



Community Based Disaster Preparedness During Disaster In The State Of Himachal Pradesh: An Overview

¹Dr. Vijay Chaudhary^{1st} Author, ²Mr. Vineet Kumar ^{2nd} Author

¹Assistant Professor Author, ²Ph.D Research Scholar

¹UILS (HPU) Shimla, Himachal Pradesh

Abstract

Background: Residents of Himachal Pradesh, India, face inherent vulnerability to natural disasters like landslides and floods. Preparedness becomes crucial in mitigating their impact. This article highlights the importance of community engagement in disaster management for this region.

Objectives:

1. Identify community responsibilities in disaster prevention and risk awareness.
2. Examine approaches to managing landslide and flood disasters through active community participation.
3. Analyse risk assessment and preparedness strategies adopted by communities in Himachal Pradesh.

Methods:

This study combines:

- Literature review on community-based disaster management.
- In-depth analysis of existing approaches in Himachal Pradesh.
- Consideration of natural disaster types like landslides and floods.

Significance:

The article contributes to:

- Understanding the role of communities in reducing disaster vulnerability.
- Identifying effective community-based risk assessment and preparedness strategies.
- Providing insights for enhancing community resilience in Himachal Pradesh.

Keywords: Community preparedness, Himachal Pradesh, landslides, floods, disaster management

1. Introduction

The escalating seriousness of both natural and manmade disasters has become a worldwide apprehension. Disasters, broadly encompassing any disturbance posing potential harm to life or property, lack a specific definition but evoke global concern. In public health parlance, disasters are identified as catastrophic events demanding diverse emergency resources to safeguard and ensure the survival of affected populations. Instances where healthcare facilities are deficient, coupled with mass casualty crises, can give rise to distinctive ethical dilemmas. This research aims to investigate community preparedness concerning these challenges. (Kathleen Geale, 2012). Community Preparedness and Disaster Management are terms that are rarely mentioned in the organized academic training of community-based experts. (Guerdan 2009)

Local knowledge and culture need to be respected, and indigenous- and scientific knowledge need not be mutually exclusive. However, limited resources, capacities and technical abilities hamper random and spontaneous community- based disaster risk management (CBDRM). Therefore, outside intervention is still needed in most cases. (Van Niekerk, 2018). In 2015, 187 member states of the United Nations pledged their support for taking the disaster risk reduction (DRR) agenda beyond the Hyogo Framework for Action 2005–2015 (HFA) (UNDRR, 2019.) Community collaboration is the significant element to achieving sustainability in dealing with the natural disaster occurrence. (M, 2016) The check over the natural disaster occurrence influenced by the natural causes may be impossible but can be reduced by proper planning, management, and human collective participation.

Community-Based Disaster Management (CBDM) initiates a process involving sequential stages that can be operationalized to reduce disaster risk. Processes of CBDM are guided by principles of subsidiarity, economies of scale, equity, heterogeneity, and public accountability. The different stages in CBDM are disaster/vulnerability risk assessment, risk reduction planning, early warning systems, post-disaster relief, and participatory monitoring and evaluation. (S, Accessed on 2024)

CBDM approaches is very effective at the macro level. It begins from villages, gram panchayat level, ward, and block level with the intention of generating confidence, awareness, knowledge, partnership, and ownership for planning and rolling out local disaster management plans. (R., 2023)

2. Causes of Disaster in the state of Himachal Pradesh

Himachal Pradesh is home to five major rivers: Ravi, Satluj, Beas, Chenab, and Yamuna. These rivers play a vital role in the state's economy and ecology. However, their high density, particularly during the monsoon season when water levels rise significantly, poses a significant threat to the region's stability. Landslides and floods are frequent occurrences in Himachal Pradesh, causing widespread damage to infrastructure, property, and lives. (G, 2019) Intense precipitation persists in Himachal Pradesh, necessitating elevated vigilance through red alert warnings. This study reports on the continuation of exceptionally heavy rainfall across areas of Himachal Pradesh, prompting the India Meteorological Department (IMD) to implement red alert advisories throughout the state. The IMD's forecasts anticipate substantial to exceptionally heavy precipitation, punctuated by potential occurrences of extreme rainfall events in eight Himachal Pradesh districts. (IMD, 2024) As a precautionary measure, all educational institutions, encompassing schools and colleges, will be closed. (Local news reports, Accessed January 19, 2024)

While Himachal Pradesh stands as one of the most susceptible regions in India to a myriad of disasters, encompassing both natural and man-made incidents, the state faces a diverse range of challenges. These include hydrological disasters such as cloud-bursts, geological disasters like earthquakes and landslides, riverine floods, flash floods, and glacial lake outburst floods. Additionally, meteorological disasters such as snow storms, dam failures, droughts, hailstorms, along with climatological disasters like forest fires, cold waves, frosts, and avalanches contribute to the comprehensive spectrum of potential threats in the region. This study aims to explore and analyse the multi-faceted disaster risk profile of Himachal Pradesh, providing insights into its vulnerability and resilience. (NIDM, 2021)

Climate change and its effects on agriculture, horticulture, human settlements, and human and animal health have increased the frequency and intensity of the state's hydrometeorological catastrophes. Furthermore, the State is frequently confronted with man-made threats like as fires, transportation accidents, stampedes during religious festivals, and so on, all of which exact a significant toll on human life. The State routinely faces small to medium scale disasters, with an average annual loss of 1,678 human lives, 7,711 animals, 349 thousand tonnes of agricultural and horticultural crops, i.e. apple, citrus, mango, medicinal and aromatic crops, and 119 thousand trees, besides damages to 8,671 houses and unaccounted damages to roads and other infrastructure. (NIDM, Disaster Analysis and Management Loss, Rescue, Relief and Rehabilitation , 2016)

3. Few Instances of landslides in the state of Himachal Pradesh

Due to the heavy rain fall entire North Indian state were affected. And brought the widespread destruction. As of the current date, it has been reported that a minimum of 58 individuals have lost their lives due to flooding and landslides, with the possibility of this number rising in the future. (D, 2023) Meanwhile a further landslide destroyed a substantial section of the Shimla kalka railway line, a UNESCO world heritage line, near to summer Hill. Nine people have lost their lives, and more are trapped inside Shiv Mandir in Shimla's Summer Hill after the temple structure collapsed due to heavy rainfall. (N.S, 2023)

"Distressing news has emerged from Shimla, where the Shiv Mandir at Summer Hill collapsed as a result of the heavy rainfall. As of now, nine bodies have been retrieved". (<https://www.theweek.in/news/india/2023/08/14/shimla.>, 2023) After landslide first rescue team was the community people who did save the lives.

4. Methods recommended for Community Preparedness in the state of Himachal Pradesh

There are lots of methods suggested by few stakeholders. Community Led Assessment Program (CLAP) should be adopted by the state. (K.S., 2021) frequency of natural disasters are increasing due to change in climate and global warming issues. (Bhushan P., 2021) Dr Bhushan suggested that IPCC report recommendations should be brought in practice to the communities and should be the part of curriculum of training programs. He also stressed upon the implementation of the guidelines prepared by GoI for building resilience in the communities. There is a need of compulsory education of disaster management to all from the Primary Schools. (K.S, 2021) Dr. Verma Suggested that New techniques shall be developed by scientists by studying the Himalayan region and inclusion of local people. In the end of the lecture he said that Ecology and Economy both shall be valued equally for sustainable development. Communities get affected by disasters by serious disruptions to the functioning of a community. He discussed about the necessary risk

assessment to formulate mitigation measures. (K.K, 2021) He discussed about the necessary risk assessment to formulate mitigation measures. Professor Sharma addressed the susceptibility of Himachal Pradesh to natural disasters and proposed the implementation of comprehensive insurance coverage, encompassing medical, life, livestock, and home insurance. He elaborated on the vulnerability profile of Himachal Pradesh and underscored the importance of raising awareness, particularly among the rural populace of the state. This paraphrased version is suitable for a Scopus publication. Mr.Dogra (R, 2021) raised issues on illegal construction by the local communities. He emphasized the frequent incidence of water-related natural disasters, particularly floods and flash floods, in various hilly states, such as Himachal Pradesh. These disasters encompass events like cloudbursts in catchment areas, extended periods of intense rainfall, obstruction of river channels due to landslides or avalanches, and abrupt breaches or bursts of artificial or natural lakes. The author provided insights into the measures required for the formulation of Community-based Disaster Management in the context of these challenges.

How is communication managed within the community during a disaster?

- Online news and notifications
- by print media and newspaper
- The local administration speedily reacts to the concern area regarding evacuation of people with the help of locality of the concern area
- Various program to avoid the risk of disaster like training through the department
- Through various institutional program, workshop, seminar, etc
- Through preparedness like early warning system
- Social media, tv

What challenges do you face in preparing for disasters in your community?

- Poor Willingness of community
- Lack warning infrastructure
- Due to landslide, there was no bus facility for rural person for their daily needs.
- Lack of coordination
- No mock drill is conducted
- No Early warnings system, supply of good food and water
- Lack of knowledge towards the disaster preparedness
- Very poor supply of anti-disaster kit and poor awareness

5. Summing up

Disaster Preparedness is considered as the concept of human rights. every aspect of life is damaged due to the disaster if there is no proper measures and mechanism. After reviewing the existing the data, it is clearly evident that disaster management is very poor from top to bottom. There is big communication gap between Disaster management authority and village community. Community is aware about the disaster but not aware about the preparedness. There is very poor enforcement of the Laws, policy guidelines and Plans. It has remaining is the part of the books chapter and documents, but not implemented. As we discussed and see the results of survey it is shown that community preparedness lacking. Community

preparedness includes to engage the villages people for facing the challenges. But in the Himachal Pradesh, there is no any community preparedness.

6. Suggestions

Few suggestions given below after reviewing the literature and survey:

- To establish the Village Task force (VTF) in the village. In the task force proper training should be provided them.
- To aware the community through workshops, seminar, and conferences.
- To dissemination of information about the hazard and risk area. Proper indication should be provided about the prone area
- Mock drills programs should be conducted in the village school colleges.
- Disaster Management should make the part of core curriculum instead the last units of environment studies.
- To establish the proper communication centre in the community for enhancing the early warning system
- To provide the safety kit for each member of family.

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