

# DISASTER PREVENTION METHODS AND PREPAREDNESS IN LIBRARIES: A STUDY ON SOME SELECTED UNIVERSITY LIBRARIES

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**Abstract:** Disaster Prevention Methods and Preparedness play a crucial part in the library. This study tries to evaluate the current status of the Disaster Preparedness plan, its Prevention methods, and preparedness to respond in three selected University Libraries of Assam. This study is based on a descriptive approach. A survey research design was adopted. Three university libraries of Assam were selected as study area. The questionnaire method, interview method, and observation method were applied to collect data. Data were interpreted and analysed by using MS excel. After analysing the results came out that all three selected libraries do not have Disaster Preparedness Plan, all three libraries apply disaster preventive measures, but it found to be ill-prepared in maintenance and immediate response resources. After this study it's recommended that libraries should develop a Disaster Preparedness plan, it should work on regular maintenance, and develop their response resources.

**Keywords:** Disaster, Disaster Preparedness Plan, Prevention Methods

## I. INTRODUCTION

Library act as a repository of books, manuscripts, musical ratings, and different literary thoughts of human being. Along with the saving of collections, libraries play an indispensable role in the organizing and dissemination of resources to the potential user. It works as a cultural heritage where countrywide identities are stored. When we talk about library resources it not only means print materials. Now a day with the development of Information and communication technology the form of library resources changed from print to non-print form. Libraries are experiencing sea changes from a traditional library to a digitalized library where services are available 24\*7. In the process of changing dimensions, the responsibilities of library professionals in acquiring, selecting, processing, storing, and disseminating resources have been changed. Although the responsibilities have changed the safeguard of resources reaming the same. The responsibilities came to arise to protect library resources as much as possible. If the resources are destroyed once they cannot be replaced. One of the prime causes of destroying resources is disasters. Disasters may destroy a huge amount of resources in one strike. Eden and Mathew (1996) [1] defined disaster in libraries as any incident which threatens to damage a library building, collections, contents, facilities, or services. Based on characteristics disasters can be categorized into two types – (i) Natural and (ii) Manmade. Floods, cyclones, hurricanes, heavy rains, earthquakes, landslides, drought, cloudbursts, tsunamis, etc. are natural disasters. Fires, accidents, bomb blasts, terrorism, war, insurgency, etc. are man-made. The international federation for library association, IFLA identified fire water, earthquake, and biological agents are the major cause of disaster in a library.

The Physical care and repairs of the library construction are mandatory. Daily Maintenance, everyday checking, Cleaning and dusting, and smoke prohibited are crucial for the library to stop both natural and manmade disasters. To deal with the disasters library designed its disaster preparedness plan. A library preparedness plan is a procedure that describes the techniques of an emergency. The obligations of immediate response and recovery from disaster when struck. The main goal of the Disaster preparedness plan is to protect the resources from destruction. Disaster planning in libraries has four phases. These are:

**Prevention:** Prevention is associated to recognize and minimize the dangers posed by way of the construction and its emergency tools. **Preparedness:** The preparedness phase is related to the library staff. In this phase try to prepare library staff to get ready to cope with the disaster.

**Response:** Response is the system of deal an emergency when a catastrophe strikes. It is associated with elevating the alarm, evacuating private as properly as resources, contact with the catastrophe response team, and so forth.

**Recovery:** After stability, the situation of emergency recovery phases starts. In this phase, the library staffs try to get back to normal.

When disaster strikes in a library it may cause to damage library building, library collection, library furniture other valuable resources which cannot be evaluate by a statistical only. It may destroy a civilization's history like university of Nalanda library named 'Dhamaganja' in 13th century, and many more.

## II. STATEMENT OF THE RESEARCH PROBLEM

Disaster management is a very important aspect of the library. Disaster may strike any time any place. Libraries no longer except them. Specially in Northeastern locations such as Assam where natural disasters like earthquakes, floods, landslides, and occasional draught are at very high risk. A study on "Disaster management in college libraries: A study in India" conducted by Boruah (2018) [2] stated that although disaster management is very important this aspect is always neglected in libraries due to various reasons such as lack of interest, financial crisis, lack of awareness, negligence mind, etc. In this study research problem conceived under the title "Disaster Prevention Methods and preparedness in libraries: A study on some selected university libraries

of Assam" tries to give an overview of prevention methods used in the University Libraries of Assam. The focus of the study is to determine the status of the Disaster preparedness plan, equipment, and preparedness of library staff to take immediate response.

### III. RESEARCH OBJECTIVES

The objectives of the research project are to carry out the results of

To emphasize the need and concern for disaster prevention and preparedness plan for university libraries of Assam.

To determine the availability of disaster prevention equipment.

To measure the current status of the preparedness plan to prevent an immediate response in the university libraries of Assam.

### IV. REVIEW OF RELATED LITERATURE

The literature review is a necessary step while conducting research work. To study how disaster can destroy library resources research was done under the title " Disaster management for Libraries " conducted by Bhade V.K.and. Aute G.P.(2016) [3]. They state disaster as A natural catastrophe in the form of very heavy rains main to flash floods that happened in the state of Maharashtra, India on 26 July 2005. It destroyed many libraries in the state. More than 2 lakh manuscripts had been lost. After the strike, for many days users no longer used the library services. This was a great loss. This highlights the significance of a disaster preparedness plan. To minimize the loss what library should do? To answer this question in the paper "Disaster Planning in Libraries", Wong. Yi Ling (2008) [4] describes how a comprehensive preparedness plan helps to respond when a disaster strike. Therefore, in the process of preparing a plan, some points should be under consideration. A detailed list of the phone number, and addresses of the disaster response team, emergency services, local disaster response, Insurances Companies, and consulted agencies should contain the preparedness plan. A detailed floor plan, entry-exit doors, and locations of emergency equipment should be mentioned in the plan. Responsibly should be mentioned. Although a library preparedness plan is essential, In the Indian scenario disaster preparedness is often an ignored area. In a paper, Kaoru T. (2009) [5] argued that disaster planning in university libraries stays an ignored area. In a case study of two university libraries in Punjab state, he located the result that out of two libraries one library lost 70% of its resources in the 1993 flood. This happens due to negligence in disaster planning. Another study conducted by Wong (2008)[6] suggests that the institutions ought to have identified the possible disaster that can strike and what's services of the library may also be affected by the disaster. Disaster risk may vary according to geographical location. In some areas floods and some areas earthquakes, hurricanes, or any others are at high risk. It is the accountability of the library disaster preparedness plan to become aware of the higher chance of a disaster happening. Usually, the library should be constantly prepared for water-related disasters. Regular checking of emergency tools and alarm systems must be mentioned. This paper tries to give an eye on how the University libraries of Assam prepare for disaster

### V. RESEARCH METHODOLOGY

For conducting the study on the topic "Disaster Prevention Methods and Preparedness in University library: a study on some selected libraries of Assam", a survey research design was adopted. data collection methods are planned as follows-

**Questionnaire Method:** Based on the objectives of the study the questionnaire was designed. The questionnaire contains both multiple-choice and open-ended questions. The questionnaire was divided into three-part related to General Introduction, Information Regarding Prevention Methods, and Information regarding Preparedness. This questionnaire was designed for the librarian or in charge of the library to get information supported to study. Questions are related to the Preventive equipment and preparedness of the library staff. The questionnaire was divided into three sections:

Section A: General Information

Section B: Information regarding preventive technique

Section C: Information regarding the preparedness plan

**Interview Method:** A face-to-face personal interview was conducted with the library in charge during the physical visit to the library.

The questionnaire was distributed to the selected libraries through personal visits and emails. Along with the primary data secondary data are also collected through various sources like the library website to support the study. MS Excel software was used to analyze the collected data.

### VI. SCOPE AND LIMITATION OF THE STUDY

The scope of this study is to emphasize the need and concern for disaster preventive measures and Disaster preparedness plans in university libraries. To get an overview of the present scenario of Disaster preventive measures and Disaster preparedness plans the following three different universities are selected. One of them is a State university library; one is a Special university library and another one is a Central university library. Due to time-bound, communication, and financial problem, it's not possible to include all university libraries.

### VII. RESULTS AND FINDINGS

#### The Physical Location of the Library

The physical location of the library is a determining factor. the physical location of the library building is an important aspect when the concept of disaster management comes arises. The following table shows the physical locations of the surviving universities libraries

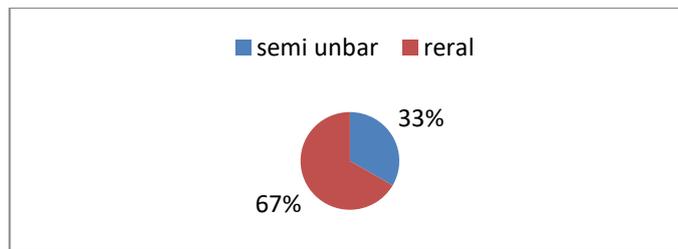


Fig: 1

The Physical Location of the Libraries

The above Fig:1 data shows that 67% library of surveyed universities is situated in rural area. And 33% library is in semi-urban areas. Out of three, no library is situated in the urban area.

**POSSIBILITIES OF DISASTER STRIKE IN UNIVERSITY LIBRARIES**

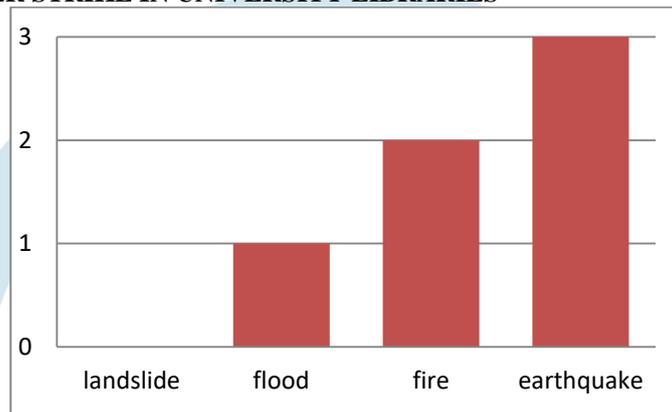


Fig: 2

Possibilities of Disaster Strike

In the above figure:2, The horizontal axis represents the name of disasters and the vertical axis represents the number of respondents. In response to the question that, the possibility of a disaster strike in the library, all three libraries stated that there are possibilities of earthquake strikes in their libraries. 2 of the respondents respond that fire may strike in the library. One of them responded as a flood porn area. There is no threat from the landslide in all three libraries.

**DISASTERS EXPERIENCED IN UNIVERSITY LIBRARIES**

The following table represents the disaster experienced in surveyed universities libraries

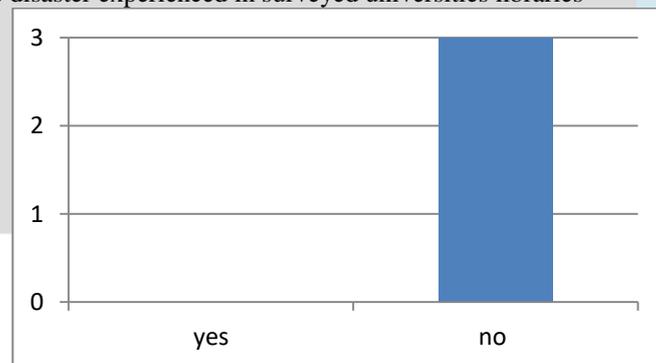


Fig: 3

Disaster Experienced

The above fig 3 shows that no library has experienced any kind of disaster. It means that no disaster has struck in all three selected libraries in previous years from the year of establishment.

**PREVENTIVE MEASURES IN UNIVERSITY LIBRARIES**

Every library should take preventive measures to prevent disasters. The ideal library building should be individual. There should be adequate free space on all floors. Among the preventive measures installations of automatic fire extinguishers, smoke alarm systems, regular checking of humidity sensitive area, and water sensing alarm are primary things to consider. The following table shows the different preventive measures taken by surveyed libraries

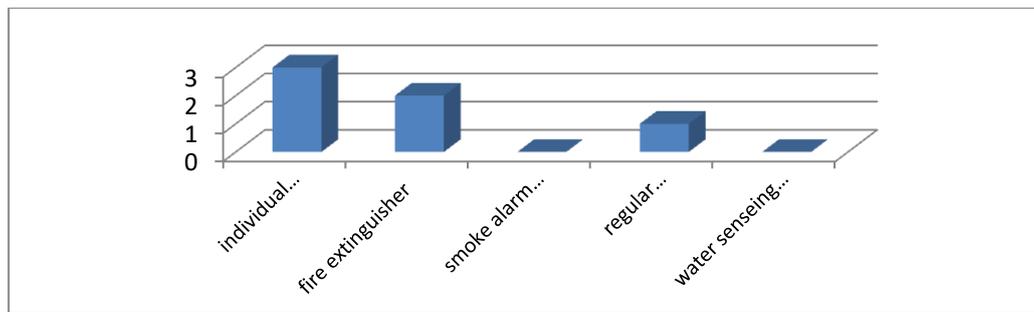


Fig: 4  
Preventive Measures

In Fig 4 The horizontal axis represents the preventive measures and the vertical axis represents the number of the library. From the above table, it's clearer that all 3 libraries have individual library buildings. Out of 3, two libraries have fire extinguishers. smoke alarm system and water sensing alarm are not available in all three libraries. One library has done Regular checking and maintenance of the humidity-sensitive area.

**ROUTINE HOUSEKEEPING OPERATION IN UNIVERSITY LIBRARIES**

Routine housekeeping operations play a significant role in disaster management. Because manmade disasters like fire may come into arose in the negligence of humans. If the library has done the housekeeping operations regularly the possibility of disaster occurrence may be low. The following table shows the different housekeeping operations done on universities libraries in the surveyed area

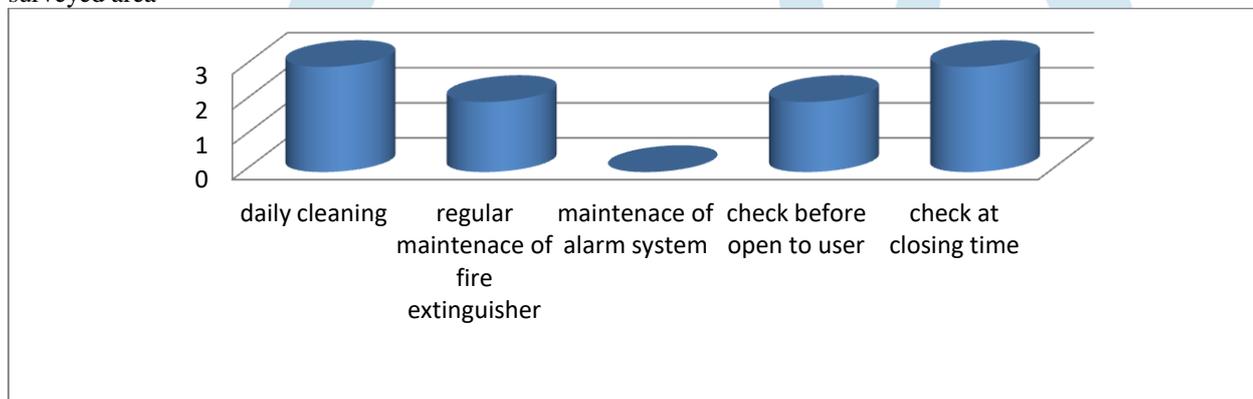


Fig: 5  
Routine Housekeeping Operation

In Fig 5. The horizontal axis represents the different housekeeping operations and the vertical axis represents the number of the library. All 3 libraries responded that they have done regular cleaning/dusting, and they check all necessary things at closing time. Two libraries check the library inside before opening it to the user. Two libraries regularly maintain the fire extinguishing system. And out of three no library regularly maintains the alarm system.

**EXISTING DISASTER PREPAREDNESS PLAN IN UNIVERSITY LIBRARIES**

A library is a place for storing intellectual resources. Another hand Disaster is a natural phenomenon. We cannot prevent disasters to happen. But we can plan to minimize the losses if disaster strikes. When disaster strikes it's common for to everyone get confused about what to do or what not to do. In that case, a disaster preparedness plan might help. Regular practice and discussion on disaster management help to respond while it strikes. A disaster preparedness plan includes all the steps when a disaster strikes The following table shows the existing disaster preparedness plan in surveyed universities



Fig:6  
Existing Disaster Preparedness Plan

As a preparedness plan is a very important aspect, the above Fig 4.9 shows that there is no disaster preparedness plan in all surveyed universities. They have no planned committee that can guide them in emergencies.

**EMERGENCY CONTACT LIST IN UNIVERSITY LIBRARIES**

When disaster strikes everyone gets shocked for a while. Everyone gets confused about what to do and what not to do. Therefore, the library has to develop an emergency contact list that may help in those situations. The following table shows the emergency contact list of surveyed universities

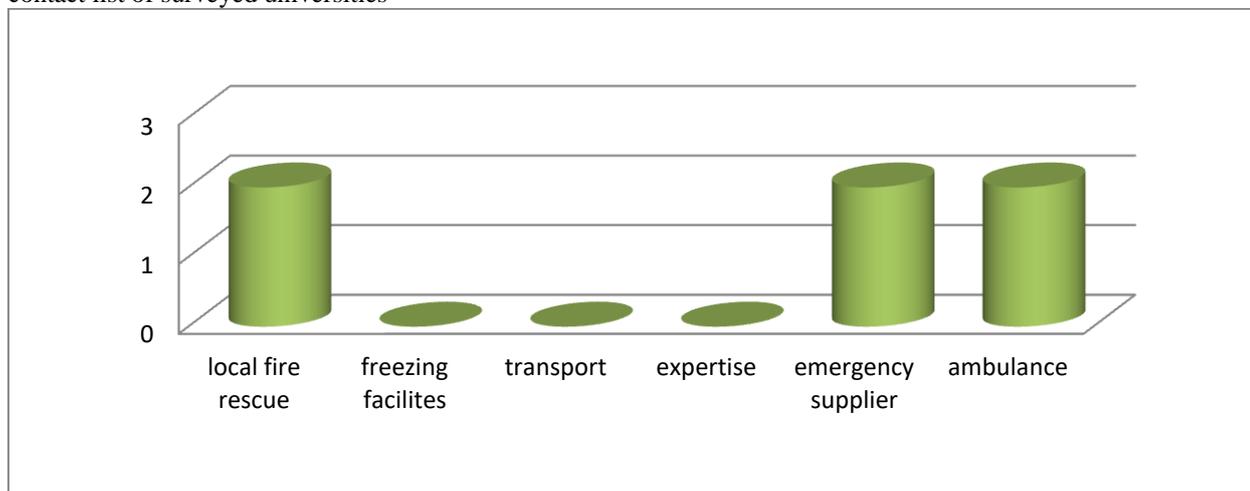


Fig: 7  
Emergency Contact List of University Libraries

As earlier in the above table horizontal axis represents the different contact list and the vertical axis represent the number of libraries. From the above fig 4.10, it is stated that 2 libraries have local fire rescue contact numbers. Again 2 libraries have emergency suppliers and ambulance numbers. No libraries have freezing facilities, transport, and expertise number.

**DATA REGARDING SALVAGE EQUIPMENT**

Salvage equipment is very essential in any institution. It helps immediate response after the disaster strike. Therefore, the library has a good collection of salvage materials inside or outside the building. In the following table, the collections of salvage materials are shown

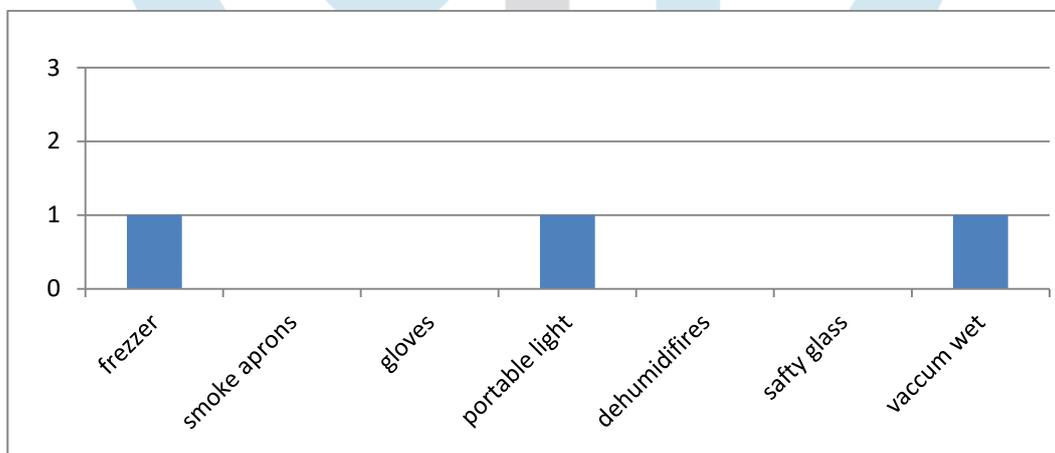


Fig:8  
Collections of Salvage Materials

As salvage materials are very important the above Fig 4.11 shows that only 1 library has freezer facilities. 1 has portable light and 1 library has vacuum wet. No library has smoke aprons, gloves, dehumidifiers, and safety glasses.

**CONTINGENCY FUNDS AND INSURANCE IN UNIVERSITIES LIBRARIES**

Lack of funds and inadequate support from management is a major problem in developing disaster preparedness plans in university libraries. Sometimes lack of trained staff may arise a problem.

**VIII. SUGGESTIONS AND CONCLUSION**

In light of the findings, it was the intention of the study to make suggestions that would be useful to the future research. Although disasters no longer happen yet, each library takes proactive preventive measures. Certain easy and simple practices of managing a library can help to prevent the damages brought on by a disaster. Libraries should work on disaster equipment and facilities like on installation and maintenance of alarm systems. Most libraries do not install fire alarms, smoke alarms, and water-sensing alarms.

Libraries should prepare a disaster management plan. This plan must be flexible and should be distributed to all staff members, administrations, emergency agencies, etc. for immediate support. This plan should include a floor plan, priority materials, emergency exit doors, etc.

Only having abounded resources is not sufficient if maintenance is not done properly. Libraries should try to include daily cleaning and dusting, checking and maintenance of fire extinguishers, checking and maintenance of alarm systems, checking and maintenance of an electrical system, checking before opening to the user, and checking at closing time in daily housekeeping operations.

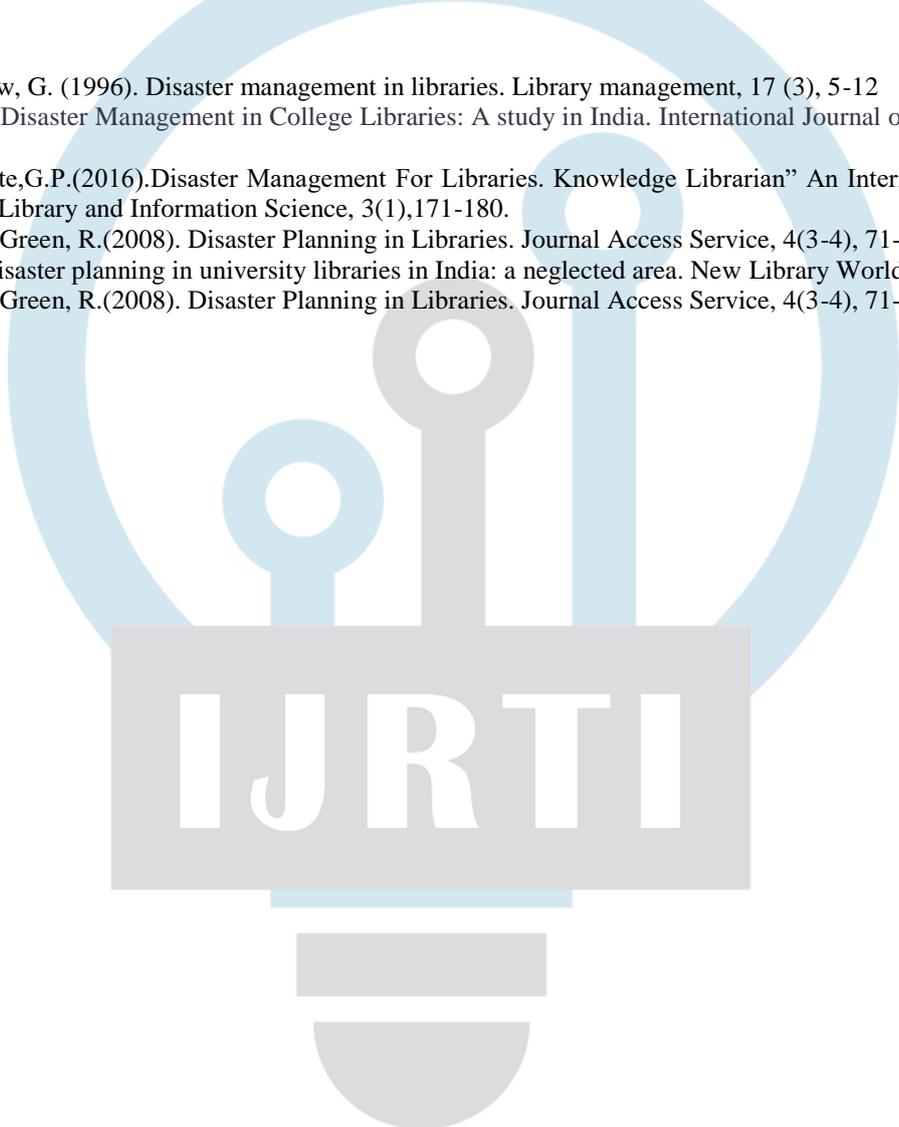
The fund is an important factor in disaster management planning. As most libraries face financial difficulties in overcoming this problem, additional funds should be made available to purchase the necessary equipment.

Trained staff should be appointed so that they can easily handle any problem that arises in a library. The training of existing staff is also important. Without training written plan could not help.

There is very little research on disasters and their management in libraries in Assam. More attention should be given. No plan suit for all. Different types of disasters need to be managed differently. Studies focusing on the management of one precise type of catastrophe are known as for. This would be in a position to focus on mitigation and preparedness measures mainly required for a particular disaster.

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