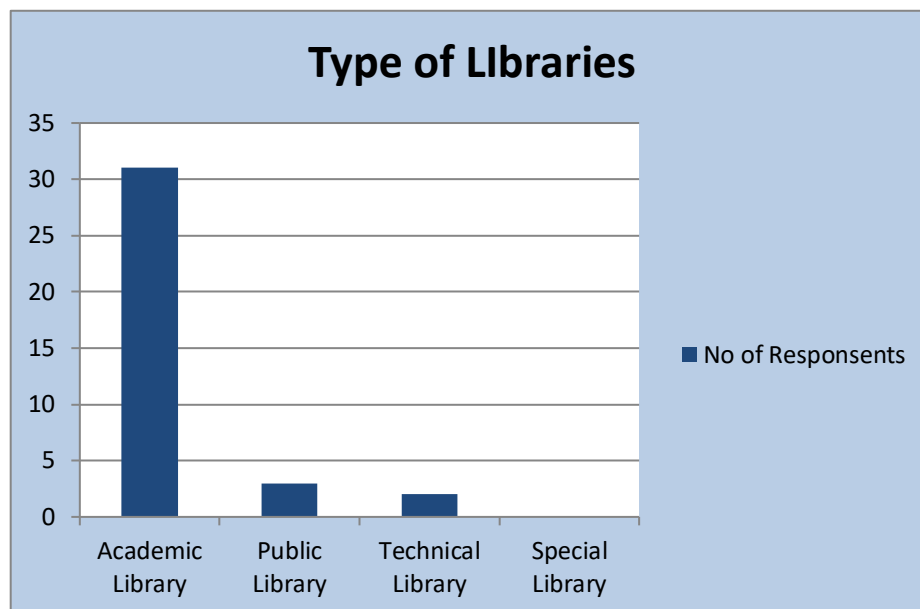
Fig 4.2: Physical location of library

The above figure shows percentage of respondents from different types of libraries under the study. As per the data collected 84% of the respondents are from academic libraries, 10% are from public libraries, 6% are from technical Libraries and nil from special libraries. The reason for 0% is questionnaire was sent to special libraries, but they din responded. After data analysis it clear that majority of the respondents are from academic libraries and nil from special libraries

4.3. Physical location of library

Physical location means a site or an area within a site where work library is located. To have the good disaster management plans, a library's physical location is important.
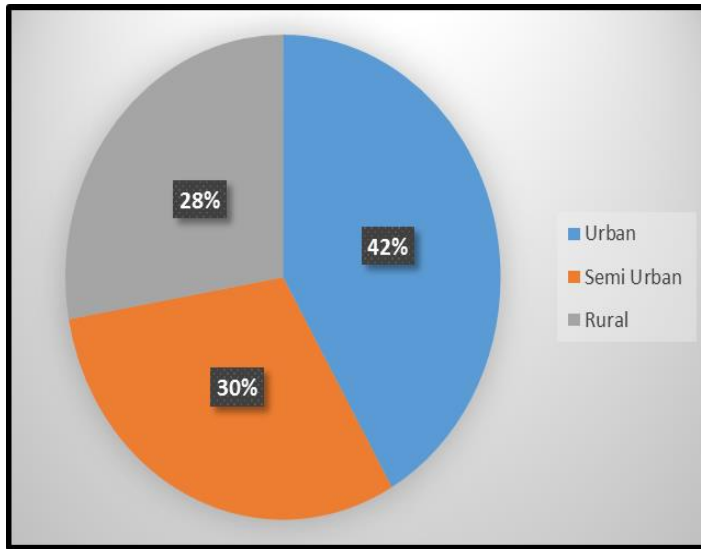
Fig 4.3: Physical location of library

Disasters can also occur due to physical location of library. So before going forward with establishment of library, disaster management plans should be followed to have good library services for long time. Above figure shows the different physical locations of libraries where library is been physically located. It is seen that 42% of the libraries are in urban areas; whereas 30% of libraries are located in semi urban areas and 28% libraries are located in rural areas.

4.4. Libraries having separate sections or areas for reading, administrative work or storage for new books.

Amongst the respondent libraries some of the libraries have separate sections or areas for reading, administrative work, or storage place for new books. So, a question was asked to the respondents to know whether their library has separate sections or area or not.
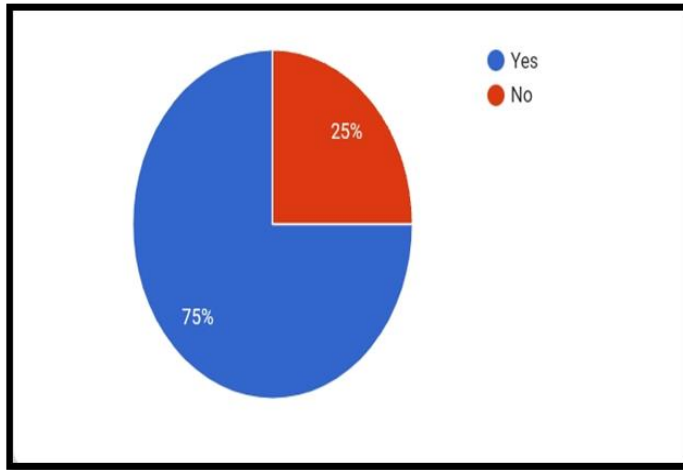

Fig 4.4: separate sections or areas for reading, administrative work, or storage for new books

The above figure speaks about libraries having separate areas or section allotted for reading, administration work and storage for new books. As per data collected from the librarians, we can see that 75% of the libraries have different areas and sections to carry out different library activities, where as a quarter of libraries don't have it. It may be because of small libraries buildings, lack of funds etc.

4.5. Total collection of books and other resources in library

Library collections and resources include books, pamphlets, journals, newspapers, maps, eBooks, eJournals, electronic databases, photocopies, electronic copies, photographs, manuscripts, sound, video and film recordings etc.

Total collection	Number of Respondents	Percentage
1000-10,000	13	36%
10,000-1,00,000	18	50%
1,00,000- More	5	14%

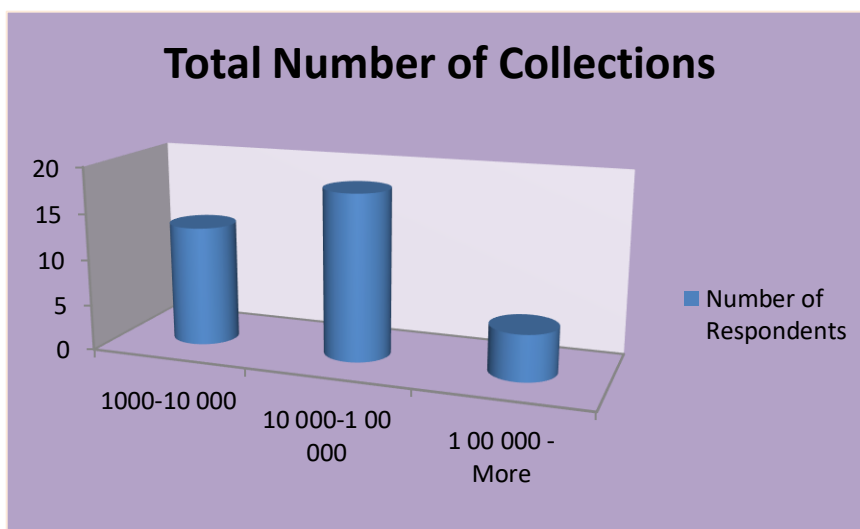Above table shows total library collection it holds, total number of respondents and its percentage.

Fig 4.5: Total collection of books and other resources in library

The above figure shows total collection each library has of printed books and other materials in libraries. Majority of the respondents were of the opinion that 50% of the libraries have collection 10000 to 100000. Whereas 36% of the libraries got collection between 1000 to 10000 and only 14% of the libraries have collection more than 100000.

4.6. Provisions for emergency exit in library building

An emergency exit is used to provide a safe passage for escape from a structure or area in the event of an emergency. The emergency exit must be easily accessible, unobstructed, and permanent location.
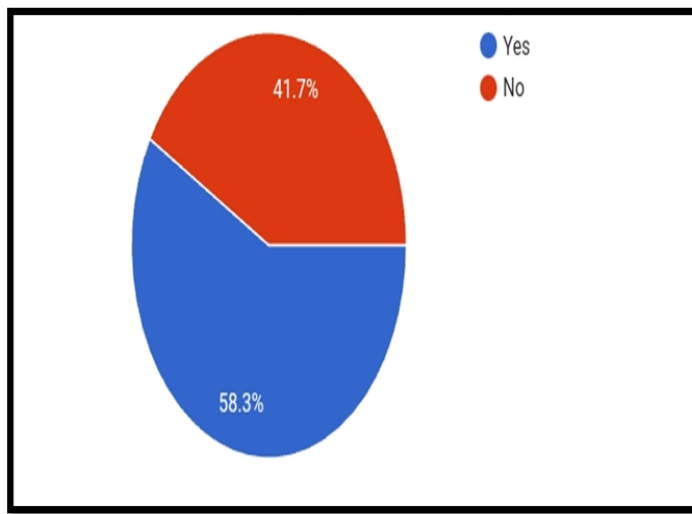

Fig 4.6: Provisions for emergency exit in library building

So the question was asked 'Does your library building have any provision in emergency exit or not, so out of the total responses 21 libraries have emergency exits, whereas 15 libraries don't have. The above figure shows that 58.3% of the libraries have emergency exits, which is very important and mandatory to control accidental disaster in libraries. Whereas 41.7% of the libraries don't have emergency exit facilities, which is very bad sign and even dangerous for library users, staff and even it can lead to loss for library resources and services too.

4.7. Automation status of the library

Automation status of library speaks about library automation. Automation plays a very important role in library, as it makes library resources and services available to users with the help of electronic mode. So out of the 36 respondents, 33 libraries are automated, whereas 3 libraries are not automated.
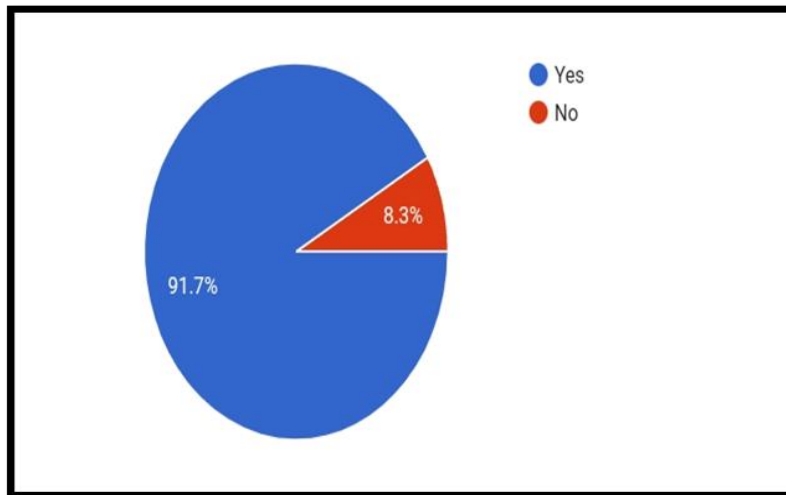

Fig4. 7: Automation status of the library

The about figure talks about the automation of libraries. The results of above data shows that 91.7% of the libraries are automated and remaining 8.3% of the libraries are yet to be automated.

4.8. Data backup plans in case of system failure

Data backup plans involve making copies of your data from primary sources and adding them to a secondary, location to protect against data loss. A data backup plan is essential for all libraries, as data is one of the most vital resources and assets for any organization. So, the question was asked to respondents what are the methods used for data backup in case of system failure. Responses were 36, and different methods used by libraries were server, cloud, DHE, other devices, Auto backup, and some libraries don't have backup plans which are very bad sign.

Backup Plans	Frequency	Percentage

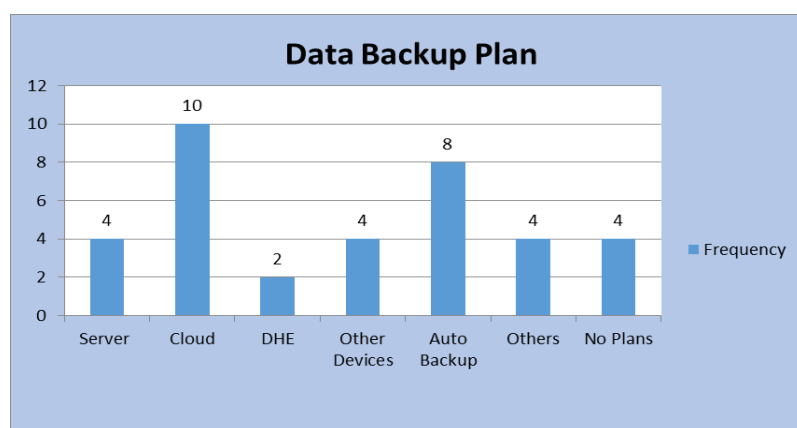| Server	4	11%
Cloud	10	28%
DHE	2	6%
Hardware Devices	4	11%
Auto Backup	8	22%
Others Plans	4	11%
No Plans	4	11%

Fig4.8: Data backup plans in case of system failure

The about figure depicts the different data backup plans libraries makes use to protection incase of system failure. 28% of libraries uses cloud-based systems for their backup, while 22% of libraries have their auto backup plans to protect their data. 33% of libraries makes use of physical servers, to protect their data and 6% of libraries use DHE and 11% of the libraries have no backup plans which is disadvantage for library.

What is this DHE

4.9. Orientation program for newly joined library users

Orientation programs means creating awareness among students students, users, staffs, about different library services, resources, activities and facilities which library has. Especially it is conducted for 30-60 minutes. Aim of library orientation programme is to educate the users on how to use libraries-their sources and services.

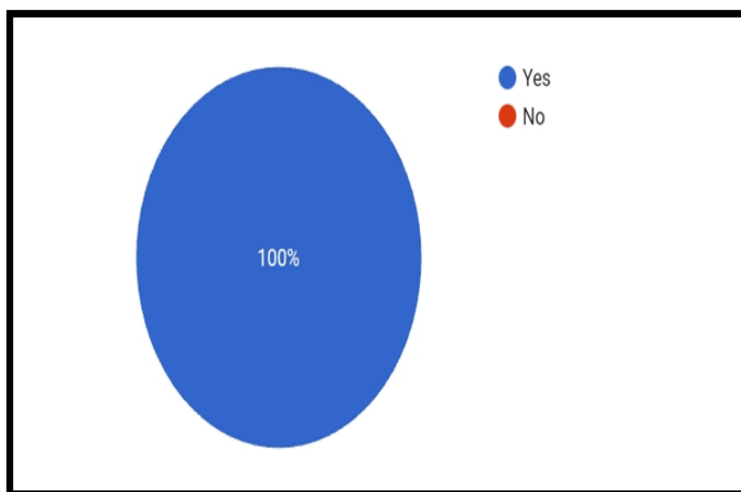| Orientation Programs	Frequency	Percentage
Yes	36	100%

No	0	0%

Fig 4.9: Orientation program for newly joined library users

As we can see from above figure that 100% of the libraries conduct orientation programmes for newly joined library users, which is very good sign and can act as a tool for Library to control accidental disasters and educate the users on how to utilise libraries-resources and services.

4.10. Water Seepage in library during monsoon

Water seepage means leaking of water from tiny holes. Water seepage in library during monsoon is dangerous as can destroy library resources. So, a question was asked as 'during monsoon season does your library suffer from water leakage or not. So out of 36 responses, 31 libraries do not suffer from above problem, whereas 5 libraries suffer water leakage during monsoon.
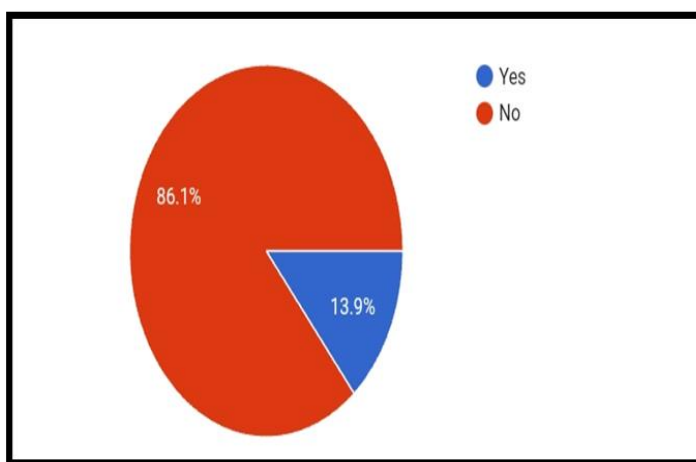
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Fig4.10: Water Seepage in library during monsoon

The above figure shows that 86% of the libraries do not face the problem of water leakage during monsoon, where as 13.9% of libraries have water leakage, that means library infrastructure is under bad condition. If this problem is not solved as fast as possible than, there will be loss in library resources in future it may even damage books and other library materials too.

4.11. Types of library material comprises

Library makes use of different materials to build library infrastructure. These materials are essential for library infrastructure. So, the question was asked to librarians what material their library infrastructure is made up.

Types of library material	No of Respondents	Percentage

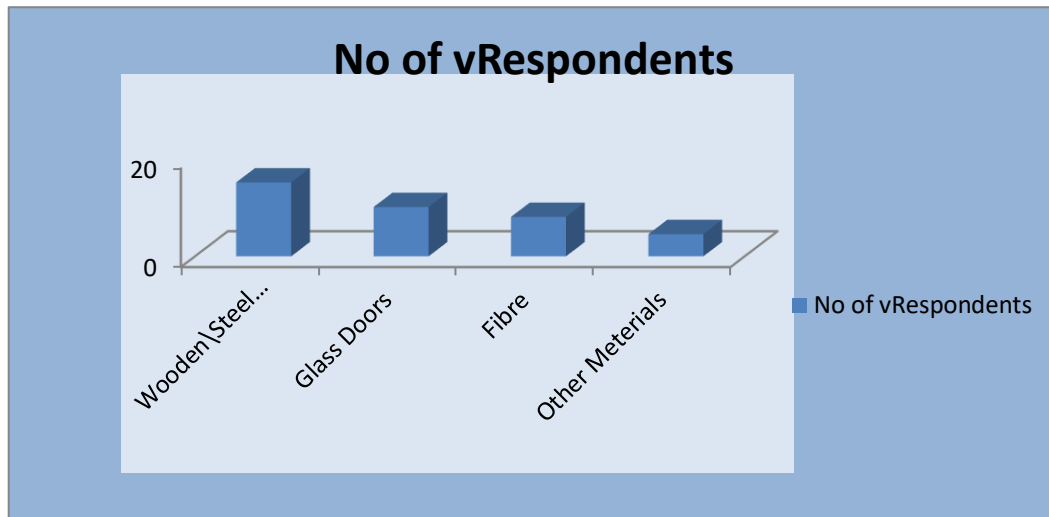|		
Wooden/Steel fixtures and fittings	15	38.%
Glass doors	10	26%
Fiber	8	21%
Other	6	15%

Fig 4. 11: Type of material library comprises

The above figure speaks about different types of materials used in a library. Out of the total responses 38 % of the libraries makes use of wooden/steel fixtures and fittings, were as 26 % of libraries makes use of glass material, while 21% of libraries fiber and 15% of libraries makes use of many types of material that is plastic, wood, glass etc.

4.12. Electricity wiring Structure

Electrical wiring is an electrical installation of cabling and associated devices such as switches, distribution boards, sockets, and light fittings in a structure. There are two types of wiring structure concealed and non-concealed. So the question asked to librarians were, what kind of wiring structure their library follow
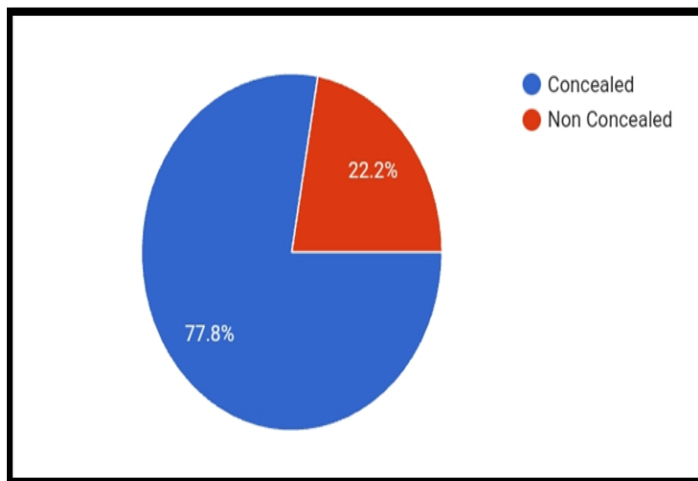
Fig 4.12: Electricity wiring Structure

The above figure indicates the electricity wiring structure a library uses. There are two types of wiring structures, Concealed and Non-concealed. It is shown in above chart that 77.8% of libraries have concealed electricity wiring structure, whereas 22.2% libraries follow old structure that is non-Concealed wiring structure. So, it is better to use concealed wiring structure, which is safe as compare to other wiring structure.

4.13. CCTV Surveillance in library

CCTV surveillance in library used to monitor and record evidence on clientele and employee misconduct. Closed Circuit Television (CCTV) is a system in which the circuit is closed and all the elements are directly connected.
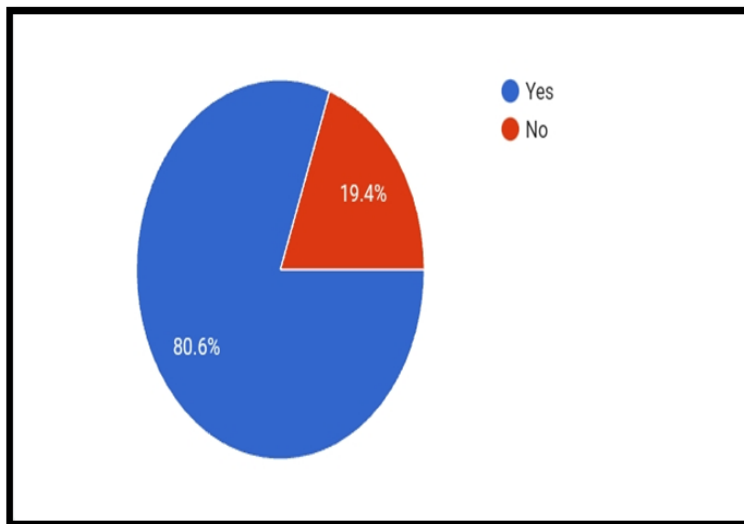
Fig4.13: CCTV Surveillance in library

The above figure talks about CCTV surveillance in the libraries. From the data collected it is seen that 80.6% of the libraries are under CCTV surveillance, which is good sign as everything is under observation and it checks any misconduct and misusing of library resources can be control etc. While remaining 14.4% of the libraries are without CCTV surveillance which is very sign and unsafe.

14 Safety Equipment available in library

Safety equipment is the protection used by libraries to avoid injuries, casualties, life threatening situations etc. Types of safety equipment are used depending upon the nature of risk involved in the library it is mostly use to avoid the accidental disaster. Types of equipment's available in library are fire extinguisher, safety alarm, emergency exit, etc.

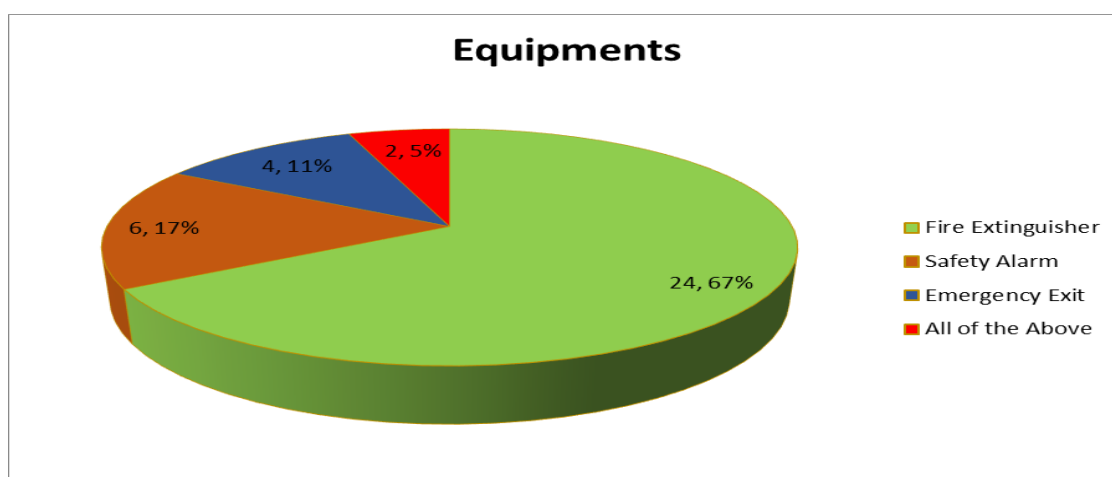| Safety Equipment's	No of Respondents	Percentage
Fire Extinguisher	24	67%
Safety Alarm	6	17%
Emergency Exit	4	11%
All of the above	2	5%
Total	36	**100%**

Fig 14: Aiding facilitates

As we can see in above figure the question was asked to librarians about different safety equipment's libraries have. 67% that is Majority of the libraries have fire extinguisher, where as 17% libraries have safety alarms, while 11% libraries have emergency exits, and only 5% libraries have all the above safety equipment's. It is important to have safety equipment's in library as it helps to protect library resources.

15. Aiding facilitates

Aiding facilities means different recovery tools libraries makes use to control disaster. Common aiding facilities are fire extinguisher, safety Alarm, emergency exit etc. Even some libraries have all Aiding facilities.

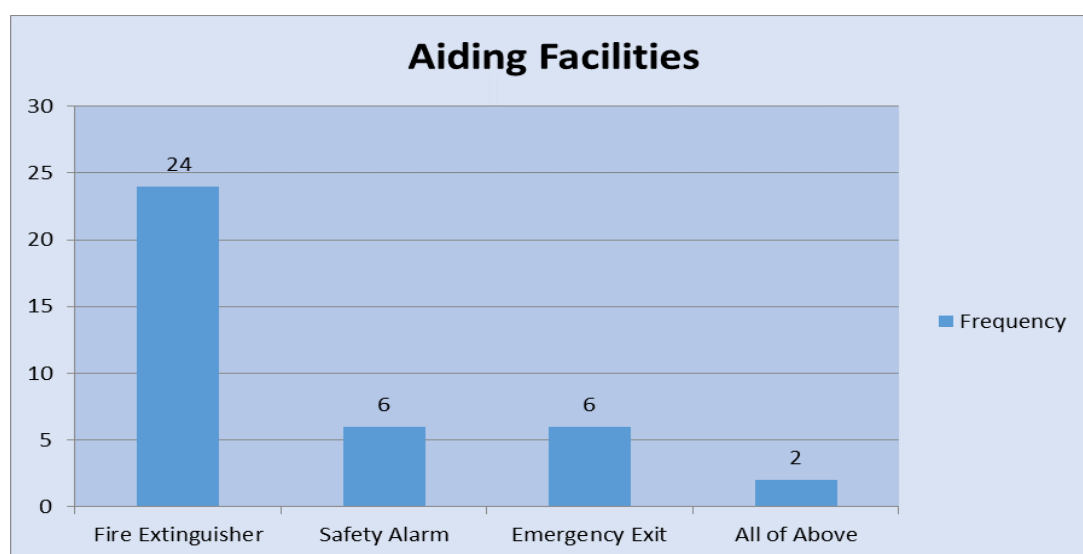| Aiding facilitates	Frequency	Percentage
Fire Extinguisher	24	63%
Safety Alarm	6	16%
Emergency Exit	4	16%
All the above	2	5%

Fig15: Aiding facilitates

A question was asked whether your library has different aiding facilities in case of any disaster. As per the respondents 63% of the libraries have fire extinguisher as aiding facility, 32% of libraries have safety Alarm and emergency exit as a aiding facilities, and 5% of the libraries have all above mentioned facilities.

16. Potential Disaster in library

A disaster is a serious problem which may occur over short or long period of time. It can be natural, man-made or technological hazard. Some common types of disasters that can potentially occur in libraries are fire, building or ceiling collapse, floods this are natural disasters, short Circuit, human error, electronic Data crash, hacking, insects etc. are human disasters.

Potential Disaster in library	No of Respondents	Percentage

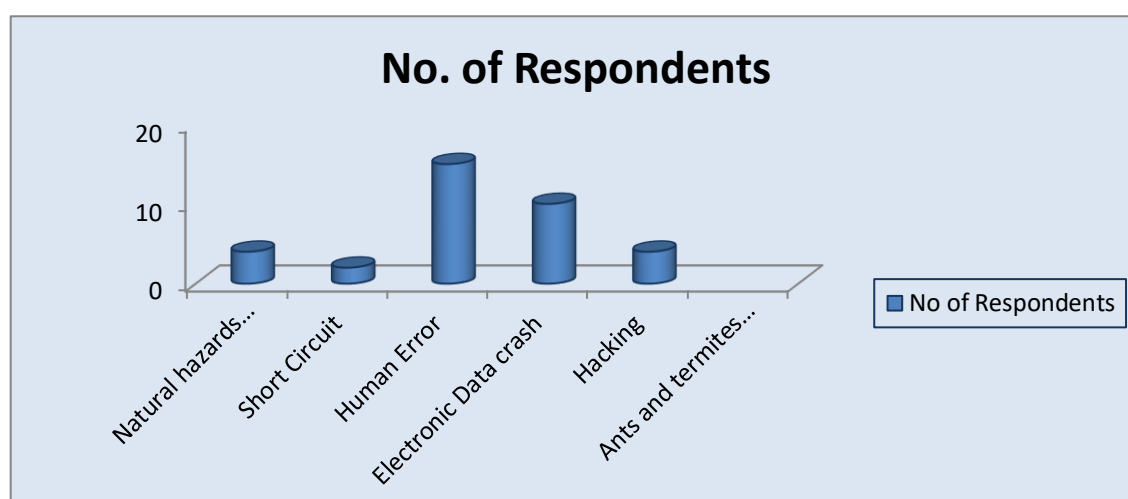|		
Natural hazards (Fire, storms, Floods	4	11%
Short Circuit	2	5%
Human Error	15	42%
Electronic Data crash	10	28%
Hacking	4	11%
Ants and termites damaged books once	1	3%
Total	36	100%

Fig16: Potential Disaster in library

The above figure speaks about types of disaster which can potentially occur in their libraries. In the above figure it is clear that 42% of libraries suffer from human errors, while 28 % of libraries suffer from electronic Data crash, about 11% of the libraries face problems of natural hazards like fire, storms floods etc and hacking. and 5% of the libraries goes through shout circuit problems and remaining 3% of libraries faces problems due to ants, termites, insects etc.

17. Unusable books found in library in a year

Unusable books are books which are not useable. The reason for being unusable may be because of mutilation, torn, damaged, and eaten by insects etc. so the question asked for librarian was 'On an average, how many books are found to be unusable in a year.

Frequency	Mutilated Torn	Damaged	Eaten by Insects

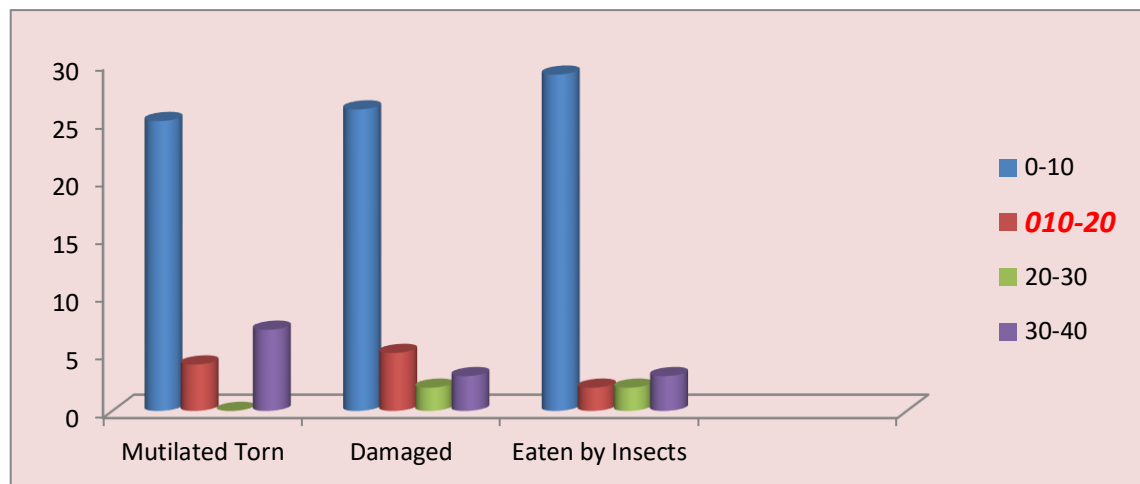|			
0-10	25	26	29
10-20	4	5	2
20-30	0	2	2
30-More	7	3	3

Fig 17: Unusable books found in library in a year

The above figure speaks about unusable books found in a year. The books are found unusable because they are found be mutilated torn, damaged, and eaten by insects. On an average around 10 books are found to be unusable due to these reasons.

18. Different Means employed for protecting library documents from termites, ant, pest, silver fish and other such insects

The different means library employs for protecting library documents from termites, ants, pest, silver fish and other such insects. Because due to above insects, Library faces a huge loss, and make library documents unusable. Some libraries implment preservation methods such as, fumigation, even regular cleaning; safety measures are followed, to protect documents.

Protecting Means	No of Respondents	Percentage
Preservation process	3	9%
Fumigation	19	58%
Cleaning	10	30%
Safety Measures	1	3%

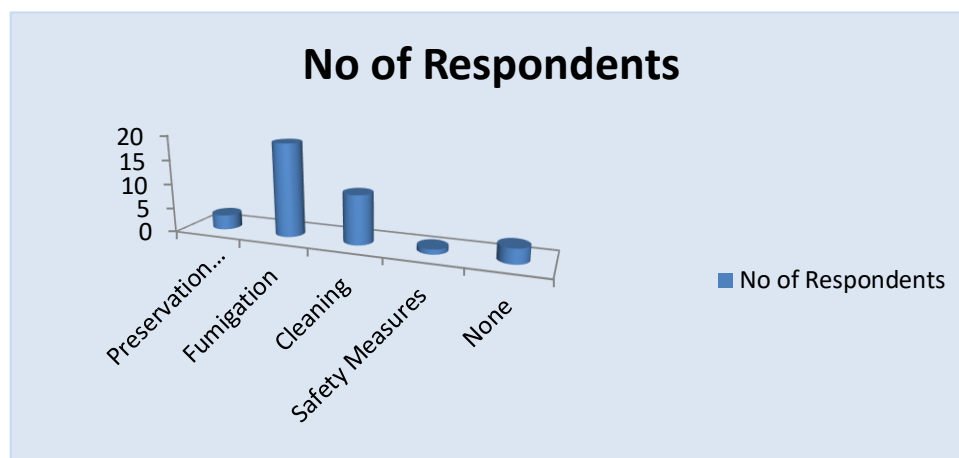| None	3	0%
Total	36	100%

No of Respondents

Fig 18: Means employed for protecting library documents

The above figure speaks about different methods libraries employ for protecting library documents from termites, ant pest, silver fish and other insects. From the results of survey, it can be seen that majority of the libraries (58%) use fumigation process for protecting documents, whereas 30% of librarians said that they do regular cleaning of documents, while 9% of libraries use preservation processes, and remaining 3% libraries take safety measures to protect their library documents.

19. Disaster management plans of libraries

Disaster Management plans are the set of actions and recommendations for controlling disasters risk reduction and for effective control .

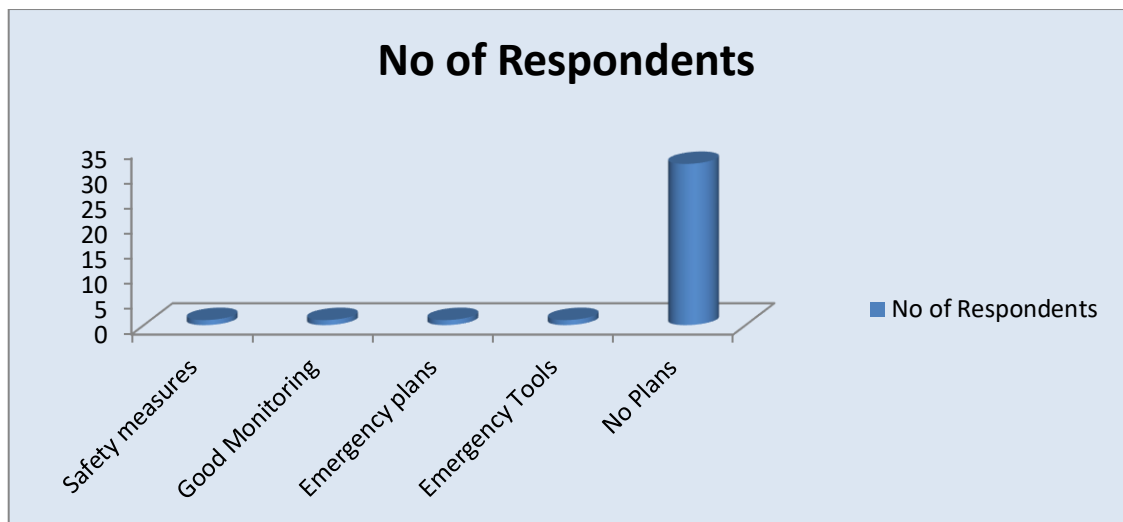| Disaster Management plans	No of Respondents	Percentage
Safety measures	1	2%
Good Monitoring	1	3%
Emergency plans	1	3%
Emergency Tools	1	3%
No Plans	32	89%
Total	36	100%

Fig 19: Disaster management plans of libraries

Above figure clearly defines that large majority of respondent libraries have no disaster management plans for their libraries. Only 4 libraries have individual tools to combat any disasters.

Chapter 5: Findings, Recommendation, conclusion

Findings

This study is based on 'Disaster Management Practices in selective libraries in Goa: An Evaluative study. Selective libraries included academic Library, public library, technical library, and special library. A questionnaire was prepared, keeping in mind the overall objectives of the study and circulated to 40 librarians from libraries in Goa,out of which s 36 librarians responded to the questionnaire and the study concludes on the basis of these 36 respondent libraries.

Some of findings are listed below:

1. As we know that there are two types of disasters, natural and man-made. After analyzing the results, it can be concluded that man-made disaster is more likely to occur than natural disaster. The most possible man-made disasters would be stealing of books, torn/damaged books, electronic data crash, etc. and among natural disasters it is insect attacks.

2. Most of libraries in Goa are located in urban area, as compare to Semi Urban and rural area. It may be due to population density, lack of good facilities, etc.

3. Most of libraries have separate sections or areas for reading, for administrative work, and even to store new books and other resources too.

4. Emergency exit is available in more than half of the respondent libraries which is a good advantage, if there is any problem user or staff can use this emergency exit.

5. All the libraries in this study are conducting orientation programmes.

6. Some libraries even suffer from water seepage during monsoon, which is a negative point which would lead to loss of library resources.

7. Library resources comprise of different materials such as Wood\Steel fixtures and fitting, glass doors, fiber etc.

8. Libraries were found to make concealed and non-concealed electricity wiring.

9. Fire extinguisher, safety alarm, emergency exit are the safety entities available in libraries

10. Libraries provides aiding facilities such first aid box, safety rooms, insurances facilities.

11. Human error and electronic data crash are the most common disaster occurring in libraries as compare to other disaster such as natural hazards [fire, storms, floods], short circuit, hacking etc.

12. In a year at list 10 to 15 books are found to be unusable, because they are torn, damaged, and eaten by insects.

13. The different means employed for protecting library documents from termites, ants, pest, silver fish, are preservation process, fumigation tools, regular cleaning, safety measures etc. only few libraries follow above mentioned techniques.

14 Unfortunately only 4 libraries from 36 libraries have disaster management plans.

Recommendations

1. All libraries should compulsorily have safety equipment's such as fire extinguisher, CCTV surveillance, safety Alarm, emergency exit door, security guard for 24 hrs.

2. Awareness programmes, training, orientation programmes should be conducted for library staff, users, student's etc.

3. Libraries should have good building plans.

4. The library should also have regularly clearing, dusting of library materials.

5. Fumigation process should be done at least once in a year, to control pests and insects.

6. Librarian should take strict action on stealing of books, overwriting on books, tearing pages, as it is human disaster.

7. Libraries should also recommend separate budget from higher authority, for disaster management and overall maintenance of library building.

8. To preserve and save electronic data, regular software update and backup must be done.

9. Where there are less aiding facilities, as there should be more aiding facilities.

10. Libraries should be set in such places, where there are fewer chances of natural disasters.

11. Educating people and generating awareness among them regarding disaster management is important task of a librarian and even library staff.

12. Government bodies and library professional association should train library professionals about disaster management through reading materials and training programs.

Conclusion

Disaster Management is an essential and important concept which everyone should follow and never neglect it. From the study it is clear that selective libraries in Goa are not prepared or aware about different kinds of disaster that can occur in library. Most of the libraries are physically located in urban areas. Some libraries have separate area or section for reading, administrative work, and storage place for new books and resources. Few libraries have emergency exits. All libraries are not automated and only few which are automated have different backup plans in case of system failure.

One of the positive finding of this study is that all the libraries provide orientation programs for its students. Some libraries suffer from water seepage during monsoon, which is also revealed due to this study and can lead great loss of library resources, as library resources comprises of wooden\steel fixtures and fitting, glass doors, fiber etc. this can add as fuel in case of short circuits/fire. Only few libraries provide safety equipment's such as fire extinguisher, safety alarm, emergency exit doors and aiding facilities like first aid box, safety room, during emergencies.

The possibility of library disasters such as short circuits, human error, torn books, mutilated books, damaged books, eaten by insects etc. is more as compared to other possibilities. At the end as it is said prevention is better than treatment, I would only recommend that libraries should have good disaster management plans and these plans should be made compulsory in all libraries as disaster is accidental incident which can occur anytime, anywhere without intimation.

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<u>A study of Disaster Management Practices in Selected Libraries of Goa: An Evaluative Study</u>

1. Name of Librarian

_____

2. Name of Institution

_____

3. Year of Establishment

_____

4. Qualification

Certificate Course

BLISC

MLISC

Ph.D

5. What is your experience in the Library Field?

_____

6. Number of staff in library?

_____

7. What is the timing of library?

_____

8. Under which of the following categories does your library

Academic Library

Technical Library

Special Library

Public library

9. Physical location of library?

Urban

Semi Urban

Rural

10. How much area does your library cover?

_____

11. Does your library have separate section or area for reading, administrative work or storage for new books?

Yes

No

12. Total collection of printed books and other materials in library?

_____

13. Does your library building have any provision for emergency exit?

Yes

No

14. Is your library Automated?

Yes

No

15. What is the method for data backup incase of system failure?

_____

16. Do you conduct any orientation program for the newly joined library users?

Yes

No

17. During monsoon season does your library suffer from water leakages?

Yes

No

18. Your library resources comprises of which type of materials?

Wooden /Steel fixtures and fittings

Glass doors

Fiber

Any other

19. What kind of electricity wiring structure does your library have?

Concealed

Non Concealed

20. Is your library covered under CCTV surveillance?

Yes

No

21. What kind of safety equipment's does your library have?

Fire Extinguisher

Safety Alarm

Emergency Exit

22. Incase of disaster does your library provide or have any other aiding facilities?

First Aid Box

Safety Room

Insurance Facility

23. What type of disasters you think can potentially occur in your Library?

Natural hazards (Fire, storms, Floods)

Short Circuit

Human Error

Electronic Data crash

Hacking

24. On an average, how many books are found to be usable in a year?

Mutilated Torn

Damaged

Eaten by Insects

25. What are the means you have employed for protecting library documents from termites, ant, pest, silver fish and other such insects?

_____

26. Does your, library have any disaster management plans. If yes, then what are the plans?

_____