

**DISASTER MANAGEMENT STRATEGIES OF CENTRAL  
UNIVERSITY LIBRARIES IN INDIA: A STUDY**

**Abstract**

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# ABSTRACT

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## **Background of the Study**

The academic library is a hub of information storage and information dissemination as well as a key element of social development. No society in the world escape from the library and its services, whether ancient society or modern society accepted the relevance of academic libraries. The library is a part of the education systems over the world. The education system cannot escape from it and a disaster is an uncertain event or threat that might be harmful to the library staff, users, and resources. In another word, it can be said that is an unscheduled event that usually occurs in libraries. Disaster management practices in libraries are a key element of academic libraries. It promotes the minimum harm to the libraries, material, users, library staff as well as library building. Due to emerging new technologies and changing climate, weather, and earth structure and increases the risk over the world it is necessary for libraries to develop strategic planning to save the library material-print and electronics, library users as well as library staff during an emergency situation. In the past couple of years, a number of natural disasters have happened in India such as earthquakes, tsunamis, volcanic eruptions, landslides, floods, tropical storms, drought, and other natural calamities. These disasters have also inflicted the library building and other infrastructure of the library. A disaster management plan is more important for academic libraries because it can instruct the library personnel on what to do in an emergency situation. and also help reduce disaster risk in libraries. Disaster management is one of the significant roles played in libraries and information centres. A disaster is an uncertain event of occurrence it may be an occurrence in a limited geographical area or a large geographical and its impact depends on the nature of the disaster. Disasters are serious disruptions to the operations of a society that exceed its ability to cope using its own resources.

Disasters may be occurrence by Man-made, Natural, or technological hazards, as well as several factors that emphasize the revelation and vulnerability of society. Mathews & Eden (1996) States about library and information services are defined as any unexpected event which is related to human security or damage or harm to library infrastructure, collections, contents, facilities as well as services. No university or library cannot escape from disaster. Disaster strategies are basic issues to the security of library staff, users, and collections of libraries. It is considering important elements of academic libraries to

make the disaster strategies so that to reduce unexpected events, to provide security for staff users and library resources. A formal written plan and strategies are to provide security for libraries during an emergency situation to minimize the damage to the library materials, contents, users as well as staff.

A natural disaster cannot possible to totally prevent in the library due to pre-planning, implementation of national disaster policy, and following other standard to reduce possible hazards or trouble. Regardless of the various kinds of disasters is occur in the libraries, it may be possible to take the losses of library resources generally caused by fire, and flood even when these are not primary factors fire, flood, short circuits etc. is almost invariable occurrences as considers a secondary reason of library disaster.

**The Dictionary for Library and Information Services defines** “ a disaster plan as a set of written procedures prepared by the library staff in advance to deal with an unexpected occurrence that has the potential to cause injury to personnel or damage to equipment or to collections and/ or to facilities sufficient to warrant temporary suspension of services”. Disaster management is a branch of management in which study how to protect lives and property during the natural disaster, manmade disaster as well as technical disaster. Disaster management strategic are multi faceted layered and its aimed to trace the issues such as floods, hurricanes, fire, earthquake and even mass failure of utilities are rapidly spread of diseases.

### **Statement of the Problem**

The problem of the present study entitled “**Disaster Management Strategies of Central University Libraries in India: A Study**”. The problems deals the disaster management strategies, plan, preparedness and recovering process, when occurring the any types of disasters in the libraries

### **Objectives of the Study**

The main focused of this study is assessment of disaster management strategies has adopted in the central University libraries in India. The present study is based on the following objectives.

1. To find out disaster management strategies followed by the Central University Libraries in India.
2. To find out the planning and programs applied by the libraries to prevent emergency situation.

3. To identify the measures for the security of the users, staff and library collection in Central University libraries.
4. To find out the major problems in applying the disaster management strategies in the Central University libraries.
5. To investigate the disaster management practice approaches are usage by central university libraries in India.

### **Hypotheses of the Study**

Hypothesis is other important part of research study. It is an assumption of the research problem under investigates. The formulation of hypothesis is one of most important steps to start the any kinds of research .The hypothesis is give the researcher a guideline to collect the pinpoint data and also help the predicting the output of the study.

#### **The following hypotheses have been formulated for the study**

- H<sub>1</sub>: The central university libraries are aware about disaster management strategies.
- H<sub>2</sub>: Most of the central university libraries have good plan and program to prevent the emergency situation.
- H<sub>3</sub>: Most of the central university libraries are using manual security system for protection of users, staff and collection.
- H<sub>4</sub>: The central university libraries are facing problems to applied disaster management strategies.
- H<sub>5</sub>: Most of the central university libraries are usages various disaster management practice approaches.

### **Scope and Limitation**

All central Universities of India are situated in large geographical areas as well as widely scattered in almost every state of India. Therefore it was not possible to cover all the central University libraries for this study. So for this study, it was decided with the consent of the supervisor and departmental research committee, it was decided for the present study was confined to all Central University libraries established up to 2007 in India. The central universities in this study are taken by the website of UGC. The selection of the scope of this study is on the basis of established years of universities up to 2007 central universities of India which has well-maintained library infrastructure, therefore it is tried to concise scope of the study. The study is limited to central university librarians. These are as follows:

<b>S. No.</b>	<b>Name of the university</b>	<b>Place</b>	<b>Websites</b>
1	Aligarh Muslim University	Aligarh, Uttar Pradesh	<a href="https://www.amu.ac.in/">https://www.amu.ac.in/</a>
2	Assam University	Silchar, Assam	<a href="http://www.aus.ac.in/">http://www.aus.ac.in/</a>
3	Babasaheb Bhimrao Ambedkar University	Lucknow, Uttar Pradesh	<a href="https://www.bbau.ac.in/">https://www.bbau.ac.in/</a>
4	Banaras Hindu University	Varanasi, Uttar Pradesh	<a href="https://www.bhu.ac.in/">https://www.bhu.ac.in/</a>
5	Central Agricultural University	Imphal, Manipur	<a href="https://cau.ac.in/">https://cau.ac.in/</a>
6	English and Foreign Languages University	Hyderabad, Telangana	<a href="https://www.efluniversity.ac.in/">https://www.efluniversity.ac.in/</a>
7	Indira Gandhi National Open University	Maidan Garhi, New Delhi	<a href="http://www.ignou.ac.in/">http://www.ignou.ac.in/</a>
8	Jamia Millia Islamia	New Delh	<a href="https://www.jmi.ac.in/">https://www.jmi.ac.in/</a>
9	Jawaharlal Nehru University	New Delhi	<a href="https://www.jnu.ac.in/main/">https://www.jnu.ac.in/main/</a>
10	Maulana Azad National Urdu University	Hyderabad, Telangana	<a href="https://manuu.edu.in/">https://manuu.edu.in/</a>
11	Mahatma Gandhi Antarrashtriya Hindi Vishwavidyalaya	Wardha, Maharashtra	<a href="https://hindivishwa.org/">https://hindivishwa.org/</a>
12	Manipur University	Manipur	<a href="https://www.manipuruniv.ac.in/">https://www.manipuruniv.ac.in/</a>
13	Mizoram University	Mizoram	<a href="https://mzu.edu.in/">https://mzu.edu.in/</a>
14	Nagaland University	Nagaland	<a href="https://nagalanduniversity.ac.in/">https://nagalanduniversity.ac.in/</a>
15	North Eastern Hill University	Shillong, Meghalaya	<a href="https://www.nehu.ac.in/">https://www.nehu.ac.in/</a>
16	Pondicherry University	Pondicherry	<a href="https://www.pondiuni.edu.in/">https://www.pondiuni.edu.in/</a>
17	Rajiv Gandhi University	Itanagar, Arunachal Pradesh	<a href="https://rgu.ac.in/">https://rgu.ac.in/</a>
18	Sikkim University	Gangtok, Sikkim	<a href="https://cus.ac.in/index.php/en/">https://cus.ac.in/index.php/en/</a>
19	Indira Gandhi National Tribal University	Amarkantak, Madhya Pradesh	<a href="https://www.igntu.ac.in/">https://www.igntu.ac.in/</a>
20	Tripura University	Agartala, Tripura	<a href="https://tripurauniv.ac.in/">https://tripurauniv.ac.in/</a>
21	Tezpur University	Tezpur, Assam	<a href="http://www.tezu.ernet.in/">http://www.tezu.ernet.in/</a>
22	University of Allahabad	Allahabad, Uttar Pradesh	<a href="https://www.allduniv.ac.in/">https://www.allduniv.ac.in/</a>
23	University of Delhi	Delhi	<a href="http://www.du.ac.in/">http://www.du.ac.in/</a>
24	University of Hyderabad	Hyderabad, Telangana	<a href="https://uohyd.ac.in/">https://uohyd.ac.in/</a>
25	Visva Bharati University	Shantiniketan, West Bengal .	<a href="https://www.visvabharati.ac.in/">https://www.visvabharati.ac.in/</a>

## **Research Methodology**

For conducting proper research, the methodology is a core component that provides a guideline for researchers on how to conduct systematic research on specific problems or phenomena. Research methodology is a logical technique of studying to be included various tools and techniques to be followed by the researcher for collecting data as well as information for the solution of the problem which is identified for investigation. It is a very important plan to conduct a study and know the core method and techniques. Such a plan of action is a set of guidelines for analyzing a problem. The present study is focused on and attempts to know and investigate the disaster management strategies of central university libraries in India: a study, to associate its problems and issues, are identified study. A well-structured closed and open questionnaire was constructed for this study and distributed among librarians in the central universities in India. To understand the various issues of disaster management strategies, Five point Likert scale has been used in this study.

## **Tools Used for Data Collection**

The choice of data collection tools and techniques depends upon the research problems. The research problems of the present study are Disaster Management Strategies of the Central University Libraries in India: A Study, has been taken For this study, the survey approach has been taken for gathering the data. During the research process the survey approach, which is the most popular tool is adopted for collecting the data through using the questionnaire method along with the Interview method and observation method, to collect different types of data from universities librarian.

## **Questionnaire Method**

A questionnaire is an important tool that is basically used in the survey approach to collecting the various types of data, which is required for this study. A questionnaire is a series of question which is filled out by respondents. The questionnaire is a data collection device that elicits from respondents the replies or answers or reactions to printed (pre-arranged) questions presented in an s specific order ( Schvaneveltd, 1985). A questionnaire has been known as the most popular and the best tool to collect data with accuracy and reliable information from the so vast scattered population. It is a cost-effective data collection approach that is widely used by researchers, private, and public organizations. The merits of using this method are as follows:-

1. The cost of the survey method is low compared to other methods of data collection when the populations are widely scattered.
2. It is freely biased because the questionnaire is filled by the respondents themselves.
3. It helps the saving of time of researchers because the researcher may send the questionnaire to the respondent or personally contact them.
4. Respondents have adequate time to fill out the questionnaire
5. In this method data and information received from respondents are more reliable and accurate.

### **Framing of the Questionnaire**

Framing a standard questionnaire is depending on the researcher's skills, and knowledge and also a professional's responsibility or not. Before designing a good questionnaire researchers should keep the following point in mind-

1. To analyze every aspect of the research problems.
2. To understand every aspect of research problems.
3. To state the question simply and clearly
4. To request only the data which is easily provided by respondents

All the above points, a researcher should be kept in mind while framing the questionnaire for any survey-based research. For the study, there was various literature analyzed to frame the questionnaire so that getting the relevant information. In this study there was no adopted readymade instrument, therefore only one questionnaire was framed for university librarians. Since the area of study was disaster management strategies in libraries while framing the questionnaire included all the aspects of the disaster which is threatening or damaging the libraries and also keeping the view of language, objectives, hypotheses, and scope of the study more relevant aspects were covered for getting responses.

### **Contents of the Questionnaire**

The content of the questionnaire is an important part of the questionnaire without relevant questions is not possible to design a standard questionnaire and also not fulfills the aim and objectives of the study. A questionnaire was used to collect data on disaster management strategies of the central university libraries in India. For the study, the questionnaire was basically divided into two parts. Part A contained the questions pertaining to general information about the librarian and parts B , C , and D comprised

questions on all aspects of the disaster management strategies of university libraries. For the study the questionnaire contained various types of questions, number of the questions were based on the Likert ( Five points) scale, and some of the questions were based on 3 point scale. All the questions of this questionnaire were such types of designing so that the respondent of this study is able to understand in very less time and fill in the necessary information.

### **Interview Method**

The interview method is another important tool for data collection from respondents. The interview is the process of interaction between the researcher and respondents; respondents may be one person or a group of persons. In this process, the interviewer is a vital role play to getting information from respondents. An interview contains an interviewer asking questions to respondents and recording their answers (Monette et al. 1986). Burns (1997). An interview is a verbal interchange of information, it may be face-to-face using through telephone and in this process, an interviewer always tries to get relevant information, in belief or opinion from another person, Any person-to-person interaction, it may be face-to-face or otherwise between two or more persons with a specific aim in mind is called an interview in this study which data are not received through the questionnaire the researcher tries to getting information through interview method. A number of relevant pieces of information were received from librarians using this method for the study.

### **Sample Size**

The present study has been conducted on disaster management strategies in central university libraries in India. The total sample included in the study has 22 central university libraries out of 25 university libraries, using questionnaires as tools for data collection. In this study, three central university libraries i.e. Central Agricultural University, Manipur, Mahatma Gandhi Antarrashtriya Hindi Vishwavidyalaya, Maharashtra, North Eastern Hill University, Meghalaya under the scope of the study have been excluded due to not providing the primary data.

### **Data Collection Procedure**

The questionnaire was distributed to the librarians by personal meeting, some of the questionnaires were sent to the librarian through the speed post, and some of the questionnaires send the email in Google form.

### **Distribution of the Questionnaire and Response Rate**

In the study, a total of 25 questionnaires were distributed among librarians of all central universities. Out of total 25 distributed questionnaires, 22 questionnaires were received by librarians. The distribution of the questionnaire was started in July 2019 and filled of the questionnaire was received in September 2022. Distribution of the questionnaire was a difficult task which was faced by the researcher and gathering the filled questionnaires required many times to visit. Most of the time follow-ups were made to get maximum responses from respondents. Although the questionnaire was the main tool for getting data wherever seems to need a gap in information on where to fill the data through interviews.

### **Measuring Technique Used**

Measuring technique is a vital role play the getting the actual result of the research study. The study included numbers of the pre-assigned symbols and numbers which are based on certain specified rules. For this features such as the probability of disasters in the library, checking the status of disaster instruments, and other relevant items were measured. In this study which was numbers assigned to get the actual value of the disasters were permitted for statistical analysis.

### **Analysis and Interpretation of Data**

Data analysis is a part of the research methodology. It helps the researcher to carry out the actual finding. In the present study, the researcher collected data through the questionnaire method and then data was organized and tabulated. MS. Excel has been used as a statistical tool for data analysis.

### **Style of Bibliographic References**

All the references are presented according to the American Psychological Association (APA) 7th Edition 2019. In this study, all the references and bibliographical details are presented descending order of the year wise.

### **Ethical Considerations**

In this study, the librarian of the central universities which were covered in the scope and limitations was the only respondent for this study and it tried to address certain ethical issues of the respondents for the study. The considerations of ethical issues were most important to fulfill the aims and objectives of the study and also try the ensuring the privacy of the respondents of this study. In this study, most of the significant ethical's issues considered in the initial stage of the research process include consent and confidentiality. In order to secure the consent of central university librarians, the

researcher has taken all the relevant information for the study according to its aim and purpose. In this study, there were no types of forced librarians (respondents) to give suggestions or opinions to fill out the questionnaire research. The confidentiality of the respondents which were participated in the research was also ensured that were not disclosing any types of information like names, or personal information in the research, only relevant information which was helping fulfill the aim and objectives are included in the research.

### **Need of the Study**

The present study has been undertaken here as an attempt to critically assesses the disaster management strategies, planning, and practices pre, during, and post-unexpected emergency situation in academic libraries. The study has been conducted with the hope that will be useful in various ways-

1. This study will be useful to know the unexpected events which are threats or damage to any kind of libraries in India as well as the world.
2. It may be helpful to librarians to make the disaster plans, strategies, and practice approaches implementation in the library as soon as possible.
3. It will be useful for librarians to make a policy for the conservation and preservation of resources in the library.
4. To implement of disaster management policy in the library, the librarian may be prevented and recover from disasters.
5. This study may be useful for other institutions, archiving centers, and historical societies to help the implantation of disaster management strategies and recovery from disasters and also help the design of the disaster and recovery model.
6. The study may be helpful for designing the curriculum development of library & information science in India.
7. This study may help the university librarian and other higher authorities of the institution to design a good plan to reduce the disaster.
8. The study may be helpful for identifying potential disasters in libraries.
9. The study may be helpful for conducting the disaster training program among library staff at every level in the library so that the library staff is able the reduces the threat or damage when occurrence any type of disaster in the library.
10. Present study may help in identifying the resources and infrastructure for disaster management planning, process, and implementation in libraries at all levels.

11. Conducting awareness programs and training on disaster risk management among librarians may help to reduce the disaster in library.

## **Profile of University Libraries: An Overview**

This chapter covers the background of central university libraries in India under the scope of the study. The chapter deals with historical background, about the library, collections and services. Total 25 central university libraries profile has been given in this chapter.

## **Data Analysis and interpretation**

This chapter presents the data analysis and interpretation of disaster management strategies of central university libraries in India which are related the scope of the study. The questionnaires was framed from March 2019 to June 2019 during this period four months were spent for designing the questions that concerned to the objectives and hypothesis of the study with consistent output achieved . In this chapter 27 questions consisting sub-questions has been taken for data analysis and interpretation, and this chapter has been divided into three section - Disaster management plan and strategies, Prevention Measures for users, Staff and Collection and Adoption of disaster management practical approaches in library.

## **Findings, Suggestions and Conclusion**

This chapter covers significant findings of the central university libraries which are related the research problems, questions arises, objectives and hypothesis of the study. The conclusion is given on basis of the results of investigation. However, suggestions are mentions in this chapter on the basis of found problems of the libraries under the scope of the study and incorporate disaster management strategies, plan, preparedness, disaster management practical approach, disaster management tools, disaster occurrences, several challenges of disaster prevention, and possible potential for further research has mentioned in this chapter

### **Section –A General Information**

#### **Table no. 5.1.4.1.1 Response rate of university libraries**

The result reveals that 22 university libraries are given responses out of 25 central university libraries.

#### **Table no.5.1.4.1.2 Gender-wise respondents**

The results reveals that majority of the male librarians are hold the librarian position of the central university libraries rather than female librarians.

#### **Section- B Disaster management plan and strategies**

#### **Table no. 5.1.4.1. 3 Awareness about to disaster management plan and strategies in libraries.**

The result reveals that majority of the libraries are aware about to disaster management plan and strategies, fewer librarians are not aware about to its.

#### **Table no. 5.1.4.1.4 Employed of disaster management strategies in non- formal way in libraries.**

The result reveals that majority of the librarians are employed disaster management strategies in non- formal way in libraries.

#### **Table no. 5.1.4.1.4.1 Reasons of not implementation of the disaster management strategies in libraries.**

The result reveals that 22.73% librarians are not adopted disaster management strategies due to absence of plan and strategies. 13.64% librarians are not employed it's because of have untrained staff; 4.55% librarians are not adopted due to its no relevant for libraries; 9.09% librarians are not adopted due to insufficient availability of staff in libraries.

#### **Table no.5.1.4.1.5 Implementation of the National Disaster Management Policy in Libraries.**

The study found that 41% librarians are implementation of national disaster management policy in libraries.

#### **Table no.5.1.4.1.5.1 Reasons of not implementation the National Disaster Management Policy in libraries.**

The results reveals that 40. 91% librarians are not implementation national disaster management policy because of lack of awareness about to this policy. 27.27% librarians are not implementation due to lack of disaster management tool in libraries; 31.82% librarians are not implementation because of inadequate fund in libraries.

#### **Table no.5.1.4.1.6 Availability of disaster management strategies in written form in libraries.**

The study reveals that fewer university libraries are have disaster management strategies in written form i.e. 14%.

#### **Table no.5.1.4.1.7 Adopted of policy for safety of the library collection during emergency in libraries.**

The result reveals that 73% librarians are adopted of policy for safety of collections during emergency in libraries.

**Table no.5.1.4.1.7.1 Adopted of policy for types of collection in libraries.**

The result reveals that majority of the librarians are adopted policy for both print and electronic collection i.e. 93.75%

**Table no.5.1. 4.1.8 Perception towards well preparedness against disaster in libraries.**

The study reveals that 64% university librarians are given their perception towards libraries are well preparedness against disasters.

**Table no. 5.1. 4.1.8.1 Perception towards well preparedness against types of disasters in libraries.**

It was found that 85.71% respondents are given their perception about to preparedness against natural disaster. 28.57% respondents are given their perception about to libraries are prepared man- made disaster and similarly 28.57% respondents are given their perception about to libraries are prepared against technical disaster.

**Table no. 5.1.4.1.9 Applied of disaster management plan and program during occurrences of emergency in libraries.**

The study reveals that 36% libraries are employed of disaster management plan and program during occurrences of emergency.

**Table no. 5.1. 4.1.9.1 Reasons of non- existence of disaster plan and program in libraries.**

The result reveals that 21.43% librarians are not adopted because of lack of cooperation among library advisory committee. 28.57% librarians are not employed due to no need of disaster management plan and program.7.14% librarians are not adopted its because of have no significant holdings of rare books/ Materials/ Manuscripts. 43.75% librarians are not employed because of have inadequate human resources.7.14% librarians are not adopted due to no perceived risk of disaster.

**Table no .5.1. .4.1.10 Availability of disaster management equipment in libraries.**

The study reveals that 86% libraries were have disaster management equipment in libraries.

**Table no. 5.1. .4.1. 11 Committee set up for disaster control in libraries**

The study reveals that fewer libraries were set up a committee for disaster management i.e. 18 %

**Table no. 5.1. 4.1.12 Adoption of disaster recovery procedure in libraries.**

The study found that 22.73% university libraries were kept reading material in digital form for recovery from disaster. 100% university libraries were usage of standard Almirah for recovery in case of occurrence disasters and 20(90.91%) libraries were kept of reading materials in well maintain building.

**Table no. 5.1.4.1.13 Measure to control disaster outbreak in libraries**

The result reveals that 31.82% university libraries were measuring daily and similarly 31.82% never measuring for control disaster.

**Table no. 5.1. 4.1.13.1 Security checks at the exit gate in libraries.**

Majority of the libraries were security checked daily at the exit gate.

**Table no.4.1.13.2 Ensuring well drainage facilities and good plumbing work in libraries**

The study reveals that 50% libraries were checked daily for ensuring well drainage facilities and good plumbing work.

**Table no.4.1.13.3 Ensuring standard electric work in libraries.**

The highest 59.09% libraries were checked monthly for ensuring standard electric work.

**Table no. 5.1.4.1.13.4 Conducting regular survey in and outside the building for identify defects in libraries.**

The highest 31.82% libraries were conducted survey weekly in and outside the building for identify defects.

**Table no. 5.1.4.1.13.5 Microfilming of reading materials in libraries.**

The majority of the libraries were never doing micro filming of materials i.e. 54.55% libraries.

## **Section – C Prevention Measures for Users, Staff and Collection**

**Table no. 5.1. 4.1.14 To backup of data and information resources in libraries.**

The most of the libraries were taken daily backup of data and information resources i.e. 81.82% libraries.

**Table no. 5.1.4.1.14.1 To check security in all sections of libraries.**

The majority of the libraries were checked daily security in all sections of the library i.e. 90.91%.

**Table no. 5.1. 4.1.14.2 To identify the fault like wiring, leakage water pipes in libraries.**

The result reveals that 54.55% libraries were examined daily the fault like wiring, leakage water pipes.

**Table no. 5.1. 4.1.14.3 To check building inspections in libraries.**

The highest 31.82% libraries were checked monthly to the check building inspections.

**Table no. 5.1.4.1.15 Preparedness measures for users, staff and collection in libraries.**

The result reveals that 54.55% libraries were preparedness have trained staff for first aid handling in case of occurrences disasters. 9.09% libraries were have appropriate insurance provisions for the safety of users, staff, and collection. 77.27% libraries were established coordination with local police when needed the control the disaster. 81.82% libraries were established coordination with fire fighting stations for the safety of users, staff, and collection. 36.36% libraries were given structure training program for staff in disaster management.

**Table no. 5.1.4.1.15 .1 Emergency gate open only working hour in libraries.**

The majority of libraries were opened daily emergency gate only working hour i.e. 40.91% libraries.

**Table no. 5.1.4.1.15.2 To display emergency instructions in libraries.**

Majority of the libraries never displayed emergency instructions for safety users, staff in case of occurrences disaster. i.e. 36.36% libraries .

**Table no. 5.1.4.1.15 .3 Users training program for emergency situation in libraries.**

The result reveals that 54.55% libraries were never conducted users training program for emergency situation.

**Table no.5.1. 4.1.16 Types of disaster experience faced by librarian in libraries.**

The result reveals that 54.55% librarians are have experienced of Fire disaster occurrence during routine work in the libraries. Fewer librarians are have experienced Flood disaster i.e. 4.55%. 18.18% librarians are have experienced to the landslide disaster. 72.27% librarians are have experienced to the water leakage, strikes and Earthquake disasters and fewer librarians are have experienced to the Vandalism disaster i.e. 40.91% . 100% librarians of the central universities are not have experienced to the terrorist attack disaster during routine work.

**Table no. 5.1. 4.1.17 Problem faces by librarian while adoption of disaster management strategies in libraries.**

The study found that 68.18% librarians are not adopted disaster management strategies in libraries due to faces problem of lack of fund , and 77.27 % librarians are faced problems of inadequate trained staff in disaster management, Similarly 72.73% librarians

are faced problems lack of disaster management oriented devices and lack of disaster communication network.

**Table no. 5.1. 4.1.18 Availability of emergency supplies kit for users and staff in libraries.**

The result reveals that 59.09% libraries were not have availability of emergency supplies kit for users and staff.

**Table no. 5.1. 4.1.19 Availability of operational smoke detectors in libraries.**

The result reveals that 54.55% libraries were not have operational smoke detectors.

**Table no .5.1. 4.1.20 Participation in designing disaster management plan in libraries.**

The result reveals that the highest 30.43% librarians are made disaster management plan with the help of any other authority.

**Table no. 5.1. 4.1.21 Probability of fire disaster occurrences in libraries.**

The study found that 50% librarians are given their response towards probably of fire disaster occurrence in libraries.

**Table no. 5.1. 4.1.21.1 Probability of flood disaster occurrences in libraries.**

The study found that the highest 36.36% librarians are given responses towards rare probability of flood disaster occurrences in libraries.

**Table no.5.1.4.1.21.2 Probability of landslide disaster occurrences in libraries.**

The majority of the librarians are given definitely not probability of disaster occurrences as a landslide disaster in libraries. i.e. 45.45% libraries.

**Table no.5.1.4.1.21.3 Probability of water leakage disaster occurrences in libraries.**

The study reveals that 50% librarians are given responses about to probably occurrences of disaster.

**Table no.5.1.4.1.21.4 Probability of strikes disaster occurrences in libraries.**

The study found that similarly 40.91% librarians are given responses about to probably and rare possibly of disaster occurrences in libraries.

**Table no.5.1.4.1.21.5 Probability of earthquake disaster occurrences in libraries.**

The study found that the highest 50% librarians are given responses towards probably occurrences of earthquake disaster.

**Table no.5.1.4.1.21.6 Probability of vandalism disaster occurrences in libraries.**

It was found that the highest 59.09% librarians are given responses towards definitely not probability of occurrences as vandalism disaster in libraries.

**Table no.5.1.4.1.21.7 Probability of terrorist attack disaster occurrences in libraries.**

The study found that 63.64% librarians are given responses towards rare possibly of terrorist attack disaster occurrences in libraries while 36.36% librarians are given responses towards definitely not probability of terrorist attack disaster occurrences in libraries.

**Table no.5.1.4.1.22 Availability of infrastructure for disaster management in libraries.**

The study found that 63.64 libraries were have trained staff in disaster management. 72.73% libraries were have hard disks for storage of data for the safety of disaster. 27.27% libraries were have sensor doors for disaster management. 36.36% libraries were have cloud computing facilities. 54.55% libraries had private server.

**Table no.5.1.4.1.23 Availability of disaster management tools in libraries**

It was found that 100% libraries were having fire extinguishers. 50% libraries were having audible alarm fire disaster management tools. 100% libraries were having camera. 45.45% libraries were having smoke detectors. 18.18% libraries were having glass alarm using as tools for disaster management .13.64% libraries were having Fire sprinklers . 54.55% libraries were having First aid kits. 9.09% libraries were having Water/ Moisture alarm in the library.

**Section –D Adoption of disaster management practical approaches in libraries.**

**Table no.5.1.4.1.24 Maintain and update telephone directory for disaster management in libraries.**

The study found that the highest 45.45% librarians are strongly agree to maintained and updated telephone directory in libraries.

**Table no.5.1.4.1.24.1 To identify priority of collection in case of disaster occurrence in libraries.**

The result reveals that the highest 40.91% librarians are given response to strongly agree the identifying the priority of collection in case of disaster occurrence in libraries.

**Table no.5.1. 4.1.24.2 Contacts companies /government agencies who could respond in case of disaster occurrence in libraries.**

The study found that majority of the librarians are given response to agree i.e. 45.45% libraries.

**Table no.5.1.4.1. 24.3 Maintain contact to nearby institutions or libraries that are willing to help in case of disaster occurrence in libraries.**

It was found that 45.45% librarians are given response to agree to established contact to nearby institutions or libraries that are willing to help in case of disaster occurrence in libraries .

**Table no 5.1.4.1. 24.4 Regularly organize training program on disaster management for staff in libraries.**

The study found that majority of the librarians are given response to strongly agree regularly organize training program on disaster management for staff. i.e. 59.09%.

**Table no.5.1.4.1.25 Availability of security provision to reduce the insect attack for collection in libraries.**

It was found that that 68.18% libraries were made security provisions to reduce the insect attack for collection in libraries.

**Table no.5.1.4.1.25.1 Frequency of checking the insect attack in libraries**

The study reveals that similarly 33.33% libraries were checked on the basis of monthly and yearly of the insect attack in libraries .

**Table no.5.1.4.1.26 Opinion of librarians towards budget allocated for disaster management in libraries.**

The study found that 82% librarians are given responses towards budget allocated for disaster management in libraries.

**Table no.5.1.4.1.26.1 Opinion of librarian towards range of budget allocated in libraries.**

It was found that 38.89% librarians are given their opinion, 0- 2lakh budget allocated should be sufficient for disaster management in libraries.

**Table no.5.1.4.1.27 Types of challenges faced by libraries for disaster control**

The study found that 54.55% libraries were faced challenges lack of interest on the part of staff. 45.45% libraries were faced challenges insufficient exit gate. 59.09% libraries were faced challenges Firefighting equipment is not in working order. 50.00% libraries were faced challenges to the lack of suitable accommodation for libraries and archives.45.45% libraries were faced challenges to the inadequate facilities for control disaster.36.36% libraries were faced challenges to the Technophia . 54.55% libraries were faced challenges of financial incapability. 13.64% libraries were faced challenges of care free attitude of library personnel/ authority. 18.18% libraries were faced challenges of lack of interest on the part of librarian.

## Testing of Hypothesis

**H<sub>1</sub>: The central university libraries are aware about disaster management strategies.**

Table no.4.1.3 presented the awareness about to disaster management plan and strategies in libraries. The analyzed data clearly presented that 86% libraries are aware about to disaster management plan and strategies whereas 14% university libraries are not aware to its.

Thus this hypothesis has been proved and accepted .

**H<sub>2</sub>: Most of the central university libraries have good plan and program to prevent the emergency situation.**

Table no.4.1.9 shows the applied of disaster management plan and program during occurrences of emergency in libraries. The analyzed data reveals that 36% libraries are employed of disaster management plan and program during occurrences of emergency while 64% libraries are not adopted disaster management plan and program during occurrences of emergency.

Thus this hypothesis has been rejected.

**H<sub>3</sub>: Most of the central university libraries are using manual security system for protection of users, staff and collection.**

Table no.4.1.13.1 shows the security checks at the exit gate in libraries so that no occurrences of man-made disasters. The analyzed data clearly presented that 95.45% libraries were security checked daily at the exit gate.

Table no. 4.1.13.2 shows the ensuring well drainage facilities and good plumbing work in the libraries. The above table clearly indicated that 50% libraries were checked daily for ensuring well drainage facilities and good plumbing work.

Table no.4.1.13.3 presented the ensuring standard electric work in libraries. The analyzed data reveals that 9.09% libraries were checked daily for ensuring the standard electric work. Followed by 9.09% libraries were checked weekly; 59.09% libraries were checked monthly; 18.18% libraries checked yearly; 4.55% libraries were never checked.

Table no. 4.1.13.4 presented the regular survey in and outside the building to identify defects so that minimize the risk of disaster occurrences in libraries. The analyzed data clearly indicated that 27.27% libraries were conducted survey daily to identify the defects in and outside of the building. Followed by 31.82% libraries were conducted

survey weekly; equally 18.18% libraries conducted monthly and yearly survey; 4.55% libraries were never conducted surveys.

Thus this hypothesis has been proved and accepted

**H<sub>4</sub>: The central university libraries are facing problems to applied disaster management strategies.**

Table.no.4.1.17 shows the problem faced by librarians while adopting disaster management strategies in libraries. The analyzed data reveals that 68.18% librarians are not adopted disaster management strategies in libraries due to faces problem of lack of funds while 31.82% librarians are not faced such type of problems. 77.27 % librarians have faced problems of inadequately trained staff in disaster management while 22.73% librarians are not faced this problem. Similarly, 72.73% librarians faced problems lack of disaster management oriented devices and lack of disaster communication networks.

Thus this hypothesis has been proved and accepted.

**H<sub>5</sub>: Most of the central university libraries are usages various disaster management practice approaches.**

Table no.4.1. 24 shows the opinion of librarians towards maintaining and updating the telephone directory for disaster management in the libraries. The analyzed data clearly presented that 22.73% librarians agree to maintaining and updating the telephone directory. Followed by 45.45% librarians are strongly agree to maintain and updated telephone directory; 9.09% librarians are disagreed to the maintained and updated the telephone directory and 22.73% librarians are given responses to neutral about to maintained and updated telephone directory in the libraries.

Table no.4.1. 24.1 presented the opinion of librarians for identifying the priority of collection in case of disaster occurrence in libraries. The analyzed data clearly indicated that 31.82% librarians are given responses towards agree identifying the priority of collection in case of disaster occurrence in the library. Followed by 40.91% librarians are given responses about to strongly agree; 13.64% librarians are given responded about to disagree; 13.64% librarians are given responses neutral.

Table no.4.1. 24.4 presented the librarian opinion about regularly organizing training programs on disaster management for staff in libraries. The analyzed data clearly presented that 18.18% librarians are given responses to agree. Followed by 59.09% librarians are given response strongly agree; 4.55% librarians are given responses to disagree and 18.18% librarians are given responses neutral about regularly organize training programs on disaster management for staff in libraries.

Thus this hypothesis has been proved and accepted.

## **Result Discussion**

Disaster management plans and strategies are a pivotal role in libraries due to their having high-level assessing qualities for minimizing the risk of disaster occurrences and helping the preparedness, response, and recovery pre, during, and after disasters. The results of the study reveal that significant university libraries are aware of disaster management plans and strategies. The study widely emphasizes that the majority of the libraries are employed disaster management plans and strategies in a non-informal way but most of the libraries do not have disaster management plans and strategies in written form, and the study clearly presented the several reasons behind their implementation of disaster management plan and strategies in libraries due to absence of plan and strategies, untrained staff, less relevant for libraries and fewer availability of staff. The result indicates that fewer university libraries are adopted the national disaster management policy due to poor awareness, insufficient disaster management tools, and inadequate availability of funds. The study reveals that the majority of the librarians adopted of policy for safety particularly both print and non-print collections of the library during emergency situations. The study significantly explores that the majority of the university libraries have disaster management equipment and most of the libraries are adopted practices approach for minimizing the risk of disaster occurrences.

## **Relevancy and Social Implication of the Study**

Due to drastic changes in users' information needs and exponential increases in the pricing of reading materials is essential for academic libraries are redesign and restructure products and services so that continue their services without disruption. The disaster management plan and strategies are a pivotal role played in libraries' continuing services. The findings of the study are widely beneficial for LIS society as well as the entire society especially for the knowledge society, learning society and policymakers, regulatory authorities likewise University Grant Commission, and other similar organizations which are engaged in and implementation of disaster management.

## **Conclusion**

The study is based on the disaster management strategies of central university libraries in India: A study. Due to the uncertainty of disaster occurrences, it is essential assessing the risk of disaster and preparedness the entire aspects, especially for the safety of the trinity of the library. There are needs of the present hour for libraries to redesign the

library product and services so that continue to offer their product and services with the safety of the trinity during disaster occurrences. The study reveals that the majority of the librarians are aware of disaster management plans and strategies and employed in the library in an informal way due to the absence of disaster management plans and strategies in written form but the significant point seen that most of the university libraries are not the implementation of national disaster management policy in the library. Although national disaster management policy is a leading framework of India for preparedness, response, and quick recovery from disaster. The study presented that the majority of the libraries are prepared for the prevention of the disaster probability of occurrences in the library. The study also reveals that most of the university libraries are having several disaster management equipment and employed recovery procedure by using standard Almirah, kept of materials in well-maintained buildings and in digital form. The study reveals that the majority of libraries are employed practical approaches for minimizes the risk of disaster occurrences.

## **Suggestions**

The primary data analysis and the study findings have enabled the researchers trying to present some suggestions for improving the study of central university libraries for employing vast disaster management plans and strategies. The following suggestions should be made for further improvement –

- 1.It is suggested that disaster management plans and strategies should be made in written form and then implemented in libraries.
- 2.It is suggested that implementation of a national disaster management policy in the libraries.
- 3.It is suggested that provide training for library staff in disaster management.
- 4.It is suggested that provide an orientation program for library users about safety procedures in case of any type of disaster occurrences in libraries.
5. It is suggested that a special budget should be allocated for disaster management in libraries.
- 6.It is suggested that university authority should be mandatory insurance of trinity for safety purposes.

## **Areas for Further Study**

One of the critical points for further study will be exploring the more extension of qualitative research that should be continued. It is look forward that the present conducted study has yielded valuables output and the researcher highly believes that the present study has been flourishing as an initial stage for such making and analysis. In the future, the following study may be conducted-

- 1.Current status and future perspective of disaster management in central university libraries in India.
- 2.Comparative study of disaster management strategies in central university libraries of India
- 3.Current issues and challenges of framing disaster management plans and strategies in central university libraries in India.