
A SYSTEMATIC REVIEW OF COMMUNITY-BASED DISASTER PREPAREDNESS PLAN

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ABSTRACT

The concept of disaster management is presently undergoing a change as the emphasis is on making it more community-based. The top-down approach, it is feared, might not result or lead to collective efforts towards reducing disasters. It is being felt that the interventions should be more community-based. The wrath of disasters, in most cases is experienced by the people at local and hence this needs to be the focal point for mitigation, preparedness and response activities. It is the community which has to take the initiative of assessing their needs and resources so that they are better prepared to face the disaster. In this paper community based preparedness is taken into consideration wherein stress is on the systematic approach and preparedness planning at all the levels of disaster phases.

INTRODUCTION

The term community as such is considered to be a complex term that needs to have a uniform acceptability. In simple terms, it implies a group of people sharing common ideas, resources, environment, aspirations, etc. The most logical definition of a community has been provided by the World Health Organisation in which a community has been defined as 'a group in face-to-face contact having a harmony of interest and aspirations and bound by common values and objectives' (Alley, 1993)

A community- based approach is necessary in not only responding to disaster situations but also in bringing about adequate preparedness with provision of human, material and financial resources. Any disaster preparedness planning needs to give importance to local participation at various levels and ways that would bring desired results to people at grass roots level.

Community-based Disaster Preparedness (CRDP) has to incorporate certain important components.

These include:

- Hazard Mapping and Zoning
- Involving Panchayati Raj Institutions
- Formulating Community preparedness and Contingency Plans
- Forming Disaster Task Forces at the village and block levels
- Capacity building of the members of task force
- Arranging mock drills at the village and block levels
- Networking with NGOs and CBOs.

The core attribute of a community- based approach to disaster mitigation and preparedness is that the principal authority over the programme must rest with the community. This control should be exercised at all key moments of a disaster mitigation and preparedness programme. Local knowledge and wisdom can best identify the needs of a community and the causes of their vulnerability. Naturally, vulnerable people themselves, rather than the bureaucrat or the outside expert, are best placed to evaluate the situation and prioritise their needs. A community's knowledge of the lives and livelihoods of its members is often the most comprehensive accurate information available. The most effective disaster mitigation strategies will be those that build on community knowledge (Palakudiyil and Todd, 2003).

There are three key elements in promoting community-based disaster management. These are:

- Help communities work alongside local government
- Introduce methods of communication; and
- Create structures for coordination.

OBJECTIVES OF THE STUDY

Disaster Preparedness plans facilitate the handling of crisis especially in unforeseen circumstances. A Preparedness plan made at the community level is a comprehensive document which indicates measures to be taken up by the community before, during and after disasters. Keeping in view the need of community preparedness, this study is aimed to achieve following objectives:

- To highlight the significance of community based disaster preparedness,
- To analyse and discuss community-based disaster preparedness plan.

METHODOLOGY

The research paper is a descriptive in nature. The secondary data and information have been analyzed for preparing this paper. The secondary information have been collected from different sources like published books, articles published in different journals, periodicals, conference paper, reports, magazines, working paper and websites.

LITERATURE REVIEW

Disasters are situations that need mobilisation of capabilities and capacities of local population. It is also known that the local communities have an active part to play before and after disasters because:

- A good state of preparedness before a disaster strikes may reduce its impact.
- More number of lives can be saved during the first few hours after a disaster has occurred, before help arrives from elsewhere.
- The numerous problems of survival and health resulting from a disaster are dealt with more efficiently, if the community is active and well-organised (WHO, 1989).

In the face of devastating impact of disasters, the task of supporting the resilience of Indian communities has never been more urgent. Resilience is taken to mean the capacity 'to mitigate, prepare for, respond to and recover from the impact of disaster-in a way which leaves communities less at risk than before. The three Case Studies which we shall be discussing, illustrate ways of enhancing resilience, before, during and after disaster. The first study focuses on the village of Samiapalli the highly disaster-prone state of Orissa, which reveals how prioritising risk deduction before disaster strikes pays dividends in the future. During the 1990s, the people of Samiapalli, with the help of a local nongovernmental organisation embarked on a long process of development, one element of which was to construct disaster-proof homes.

When the 'super cyclone' of October 1999 struck the villages, these houses saved both lives and livelihoods, while tens of thousands of people in weaker homes perished around them. Zaheerabad region of Andhra Pradesh, since mid-1990s, has been suffering an ongoing disaster of chronic food insecurity, driven by drought and the failure of pest-prone cash crops such as wheat, rice and cotton. I-lower, inspired by a local development agency, some of the state's poorest and most marginalised communities have rediscovered traditional, drought-proofing seeds and farming techniques in a bid for self-sufficiency. This initiative has spread to 65 villages. Similarly villages from Patanka in the state of Gujarat rebuilt their homes stronger than before, with the help of a partnership of local and

international aid organisations. Farmers, left unemployed by three years of intense drought, were retrained as masons and helped build earthquake-resistant houses for every family in the village. Building on the success of this initiative, villagers were able to access government funds to create a new rainwater harvesting system to improve both their health and crop yields (World disaster Report, 2004).

Though the community has an important role, their coping mechanisms are undervalued. But as observed in case of any disaster, the responsibility of the community and local government is much more in setting goals, devising rehabilitation programmes, managing recovery, and developing priorities. The role of central and state governments is mostly confined to rendering advice, providing funds towards relief and other resources. Hence, we need to recognise the community as a key resource in disaster management.

Communities and victims are a resource because:

- They are knowledgeable about disasters happening in their own environment and are sometimes able to forecast them.
- They are rich in experience of coping, both in preparedness and in emergencies. Their coping methods - practised over time and derived from their own experience suit the local environment best. The richness and diversity of ordinary people's coping strategies is certainly a resource to be recognised (Ariyabandu, 1999).

There is a clear shift from superimposed efforts to attain development or tackle any crisis that is directed towards the people at risk. Now the capacities, methods and ways through which people at risk manage and respond, and find alternatives to crisis and stress, are becoming important. There is a realisation gaining momentum that the global capacity to prepare for and respond to disaster needs to be strengthened. The development of improved capacity arises from the need to instill the principles of self-reliance and self-help into the vulnerable communities. The communities in many countries are playing a key role in preparedness activities.

In India, in the Saurashtra District of Gujarat, around 10,000 check dams have been built responding to the State Government's "Build Your Own Dam" (BYOD) scheme. Under the project, the government bears 60 per cent of the total cost of the dam while the villagers shoulder the remaining costs through voluntary labour. Similarly in village Rampur in Okhaldhunga District, Nepal, monsoon rains while contributing to agricultural productivity the main livelihood; also bring the threat of soil erosion,

landslides and flooding. Villagers have worked out techniques to 'manage' monsoons, to trap adequate quantities of monsoon rains for agricultural purposes and to let the excess out. Stone works are used to stabilise slopes and to make diversions to check gully erosion. Grass and tree planting are done to reduce soil erosion during the monsoon. All construction and resource management work in the village is done to Jet the flood out without much damage (Dahal, 1998).

Community efforts still are being underutilised due to lack of resources, access to information, technology, awareness etc. This calls for strengthening their capacities in the following areas:

- Assessment
- Monitoring
- Early warning and preparedness systems
- Identifying and working with those who need the assistance
- Accurate and effective communications strategies
- Developing systems for cooperation and collaboration among response groups in the recovery process; and
- Effective leadership in the implementation of preparedness and response programmes.

The Government of India UNDP Disaster Risk Management Programme (DRM) aims to build capacities at all levels to institutionalise the DRM system in India. Under this, community- based disaster preparedness is being popularised. Preparation of CBDP plans are being promoted in 169 districts in 17 states. The components of CBDP include:

- Formation of village Disaster Management Committee
- Review and analysis of past disasters
- Preparation of seasonality disaster calendar by the community
- Mapping risks, vulnerability and capacities of the village by the community
- Constitution of Disaster Management Teams
- Identification of hazard specific mitigation activities; and
- Constitution of Community Contingency Fund. (CCF)

COMMUNITY- BASED DISASTER PREPAREDNESS PLAN

Preparedness is a key component of disaster management. It requires systematic and comprehensive planning. Plans are generally formulated at the national, state, district and village levels. But the emphasis presently is to reach out to the community at the grass roots level and hence

community-based disaster preparedness plans are being advocated. The objective of this effort is to strengthen the capacities of people and institutions at community level to face disasters. The plans are prepared with the involvement of community as they can better identify the existing resources, hazards they are exposed to prevailing infrastructure, resources, coping mechanisms etc. Hence preparedness plan needs to take cognisance of different types of activities needed at various stages of disaster management.

The community- based disaster preparedness requires performance of several types of activities at three different stages i.e., pre-disaster, during-disaster and post-disaster. Those activities are to be identified which can be reflected in the preparedness plan.

Community-based Preparedness in Pre-disaster Phase

1. Orienting the community towards the nature and effects of the disasters to which they are vulnerable.
2. Taking stock of the resources of the community such as schools, primary health centres, cyclone shelters, communication facilities, roads and older infrastructure and skilled individuals.
3. Assessing the risks and vulnerabilities of the community. The various elements at risk that include the physical structures, as well as the vulnerable sections of the community such as women, children, physically challenged, old, etc., need to be examined so that the preparedness measures are appropriately planned.
4. Formulating preparedness plan at the community level, that takes into cognisance the community needs, measures to be taken by the community before, during and after the disaster strikes, resources available at various places, clear allocation of responsibilities amongst all concerned officials, departments, Panchayati Raj Institutions, NGOs, CBOs etc. A properly prepared plan facilitates the community to effectively execute the plan.
5. Specifying the role of community in handling the disaster.

Community-based Preparedness During-disaster

1. Organising Search, Rescue and Evacuation activities. This includes identifying the disaster victims, bringing them to safer places, provision of first aid, distribution of relief, adhering to evacuation plan etc.
2. Providing shelter for people as well as livestock. This includes arrangements for water supply, sanitation, kitchens, fodder for animals, medical services and first aid etc.

3. Clearing of debris from collapsed buildings, bridges, trees, other structures, reestablishing of transport and communication services.
4. Moving of injured to the nearby health centres and hospitals.
5. Disposing of dead humans in order to contain the spread of diseases is another important task. Identification of dead bodies, compliance with police formalities, mobilising resources for disposal of bodies in accordance with religious and cultural practices, are activities which involve the community. Disposal of dead animals is important as it has effect on health and environment.
6. Assessing damages immediately on the occurrence of disaster facilitates quick emergency relief. This is to be done with reference to the number of households, population, livestock, area affected etc.

Community-based Disaster Preparedness in Post-disaster Phase

1. Undertaking a detailed damage assessment covering verified number of human lives, identification of live victims as well as the dead; livestock, infrastructure, damage to crops and the estimated value.
2. Drawing up a comprehensive economic rehabilitation plan that includes restoration of agricultural activity through necessary inputs, rehabilitation of artisans, marginal, small scale and business people, those pursuing other occupations, replacement of cattle, agricultural and other equipment, boats, fishing nets etc.
3. Ensuring social rehabilitation through strengthening of existing health centres, schools, anganwadis, community centres, vocational training centres, psychological counselling to the affected to enable them get back to their normal routine.
4. Building an appropriate monitoring and evaluation mechanism in community-based disaster preparedness programme. This is needed to facilitate proper utilisation and implementation of resources.

Community-based disaster preparedness is essential to assess the damages arising out of disasters, determine the extent and type of assistance. A community-based disaster preparedness plan is a comprehensive action plan which specifies the demographic profile, resources available with the community, measures to be taken before, during and after the occurrence of disaster. It is said to contain an inventory of several types of resources available at the community level, roles and

responsibilities of different administrative agencies, Panchayati Raj Institutions, NGOs, CBOs and community.

Community-based Disaster Preparedness Plan

- A Community- based Disaster Preparedness Plan, broadly is to indicate the following aspects:
- Village profile
- Profile/information about the community
- Disaster profile
- Inventory of resources of the community
- Emergency communication procedures
- Specific roles and responsibilities (of different agencies and functionaries)

COMPONENTS OF COMMUNITY- BASED DISASTER PREPAREDNESS PLAN

Pre-disaster Phase

- Risk assessment and vulnerability analysis
- Resource analysis and mobilisation
- Warning system and its dissemination
- Organising community response mechanism
- Construction and maintenance of cyclone/flood shelters
- Mock exercises and drills
- Strengthening of community self-help capacities
- Specification of roles and responsibilities of various functionaries and agencies. (Panchayati Raj Institutions (**PRIs**), Government functionaries, NGOs, Police, Primary and District Health Centres, Disaster Task Force and Community)

During-disaster Phase

- Search, Rescue and Evacuation
- Shelter for disaster affected (community as well as livestock)
- First aid and other medical support
- Clearance of debris
- Restoration of communication system or use of alternative communication system
- Disposal of Dead
- Relief distribution

- Property security and public safety
- Immediate damage assessment
- Information, Education and Communication (IEC) and training
- Role of various functionaries and agencies. (PRIs, Government functionaries, NGOs, Police, Primary and District Health Centres, Disaster Task Force and Community)

Post-disaster Phase

- Damage and needs assessment
- Psychological support to the victims
- Restoration of lifeline support
- Agricultural, economic and social rehabilitation
- Information, Education and Communication and training
- Role of various functionaries and agencies,

(PRIs, Government functionaries, NGOs, Police, Primary and District Health Centres, Disaster Task Force, and Community)

The community- based disaster preparedness plan is to reflect the needs, resources and strategies mutually agreed upon by the local people. The activities are to be clearly defined, specified, and target-oriented, in consonance with the capacities and capabilities of the community. The plan with its components as discussed above is comprehensive that provides counter-disaster measures including preparedness and mitigation, provisions for emergency action, ways of creating awareness amongst the community and also indicate the developmental requirements to establish a link between disasters and development.

CONCLUSION

The community- based disaster preparedness through various measures such as formulation of plans at community level, evolving preparedness and mitigation measures, generating awareness etc. can go a long way in effective disaster management. The community by organising itself in the form of committees, task forces and groups will be able to assess their strengths, weaknesses, and experiment with innovative methods, identify skills etc. Human beings everywhere are organised at the community level to carry out collective tasks. The people live in diverse social situations and accordingly their priorities could vary. But the community level is the key focal point for disaster management efforts, particularly in the mitigation and preparedness process. This needs a strong

commitment from the community and commitment on the part of local authorities to motivate community for participation. Any effort towards mitigation or preparedness or recovery should be to work with the communities instead of doing things for them.

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