ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 12| Issue: 1| January2026|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

MAPPING THE PROBABILITY OF DISASTER OCCURRENCES AND ITS FRAMEWORK OF MANAGEMENT IN CENTRAL UNIVERSITY LIBRARIES OF INDIA: A STUDY

Dr. Prem Prakash Kusahwaha[1], Dr. Ravindra Kumar[2]

[1]*Assistant Professor, Department of Library and Information Science, U.P. Rajarshi Tandon Open University, Prayagraj, Uttar Pradesh*

[2]*Assistant Librarian, Galgotias University, Greater Noida, Uttar Pradesh*

ABSTRACT

Purpose: *The research paper highlights the any types of disaster plan existing in library or not and also tries to find out the preparedness strategies against pre, during and after disaster in library. Another core objective of the study is to examine the probability of disaster occurrence in library.*

Methodology: *The present conducted study was used survey method to fulfill the objectives of the study. The structure questionnaire was used for getting information to the central university librarians about the probability of disaster and preparedness strategies in the library to minimize the risk of unprecedentedly event.*

Findings: *All the libraries of the central university were having no any types of disaster management plan in written form to reduce the risk of disaster or safety against disaster. The majority of the central university libraries under the scope are fewer preparedness strategies to recovery from disaster and mostly libraries were less probability of disaster occurrence in library.*

Originality/Value: *This study examines to know the disaster management plan, preparedness strategies and probability of disaster occurrence central university libraries in India. The study will be help to identify the probability of disaster and framing the disaster management plan as well as preparedness strategies in the library.*

KEYWORDS: *Disaster Management Plan, Strategies, Preparedness Recovery and Probability.*

1. INTRODUCTION

Academia library is pivotal role play in the conservation and preservation of information resources as well as provided right information to right users at right time. Due to hub of knowledge resources and human beings it is essential for library to provide safety not only information resources but also library staff and users. Due to drastically development of information communication technology and increases day to day information resources and having less space in the library, most of the libraries are redesigning their building in this context, disaster management plan is vital role play to reduces the risk of any types of loss whether information resources or human beings. Implementation disaster management plan may not only minimize the risk of disaster but also provides safety to the trinity of the library. Viewed from the core point of the library a disaster may be anything or event which is directly or indirectly affected the library functions and services. Versosa,s (2009) stated that library must be made disaster management plan so that minimized the damage of life, information materials or finally reduces the loss of institutional business. Alegbeleye (1993) mentioned that commonly two types of disasters included fire and floods were occurrence in library. similarly Anderson and McIntyre (1985) opined that generally vanadalism, theft, insect attack, earth quake, affect of lights etc. were found disaster in the library. Disaster is uncertainty occurrence those threat or hazard of human beings, property, environment etc. area depend on types of disaster. Another words, disaster is a sudden calamitous occurrence that seriously disrupts the execution of a community or society and causes human, material, and economic or environmental losses that go beyond the community's or society's ability to cope using its own resources. Though often caused by nature, disasters can have human origins. Lyall (1993) mentioned that disaster management plan is a document which explained the procedure devised the prevent and prepare for disaster and guideline the clear order to what to do during disaster as well after disaster.

2.REVIEW OF LITERATURE

The conducted present study, review of literature is covered to the disaster management plan, preparedness, strategies and probability of disaster which is affected the library. There are numbers of the study found concerned to the scope, few studies are; Marfo & Bortey(2010) opined that " library and working professionals are not prepared against disaster due to inadequate infrastructure, lack of disaster management as well as absence of provision of disaster plan." Bhavjot (2016) disaster management plan is minimized the risk of hazard and to help to indentify the core areas of damage in the llibrary. A recent study by Idiegbeyan-Ose et al (2018) has also mention that "disaster experiences were occurrence in some developing countries library and further probability of disaster happened in future but implementation of disaster preparedness and plan it can be

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 12| Issue: 1| January2026|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

control." Further they evaluate the disaster management plan in some developing countries. Authors found that majority of the libraries were having no disaster management plan. They were strongly recommendation that to identify the risk management, prepare of disaster management plan and policies, immediately response and recovery plan help to prevent vast losses from disaster. Similarly other study has mention by Hussain (2019) that LIS working professional's awareness and sanitization on state of disaster preparedness in library." author found significance difference between the level of awareness and sanitization in library, no any libraries under the scope of the studies are prepared against disaster. Majority of the libraries of Kashmir is fewer prepared from disaster likewise Flood, fire etc. Similar another study found also pointed that libraries of Philippines was not prepared against disaster. They found that majority of the libraries were having no disaster management plan. Out of 13 libraries only one libraries have disaster management plan (Superio et al. 2019.) . Brown (2018) conducted a study, to examine the disaster management plan and strategies for managing information resources in the library. Further author evaluate the significance differences in disaster management plan for physical and digital information resources. It was found that majority of the libraries were implementation integrated disaster management plan for library resources. Similarly other significance study found "implementation of disaster management plan and its use of frequency in library for preservation and disaster control. Author also investigate the probability of disaster affected the library." For this study, author design a structure questionnaire consist both open and close questions along with observation method to collection of data. It observed that most of the library were have no disaster management plan. The findings of the study, majority of the libraries were faces problems of the disaster management practices. (Ishola. 2018).

3. OBJECTIVES OF THE STUDY

1. To find out the availability of disaster management plan in central university libraries.
2. To identify the preparedness strategies against disaster
3. To investigate the probability of disaster in libraries.

4. RESEARCH APPROACH / METHODOLOGY

The present conducted study was used survey method. The structure questionnaire was used for getting information about the probability of disaster and preparedness strategies in the library to minimize the risk of unprecedentedly event. Questionnaire was used as tool with observation as well as interview method for data collection. For this study, researcher was visited selected central university libraries under the scope of the study. Total 16 questionnaire were distributed to the central university librarians over the country out of them 12 questionnaires were received. The collected data was analysis with the help of MS-Excel in average and percentage form.

5.SCOPE AND LIMITATION

The scope of the conducted study is covered central university libraries in India. The study is limited only 12 central university libraries all most across the country. In this study, under the scope included Banaras Hindu University, Babasaheb Bhimrao Ambedkar University, Aligarh Muslim University and University of Allahabad, Indira Gandhi National Tribal University, Indira Gandhi National Open Univeresity, Mizoram University, Sikkim University, Pondicherry University, Rajiv Gandhi University, Mulana Azad National Urdu University and Assam University.

6.DATA ANALYSIS AND DISCUSSION

Table.1.Demographical Details

Gender	Name of respondents	Percentage
Male	11	91.67
Female	1	8.33
Total	12	100

Table 1. show the demographical detail of librarians of the Indian central university libraries. The result revealed that 91.67 percent male librarians were hold librarian position of the central university library whereas 8.33 percent were female librarians.

Table.2 . Awareness about disaster management plan and strategies

Awareness about disaster management plan and strategies	Name of respondents	Percentage
Yes	10	83.33
No	2	16.67
Total	12	100.00

In this table asked questions to the librarians about the awareness of disaster management plan and strategies in the library. In this context, (table. 2) indicates that 83.33 percent librarians were aware about the disaster management plan and strategies while 16.67 percent librarians were not aware about it.

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 12| Issue: 1| January2026|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

Table.3 Availability of formal disaster management plan

Availability of disaster plan	Number of the respondents	Percentage
Yes	O	00.0
No	12	100.00
Total	12	100.00

Table. 3 show the availability of disaster plan in the central university libraries in India. It was found that 100 percent central university libraries were have no any disaster management plan in written form in library.

Table. 4 Implementation of national disaster management policy in library

Implementation of policy	Number of respondents	Percentage
Yes	5	41.67
No	7	58.33
Total	12	100.00

National disaster management policy is one of the important policy of the country. The policy provides the procedure of safety, precaution and how to minimize the affect against any types of disasters.(Table.4) shows that 41.67 percent central university libraries of India was implementation of national disaster management policy in the library whereas 58.33 percent libraries were not implantation of this policy.

Table.5 Disaster recovery procedure

Recovery procedure	Yes	No	Total
1. All material kept in digital form	8.33	91.67	100.00
2. Use of standard Almirah	100	0	100.00
3. Kept of material in well maintain building	100	0	100.00

Note: Percentage exceeds 100 per cent because respondents were allowed multiple answers

Disaster recovery procedure in the central university libraries in India. Disaster recovery procedure is vital role played to reduces the risk of damage against disaster.(Table.5) result presented that 8.33 percent information resources are kept in digital form for safe from any types of disaster while 100 central university libraries were used standard Almirah and kept materials in well maintain building.

Table. 6 Frequency of measures to control disaster outbreak in library

Frequency of measures	Daily	Weekly	Monthly	Yearly	Never	Total
1. Security patrol round the library premises	16.67	41.67	25.00	8.33	8.33	100.00
2. Security checks at the library exit	41.67	25.00	16.67	16.67	0.00	100.00
3. Maintain the vigilance	58.33	16.67	25.00	0.00	0.00	100.00
4. Ensuring good drainage and plumbing facilities	50.00	33.33	16.67	0.00	0.00	100.00
5. conducting regular survey in and outside of the building to identify defects	25.00	16.67	50.00	8.33	0.00	100.00

Note: Percentage exceeds 100 per cent because respondents were allowed multiple answers

Table.6 shows that the frequency of measures to control disaster outbreak in library. it was found that 16.67 percent librarians of the central universities were checked daily the security patrol round the library premises. Followed by 41.67 percent librarians were checked daily security checks at the library exit, 58.33 percent librarians were measures the current maintenance of the vigilance devices in library, 50.00 percent librarians were checked daily the status of drainage and plumbing facilities whereas 25.00 librarians were measures daily the in and outside of the library building defects.

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 12| Issue: 1| January2026|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

Table.7 Prevention measures for security purpose

Prevention measures for security purpose	Daily	Weekly	Monthly	Yearly	Never	Total
1. To backup copies of library data and information resources	100	0	0	0	0	100
2. To check security in all section	91.67	8.33	0.00	0.00	0.00	100.00
3. To identify the faulty wiring, leaking pipe etc.	83.33	16.67	0.00	0.00	0.00	100.00
4. To check building inspection	33.33	50.00	8.33	8.33	0.00	100.00

Note: Percentage exceeds 100 per cent because respondents were allowed multiple answers

Table.7 shows the implantation of practice approaches to prevention measures for security purpose against disaster in library. The result reveals that 100 percent of the university librarians were backup copies of the library data and information resources daily for safety. Followed by 91.67 percent librarians were daily check security in all section of the library, 83.33 percent librarians were daily identify the any types of fault likewise wiring, leaking pipes etc. while 33.33 percent university librarians were daily check the library building inspection.

Table.8 Preparedness measures against disaster

Preparedness measures	Yes	No	Total
1. Train staff for first aid handling	58.33	41.67	100.00
2. Appropriate insurance provisions for users, staff.etc.	0	100	100.00
3. Coordination with local police	100	0	100.00
4. Structure training program for staff	66.67	33.33	100.00
5. Coordination with fire fighting station	91.67	8.33	100.00

Note: Percentage exceeds 100 per cent because respondents were allowed multiple answers

Preparedness is pivotal role play in the library to minimize the losses from disaster. For this purpose, questions were asked to the central university librarian about the preparedness against disaster. Table.8 result indicates that 58.33 percent librarians of the central universities were trained working staff in first aid handling in order to occurrence any types of disaster in library. followed by 100 percent librarians were established coordination with local police for highly uncontrolled disaster events in library, 66.67 percent librarians were provides structure training program of working staff whereas 91.67 percent librarians were established coordination with fire fighting station.

Table.9 Probability of disaster in library

Probability of disaster	Definitely	Probably	Rare possible	Probably Not	Definitely Not	Total
1. Earthquake	33.33	66.67	0.00	0.00	0.00	100.00
2. Floods	0	0	50	33.33	16.67	100.00
3. Wildfire	0	0	25	50	25	100.00
4. Manmade disaster	50	33.33	16.67	0	0	100.00
5. Fire	16.67	25.00	58.33	0.00	0.00	100.00
6. Strikes	58.33	41.67	0.00	0.00	0.00	100.00
7. Landslide	8.33	16.67	41.67	25.00	8.33	100.00
8. Leakage	25.00	33.33	41.67	0.00	0.00	100.00

Note: Percentage exceeds 100 per cent because respondents were allowed multiple answers

Table. 9 show the probability of disaster occurrence in library. The result indicates that 33.33 percent university librarians were agreed the earthquake disaster definitely probability in library. Followed by 50 percent librarians were agreed the floods may be possible; 50percent librarians were agreed the man -made disaster definitely probable in library; 16.67 percent librarians were expressed their opinion about fire disaster can be definitely affected the library; 58.33 percent university librarians were presented their opinion towards strikes are definitely happened in library; 8.33 percent librarians were agreed landslide disaster definitely occurrence whereas 25.00 percent university librarian

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 12| Issue: 1| January2026|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

were presented their view about leakage disaster definitely occurrence in library.

Table.10 Experience of disaster in library

Experience of disaster	Yes	No	Total
1. Earthquake	100	0	100
2. Flood	0	100	100
3. Wildfire	0	100	100
4. Manmade disaster	75	25	100
5. Fire	8.33	91.67	100
6. Strikes	100	0	100
7. Landslide	0	100	100
8. Water leakage	58.33	41.67	100

Note: Percentage exceeds 100 per cent because respondents were allowed multiple answers

In this table asked questions to the central university librarians concerned to disaster experience in library. (Table.10) result presented that 100 percent librarians were having experience about to earthquake disaster followed by 75 percent were having man- made disaster; 8.33 percent were having experience to fire disaster occurrence in library; 100 percent librarians were having experience to strikes disaster occurrence in library whereas 58.33 percent librarians were having experience to water leakage disaster occurrence in library.

7. CONCLUSION

The conducted study has provides a vast understanding about the various types of disaster in library. Due to vast collection of information resources and availability of users and staff in the library, it is liabilities of library authority to provide safety to users, staff and library resources. In this context, disaster management plan is pivotal role played in the library. The findings of the present study, indicates that 100 percent central university libraries of India under the scope having no any types of disaster management plan in written form. The study, it was observed that most of the librarians were aware about disaster management plan and strategies and they are used in informal way time to time in library and also fewer libraries of the central university is implication of National Disaster Management Policy in library. The central university libraries are only effort to recovery from disaster to using standard Almirah and information resources are puts in well maintain building but this recovery plan is not suitable to all likewise users, staff and so on. Overall the conducted study found that majority of the central university libraries is not prepared against natural disaster. Due to unexpected nature of disaster, it is essential to library authority to implication of National Disaster Management Policy and to prepare a disaster management plan and strategies regarding to geographical risk zone of natural disaster, technical disaster as well as man- made disaster.

REFERENCES

1. *Alegbeleye, B. (1993). Disaster control planning for libraries, archives andelectronic data processing centres in Africa. Ibadan: Option Book and Information Services.*
2. *Anderson, H., & McIntyre, J. E. (1985). Planning manual for disaster control in Scottish libraries and record offices. Edinburgh: National Library of Scotland.*
3. *Bhavjot, (2016). Disaster Management Strategies in India. International Journal of Education and Management Studies, 6(3), 6–13.*
4. *Brown, H. (2018). Managing disaster preparedness and response for hybrid collections in Australian national and state libraries. Journal of the Australian Library & Information Association. 67(4), 411-433.*
5. *Hussain, A.(2019). Disaster preparedness in libraries of Kashmir. Library Philosophy and Practice. Retrieved from https://digitalcommons.unl.edu/libphilprac/2365*
6. *Idiegbeyan-Ose, J., Izuagbe, R., Ifijeh, G., Ilogho, J., Iwu-James, J., & Osinulu, I. (2018). Library disasters in developing countries: A literature review of experiences and way forward. Bilgi Dünyası, 19(2), 275-296.*
7. *Ishola, R.O.(2018). Preservation and Disaster Management of Frequently-Use Collections in University Libraries: A Case Study of three University Libraries. Library Philosophy and Practice. Retrieved fromhttp://digitalcommons.unl.edu/libphilprac/1568*
8. *Lyall, J. (1993). Staff papers: Disaster planning for libraries and archives; understanding the essential issues. Proceedings of the Pan-African Conference onPreservation and Conservation of Library and Archival Materials, Nairobi, Kenya. IFLA, 103-112.*
9. *Marfo, M.A. & Bortey, E. A. (2010). Disaster Preparedness in Academic Libraries:The Case of the Kwame Nkrumah University of Science and Technology Library,Kumasi. Ghana. Library & Archival Security, 23 (2), 117-136.*
10. *Superio, D.L., et al. (2019). Fire + water + bombs: Disaster management among academic libraries in Marawi City, Lanao del Sur, Philippines. International journal of disaster risk deduction. 41.*
11. *Versosa, P. (2009) Analysis of Information Literacy education worldwide. Being a paper prepared for UNESCO, the U.S National Commission on Libraries and Information Science and the National Forum on Information Literacy.*