

# University Libraries and Community Preparedness for Natural Disasters: A Participatory Based Action Plan

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## Abstract

*In this study, authors aimed to investigate that how far university libraries in India can contribute for building disaster preparedness. Primarily, the authors have identified three major components of disaster preparedness which are social, economic and environmental capital, and further tried to explore how these capitals can be achieved in pre, during and post disaster situation through the services of university libraries in India. Based on the theoretical conceptualization the study forwarded a model named as participatory approach based thematic model for the university library, encouraging more involvements, engagements and active participation from the users and local community. Further, the authors have made critical analysis and logical understanding to propose 16 action plan on the basis of the model that can be implemented through the services of university library in three different disaster situations, facilitating adaptive governance in the community for achieving disaster preparedness.*

**Keywords:** Disaster Preparedness, University Libraries-India, Participatory Approach, Action Plans

## 1. Introduction

Disaster is considered as the predominant driving force that collapses social and environmental structures of a society and transcends the social system from its normal state to new-normalcy. Though damaging every individual component of the society, disaster refuges the complete social system into a different state where all the earlier functionalities of the community get dissolved which demands cross cutting researches to develop dynamic and responsive ways for disaster mitigation in order to reduce its impact. New collaborations at the intersection of the Natural Sciences, Social sciences, Humanities and society with disaster research established 'disaster preparedness' as a

feasible way out to lessen the aftermaths of disaster by developing knowledge and capacities to anticipate, respond and adapt.

As libraries are integral part of society, the study is aiming to explore the role and contribution of academic libraries of India as bridging organizations to strengthen the capacity of the community to enhance disaster preparedness against natural hazards and reduces economic losses.

## 2. Interaction between Disaster Preparedness and Libraries

Prior literatures have suggested that different knowledge systems and learning environments enhance the capacity of a community to deal with uncertainty (Ludwig et al., 2001). Library is a social institution with a role of information generator and disseminator through its services into the society.



It keeps a close relation with the citizens with diverse ways of engagement that play a key operation to disaster preparedness quite effectively.

In 2008, Featherstone et al. have tried to explore the role of libraries in disaster response activities and narrated that National Library of Medicine has played as an aggregator that helps to rebuild the society from the consequences of disaster. Further, Zach (2011) has ascertained that information centre like public library has immense possibilities for making a community self-reliant by providing pertinent services to the members exhaustively. In concordance, holistic investigations have been performed by the researchers to identify the social channels through which the services can be disseminated (Jaeger et al., 2007; Bayliss, 2012; Grace and Sen, 2013; Liu et al., 2016). Meanwhile, efforts are also made to critically analyse the proficiency of those social channels for ensuring greater productivity (Veil et al., 2014). These researches mainly keep public library as a central theme for synthesizing the area, but a very few efforts till date has been made from the perspective of university library to understand its potential for building disaster preparedness against disaster.

In 2012, Braunstein et al. have narrated about the contribution of the academic libraries in building disaster preparedness by citing three case studies of three different university libraries. They opined that during and post disaster situation a university library can effectively use its pre-developed relationships with governmental bodies, NGOs, agencies and public libraries for dissemination and exchange of reliable information and communication for making the affected people aware. Similarly, Soehner et al. (2017) have also opined that university

library has an important role to reduce the rumour and misinformation at the time of disaster by enabling immediate and robust communication through its media and public relation outlets. However, in India (one of the ten most disaster-affected countries in the whole world, CRED report) no such effort has been made to understand the role of university libraries for developing disaster preparedness in community, which calls for further exploration.

### 3. Objectives of the study

- ❖ Develop a suitable model for the university libraries in India to achieve disaster preparedness in the community.
- ❖ Formulation of action plans for the university libraries on the basis of the model.

### 4. Formulating Participatory Approach based Thematic Model for the University Libraries in India

Participatory approach is a method which allows participation of the actors from the both ends. Here, the study opines that from one direction library will facilitate its services to aware the people about the disaster to create disaster preparedness, similarly from the other end patrons and local people interact and exchange their opinion and experiences for developing more structured, reality driven, flexible and grounded action plans which can effectively percolate the services and information into the community. The study here proposes participatory approach based thematic model for Indian university libraries for facilitating adaptive governance by inter weaving different capitals of socio-ecological system to achieve disaster preparedness (see Figure 1).

This kind of approach also adhered by Prof. Clara M. Chu, namely Community Library Inter Action, particularly in perspective of public library where she envisioned library as an anchor in the community, developing sustainability through the interaction with the local people. Informal interaction enables library to cater indigenous and local knowledge and develop an understating of the community and its need. Similarly, in India student community in the university is an excellent mediator who can develop mass relation through diverse engagements. Continuous engagement with the mass helps to acquire and exchange information, building an informal relation between all the stakeholders.

Therefore, the library can involve these users more with the daily activity to build a trust factor between the library and the users which the library can capitalize by developing engagement with the

community through these students and patrons. Here, the model suggests that if the university library can execute adaptive governance in the community through participatory approach to build disaster preparedness, then the impact of forthcoming disasters on the community will be low and assimilation of information to bounce back into the normal state will also be lower, but if the university library failed to develop disaster preparedness into the community then the impact of disaster will be high and the community will have higher demand of information to return to its normal state. Authors argue that the exchange and sharing of information is a never-ending process and continuous flow of information will gradually transcend the society to a more prepared state and for proper execution of participatory approach. The study formulates some action plans which can be implemented through the services of university library.

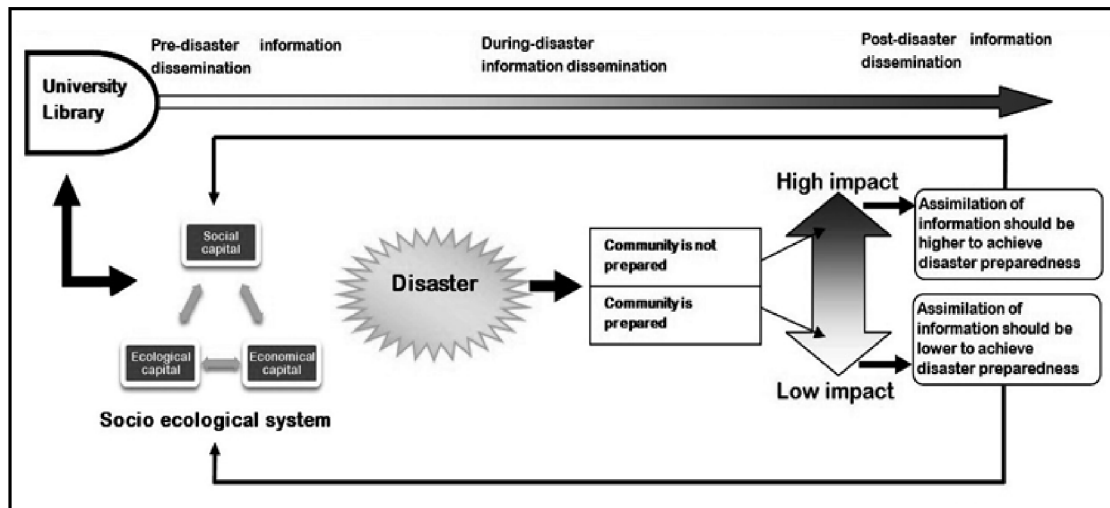


Figure 1: Diagram of Participatory approach based thematic model

## **5. Participatory Model Driven Action Plans for the University Libraries in India**

The study argues that, by involving the user community, university and local community, the library can perform participatory approach-based measures for dissemination of information to the local people. The study forwards some action plans to generate disaster preparedness into the community. Following discussion will elucidate the formulated action plans. The discussion will also help to understand the model and its applicability, reliability and robustness in the community.

### **5.1. Pre-disaster phase and University Library**

#### **5.1.1. Setting up Specialized Disaster Research Centre**

In India there is not a single disaster research centre is situated or attached with the university library. Here, university library can take a path-breaking step by introducing a fully dedicated section for disaster research. As the university library is dealing with wide range of sophisticated information, will work as a catalyst to promote and support more innovative, reality driven and relevant disaster research for the society. Research outcome can be disseminated by the university library to the community for awareness and required measures to increase disaster preparedness. Similar, approach has been observed in the library and information centre of The Energy and Resources Institute (TERI) where specialized research labs like Specialized Library on Climate Change, ENVIS (Environmental Information System) Centre and MIC (Mycorrhiza Information Centre) are developed within the library for effective dissemination of information to the nation.

### **5.1.2. Community Networking**

University library accumulate and distribute information to the society in support of disaster preparedness through its three different groups. Involvement of all the stakeholders of the community will propagate cohesiveness among all the actors and robust the interconnections by building informal partnerships among the community. Further, university library should build collaborative network, enable vertical and horizontal flow of information during disaster and support existing channels of information through its users and other stakeholders for effective communication.

### **5.1.3. Community Mapping**

Recent literatures in disaster research have shown community mapping as a necessary measuring approach for delivering immediate action in the wake of disaster. Basic principle behind community mapping is to cater the social, economic and demographic data of the community that the library serves, for constructing mitigation plan, follow up measure and disaster management policy. Through community mapping a university library can measure the level of vulnerability that the community persist, weakness and strong areas of the community, where the mitigation operation should be operated at first and how to reduce the impact of disaster.

## **5.2. During Disaster Phase and the University Library**

### **5.2.1. SMS Alerting**

Prior studies have shown mobile phone as an integral technology for crisis communication, percolating the news of crisis to citizen in a faster and dedicated way. University library has the mobile number of the patrons in their database, so they can be

communicated through SMS in time of disaster. In 2011, during the great East Japan earthquake SMS alerting service has been performed by local government which gives the citizen a small amount of time for preparing. This kind of approach should be invoked in the university library system to save lives.

### **5.2.2. Diffusion of Information through Social Media**

Social media is gaining attention of the disaster researchers as they found it a convenient, informal, user friendly and widely used medium for crisis communication. But user generated contents always increase the chances of distorted information, as a reason university library should use their social media pages as the disseminators of disaster news to the citizen to make them aware and prepared.

## **5.3. Post-disaster phase and the University Library**

### **5.3.1. Providing data for Developing Crisis Communication Network**

After the disaster the most crucial operation is the collection of information (empirical data) about the disaster from the ground level. The university library should engage the user to gather the data from disaster scenes for further validation and analysis. These data can be processed to develop crisis communication network. Collection and analysis of data will help to formulate mitigation policy and precautionary measures from forthcoming natural hazards.

### **5.3.2. Rescue Operation**

University library serves a large amount of people who are either directly or indirectly involved with

the library. After the impact of disaster library can engage its patron in the rescue operation with the disaster management team. The patrons can help in a large scale in terms of human resource to the skilled management personnel. Their support increases the speed of disaster mitigation and helps the community to bounce back into the normal state.

### **5.3.3. Place for Safe House**

Safe house is the immediate shelter for disaster affected people, where they can stay for couple of days and the relief operation is also being maintained from there. Location and structure are two major issues behind choosing a safe house; the place should be in a convenient place in the society, connected to transport route for logistics supply and should have a big area for accumulating a large gathering. A portion of the university library (generally common room or lounge) should be used as a safe house after the impact of disaster.

### **5.3.4. Fund Raising**

User community, University community and local community should volunteer fund raising programmes after the disaster for gathering monetary and logistics support for the disaster affected people in the community. Meanwhile, library can involve with any government or NGO sponsored fund-raising programme. Apart from it, the library can arrange any cultural or educational programme to interact with the local people to make them inform about the real conditions of the disaster affected people and collect funds from them.

### **5.3.5. Disaster Awareness Programme**

Here, university library can perform a major role by conducting various ranges of interacting forums, drill programme, road side play and cultural events

related to disaster awareness. Along with it, organizing programmes to show documentaries on disasters, creation of dedicated forums, panel discussion with disaster survivors, arranging small rallies in the community and other humanitarian activities should be organized by the university library to educate the local people about the do's and don'ts of disaster.

### 6. Concluding Remarks

University library has immense potential and possibility to work as an actor in the dissemination of information for securing disaster preparedness into the community. The model is unique in Indian socio-economic context and has clear directive to accomplish the desired aim. Further, some action plans on the basis of the model were proposed by the study to formulating the goal in an effective manner. Here, the study has given emphasis on informal interaction and engagement between the libraries and its user, which in the long run develop a healthy relationship within both of them. Direct engagement and interaction of the library with the community and continuous execution of the propose action plans with gradually develop disaster preparedness into the society by reducing the impact of disaster.

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**Further Reading**

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