

# Community Involvement in Disaster Risk Management (CBDRM)

## A Study of Disaster Management Volunteers

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### Abstract

*Communities are always the first to respond in any disaster situation, and they are the ultimate sufferers. Local communities, as first responders, often become a key stakeholder in all stages of disaster management. Numerous actors, including governments, technical and educational institutions, and local communities, need to be involved in the disaster risk reduction strategy since it is based on an ongoing risk and risk assessment strategy. Their efforts will need to be combined with planning and development techniques that empower people and encourage broad dissemination of knowledge. In this article, the authors aim to understand the involvement of the community in disaster risk management. The article explores the knowledge and awareness of the community regarding types of disasters, hazards, vulnerability and involvement of the community in disaster risk management programmes. The relevance of social work to ensure community involvement in disaster risk management is also explored in this article. The article employs both qualitative and quantitative methods to understand people's participation in community based disaster risk management plans and the preparedness of the community. Findings reveal that although communities were aware regarding types of disasters, hazards, and vulnerability, they were not aware of any linkage between risk, capacity, and vulnerability. The study revealed the need for greater involvement of the community in the development of disaster management plans. The principle of community organization in social work was found to be relevant to ensuring community participation in disaster risk management.*

**Keywords:** Disaster Management, Community Participation, Community Based Disaster Risk Management, Social Work

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## 1. Introduction

Disaster Management has undergone a paradigm shift in recent years, beginning from relief and response to disaster risk reduction (DRR) and evolving into community based management. Community-focused disaster management is a more proactive way to address disaster management as compared to the earlier reactive model. Involving communities in managing their risks – along with necessary stakeholder support, is not only a moral imperative but also a practical management strategy (Bhagat, 2017), to leverage the strength of local wisdom, social leadership, collective action, and the role of social work. The recent scenario of disaster emergence has made it inevitable for communities across the world to keep themselves prepared for any natural and even human-made disasters, as the probability of any unexpected disaster may hit anywhere, irrespective of any previous history, culture, and location.

Several definitions of CBDRM are available that are developed by CBDRM practitioners based on their perceived experience. Although, in general, some agreed definition defines CBDRM as a process of disaster risk management that involves active participation of the community at risk in the identification, analysis, management, monitoring, and evaluating disaster risk in order to reduce their vulnerability and increase capacities (Pribadiet. al. 2008). CBDRM is “the efforts in empowering the community to be able to manage disaster risk with some levels of involvement of community groups or stakeholders in the planning as well as the use of local resources for the implementation by the community themselves” (Abarquez & Murshed, 2004). Others define CBDRM as the framework of inclusive and sustainable disaster management where the community is involved or facilitated to be actively involved in disaster management (planning, implementation, monitoring, followed with an evaluation) with the use of most optimal possible local resources as well as possibly the least external resources (Delica-Willison, 2003).

The community-based disaster risk management (CBDRM) approach seeks to actively involve the community in the identification, analysis, implementation, and monitoring of any disaster risk situation with the aim of reducing their vulnerabilities and concentrating on enhancing their related capacities. This is because the community is the first responder in the event of any disaster. Community participation is therefore very crucial, as it is the primary source of information on

knowledge about local requirements and suitable actions to reduce the risk of disaster. This enables the community to enhance its capacity to absorb, monitor, and recover from any disaster (National Institute of Disaster Management, 2021).

The involvement of the concerned community in the management of the risk of disaster at the regional level is supported by the Community-Based Disaster Risk Management (CBDRM) approach. This calls for a series of actions and efforts, including community self-interpretation of hazards and disaster risk, monitoring, reduction, and evaluation of their performance in disaster risk reduction. Apart from this, an optimal mobilisation of resources in the community is also essential (Davies & Murshed, 2006).

CBDRM holds the principle of “leave no one behind,” which means including everyone irrespective of age, gender, race, religious group, minority group, and ethnicity. In addition, CBDRM is also seen as a unique process of empowering communities that lessens stakeholders dependency, especially during disaster emergencies. The affected community gradually becomes self-reliant and more capable. Once community capacity is strengthened with reduced vulnerability by using internal resources, the impact of the external vulnerability is reduced (Department of Disaster Management, n.d.).

Table 1 below presents CBDRM approaches in comparison with the conventional disaster management approach. CBDRM ensures sustainability as a result of the involvement of sufficient internal local stakeholders. The CBDRM approach focuses on the preparedness of the community to avoid and reduce damage and loss (United Nations Office for Disaster Risk Reduction, 2015; Helu & Samra, 2015).

**Table 1 : Comparison of CBDRM Approach with Conventional DM**

S.No	Aspect	CBDRM	Conventional
1.	Communication on disaster risk	Data and information are more symmetrical and richer; rapid information sharing among stakeholders	Asymmetrical and only based on experts' view and the knowledge of the elite. Risk communication is top-down

2.	Transaction of knowledge and practice	Transaction of knowledge is done “peer-to-peer” between the community and experts/facilitators. Cross-fertilisation of knowledge among stakeholder take place	Community indigenous knowledge is overridden by experts’ opinion that is not sensitive to the context of local risk
3.	Time effectiveness	More time investment is necessary at the beginning but in the long term it is considered more sustainable	Profitable at the shorter term but not sustainable in the longer term
4.	Cost effectiveness	Local resources (knowledge, labour, skills, capital) are made available to the maximum extent possible	More cost for longer work
5.	Effectiveness	Involvement of many stakeholders result in many more local cadres with the skills in local risk reduction	Less skilled local actors, dependency to external parties (experts, the government, NGO)
6.	Legitimacy	Community perceives program in a more friendly way. The root causes of vulnerability and risk such as gender inequality, age, and class can be reduced with participation because it	Low participation, resulting in low legitimacy due to marginalisation of the highly vulnerable of the marginalised

		opens up the space for the marginalised	
7.	Equality	Equality is a not negotiable. The level of risk distribution and the most vulnerable is the target	Lack of vision on reduction of vulnerable groups and not capable of reducing root causes of vulnerability

(Note: Adapted from Community-Based Disaster Risk Management (CBDRM) Guidelines, pg. 21, by Lassa et al., 2017, MPBI)

Understanding of the CBDRM process is essential as the community living with hazards is the ultimate sufferer. Ignorance towards such understanding will result in an unsustainable disaster risk reduction implementation at the basic level. Thus, disaster risk management plans must emerge with the awareness of local community capacity and community priority, only then implemented efforts remain destined sustainable (National Disaster Management Authority, 2019). CBDRM plans should also include social workers at micro, mezzo, and macro levels during preparedness, response, recovery, and mitigation (Javadian, 2007). Globally, communities are constantly facing new challenges, and most of the disasters are imposed as a threat to development plans, poverty reduction strategies, and the achievement of Sustainable Development Goals (SDGs) (United Nations, 2023).

In India, the National Disaster Management Plan was prepared in 2015 in consonance with the Sendai Framework for Disaster Risk Reduction, a global blueprint for disaster losses (United Nations Office for Disaster Risk Reduction, 2016). In Delhi, effort towards Community Based Disaster Risk Management (CBDRM) has included collaboration of the Delhi Government with the National Disaster Management Authority (NDMA) and the National Institute of Disaster Management (NIDM) to develop community based strategies. A Common Alerting Protocol based on an integrated alert system has been initiated by the National Disaster Management

Authority for the dissemination of targeted alerts to people in multiple languages through SMS. Emergency Response Support System through State EOC is now managing incidents with geo-tagging support to locate the incident site so the nearby Emergency Support Functionaries can immediately respond. Under the Apda Mitra scheme, the NDMA is providing training to volunteers for effective disaster response search and rescue. Apart from the Delhi Government, NGOs and voluntary organizations are also actively involved in capacity building, generating awareness, and conducting training sessions to empower local communities. Posters, leaflets, and manuals are used for awareness generation. The disaster preparedness planning is being done at all levels of the community, especially in schools where a large number of children are available. (National Disaster Management Authority, 2024a; National Disaster Management Authority, 2024b; NIDM, 2021).

The efforts of the government would remain limited without the active participation of the community members. Studies indicate that community members including professionals, housewives, retired persons, members of the Resident Welfare Associations, and students- both school students, college and university students were unaware of the disaster plan and the authorities responsible for implementation of such a disaster plan in Delhi. Members were also ignorant about their role during pre- and post disaster and the importance of training for disaster (Gautam & Tewari, 2020). A similar study reported unsatisfactory knowledge and practices regarding disaster preparedness (Chetry, et.al, 2013).

Although several international and national institutional frameworks provide platforms for integration of CBDRR at the community level, these provisions would be effective only when specific local needs are met. The involvement of all sections of the community is essential for the effective implementation of the already available disaster risk management plans. Thus, the present study attempts to explore the involvement of the community volunteers in disaster risk management programmes in Delhi.

## 2. Objectives

The broad objective of the study is to understand the involvement of the community in disaster risk management programmes.

The specific objectives of the study are the following:

- 1) To explore knowledge regarding hazards, vulnerability, and awareness regarding types of disasters;
- 2) To examine the involvement of the community regarding disaster risk management programme; and
- 3) To understand the relevance of social work to ensure community involvement in disaster risk management.

### **3. Research Methodology**

Both quantitative and qualitative methods were employed to study the community involvement in CBDRM. Employing stratified and random sampling techniques, quantitative data were collected from civil defense volunteers, NYKS, NSS volunteers, school students, school authorities, RWA representatives, village Pradhan, etc. using an interview schedule from 220 respondents (20 from each of the 11 districts). A qualitative method was applied to understand the relevance of social work in CBDRM. Respondents for qualitative data were selected using the purposive sampling method. Qualitative data were collected by employing an interview guide consisting of open-ended questions to facilitate in-depth interviews with 15 practitioners from the fields of disaster management and social work. 5 FGDs were conducted in total. The sample size of FGDs was 75 (5x15).

For the present study, the National Capital Territory (NCT) of Delhi was selected. As the research was based in Delhi, eleven revenue districts were selected for the study based on hazard profiles using stratified random sampling.

Primary data gathered through the interview schedule, field note, and observation were coded and classified. Data analysis was done using an Excel spread sheet, an advanced excel tool, as well as SAS software for theme-based graphical representation of data. Qualitative data were analysed by looking for similarities and differences, under different themes, and finally developing categories as per the research objectives.

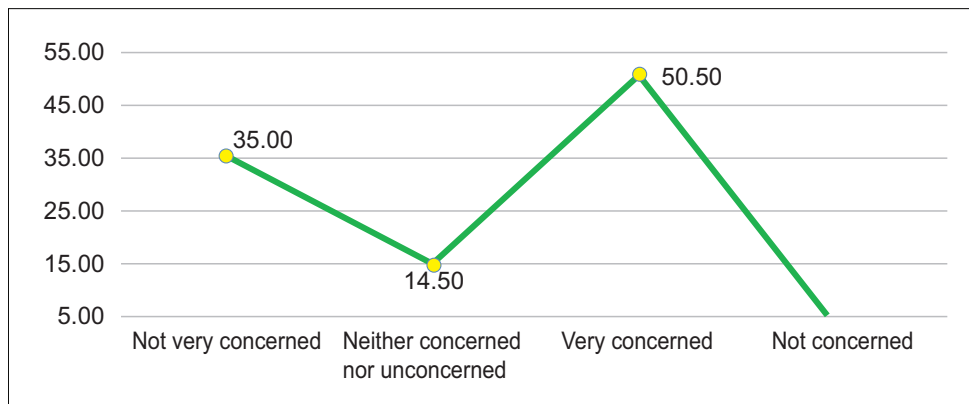
### **4. Results and Discussion**

To assess the impact and effectiveness of the CBDRM programme in various districts of Delhi, a detailed interview schedule was prepared for a total of 220 volunteers who

had engaged in Community Based Disaster Management activities at the field level such as civil defense volunteers, NYKS, NSS volunteers, school students, school authorities, RWA representatives, village Pradhan, etc.

#### 4.1 Concern Regarding Disaster Affecting the Community

In order to map the sensitivity index of the study participants towards any emergency or disaster that may affect the community, four questions were asked to the respondents on how much concerned they were about emergency/disaster affecting their community. The received sensitivity index is illustrated in the graph (Figure 1) below. Half of the respondents (50%) indicated that they were concerned below any emergency disaster that may affect their community, 35% of the participants claimed that they were not concerned, 14% showed a neutral approach.



**Figure 1 : Sensitivity index of the community**

It is pertinent to mention here that the local community can be extremely important in terms of disaster readiness, response capabilities, and disaster mitigation, including advocacy. For this reason, a disaster management programme may be created in collaboration with the affected communities while keeping in mind the existing socio-economic realities. It can put the community on a path of sustainable development with the inclusion of several cross-cutting issues such as gender, environment, and social cohesion to measure the social impact of recovery action in India (National Research Council, 2006).



## 4.2 Knowledge and Awareness Regarding Disaster

### 4.2.2 Awareness Regarding Types of Disaster

A total of 220 study participants were asked questions on the basic knowledge regarding the types of disasters. The observed results are illustrated in Figure 1. Among all the responses received, an almost equal proportion of participants were aware of manmade disasters (39%) and natural disasters (38.50%). 13.50% were aware of both natural and manmade disasters, 8.50% were not aware of any of the disasters and, 0.50% of study participants did not respond to the question. The following figure (Figure 2) represents a graphical representation of the awareness of respondents regarding types of disasters.

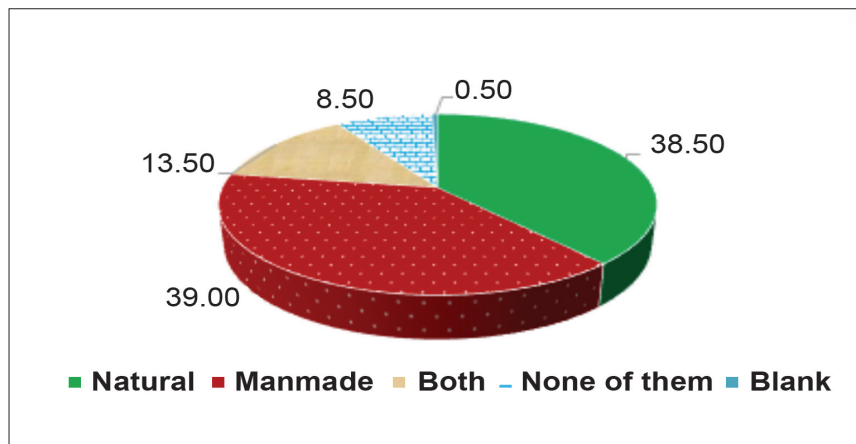


Figure 2 : Awareness regarding types of disasters

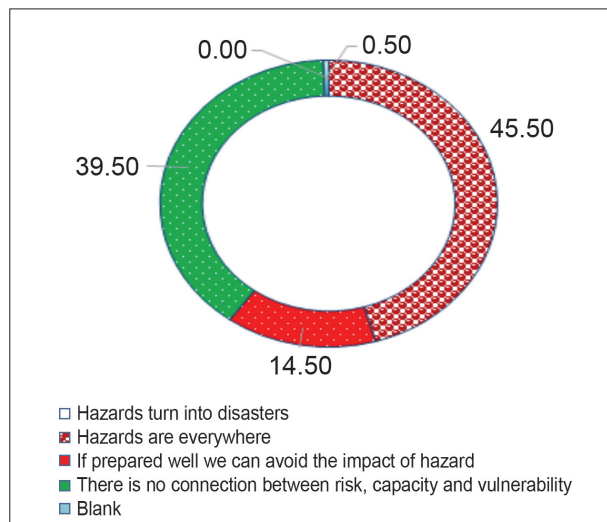
It is important to have knowledge and awareness about disasters because local communities, as first responders, can play a crucial role in disaster preparedness, mitigation, response, and recovery. The potential of local communities to deliver on this expectation has been recognized in global and national frameworks (United Nations, 2023; Ministry of Law and Justice, 2005). Thus, appropriate awareness, adequate preparedness, and effective mitigation strategies at the local level involving the most vulnerable communities are imperative for minimizing the impact of any disaster at the local level. District Disaster Management Authorities of Delhi must organise more community-level programme for creating awareness about disaster management.

### 4.2.3 Knowledge Regarding Hazard and Vulnerability

In order to assess the knowledge of the study participants regarding hazard, and vulnerabilities associated with the disaster, respondents were asked the following four statements:

- Hazards turn into disasters.
- Hazards are everywhere.
- If prepared well, we can avoid the impact of hazard and
- There is no connection between risk, capacity, and vulnerability.

The majority of the participants (45.50%) agreed hazards are everywhere, 14.50% agreed to the fact that “if prepared well, we can avoid the impact of hazards” as a correct statement. 39.50% of the respondents were not able to develop linkages between risk, capacity, and vulnerability, whereas 0.50% avoided giving any response (Figure 3).



**Figure 3 : Concept of Hazard and Vulnerability**

Although the term ‘vulnerability’ is usually used in the context of natural hazards and disaster situations, it has got varying meanings in different disciplines involved in risk research (Fuchs et.al., 2012). Knowledge regarding hazard, and vulnerability

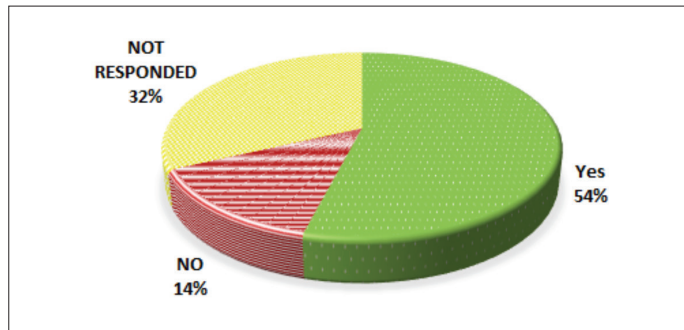
enables preparedness, response, and recovery from a disaster (Du et. al. 2015). Also, understanding regarding risk and vulnerability is an important component of the pre-disaster phase of the hazard and disaster management cycle (Berry, 2009).

### **4.3 Involvement of Community in Disaster Risk Management (DRM) Programme**

The importance of awareness of the community about the disaster risk management programme was observed in the responses received from the study volunteers. While almost 45% of the study participants confirmed that they were aware of the DRM programme around 55% indicated that no such programme was conducted in their community and they were not aware of any such programme. According to the International Federation of Red Cross and Red Crescent Societies (2023), reducing the impact of local hazards requires raising community awareness on disaster risk reduction in accordance with the local hazard context, and on the basis of the findings of vulnerability capacity assessment (VCA) in target communities. Preparedness and capacity building of local communities are essential for effective response (National Disaster Management Authority, 2009).

#### **4.3.1 Involvement of Community in The Process of Disaster Management and Awareness of Potential Hazards**

To envisage the information about the community's involvement in the process of disaster management development plan and their awareness about the associated potential hazard, respondents were asked questions on whether they were involved in creating community awareness on potential hazards and disaster management plan. The majority of respondents (54%) confirmed that communities were aware and involved themselves in the process of disaster management development plans, and they were also aware of the associated potential hazard. Only 14% of the study participants felt that communities were not well aware about the associated hazards and were not involved themselves in the development of DM plans, whereas 32% did not respond to the present question as they were not aware of any such programme being conducted by District Disaster Management Authorities in the communities. Observations are depicted in the Figure 4 below:



**Figure 4 : Awareness of Community towards potential hazard and involvement in process of DM plan**

To provide disaster risk information through the involvement of community-based organizations and nongovernmental organizations, the United Nations Office for Disaster Risk Reduction (2015) emphasizes community mobilization and improving collaboration among individuals at the local level. It also talks about conducting public and community consultations and assigning concrete roles and responsibilities to community representatives, as necessary. Decision-making is done through appropriate legal frameworks.

#### 4.3.2 People's Participation in Community Based Disaster Risk Management Plans

The compiled data below presents the responses received from the study participants about people's equal participation in CBDRM plan development. Respondents were asked to respond on the effectiveness of the people's participation in the CBDRM plans. Most of the respondents (around 50%) agreed that equal participation of the people is essential for effective CBDRM plans, while 14% of the study volunteers disagreed with that. 21% of the participants gave neutral responses and 15% of respondents strongly disagreed. The responses have been depicted in the table below through the Likert scale:

**Table 2 : People's Participation in CBDRM Plan**

People's participation in CBDRM Programme	Agree	Neutral	Disagree	Strongly disagree
Respondents' views	50%	21%	14%	15%

In order to lessen vulnerability and increase capacity, CBDRM seeks to actively involve the community in the identification, analysis, assessment, monitoring, implementation, and evaluation of disaster risks. Such an approach aims to address local issues, difficulties, and problems from the perspective of individuals experiencing it every day. Thus, for an effective CBDRM programme, equal participation of communities in the planning and decision-making process may be ensured (Department of Disaster Management, n.d.).

#### 4.3.3 Importance of Disaster Management in Community-Based Risk Reduction

The following figure (Figure 5) depicts the views of the respondents regarding the importance of the Disaster Management Programme for Community-Based Disaster Risk Management. Although the majority (39%) of the participants agreed that the disaster management programme was important for CBDRM, almost an equal number of participants (37%) were unable to decide for the claimed statement. 10% of the study participants strongly disagreed that a disaster programme is important for CBDRM, 14.50% participants disagreed with the significance of the disaster management programme in CBDRM.

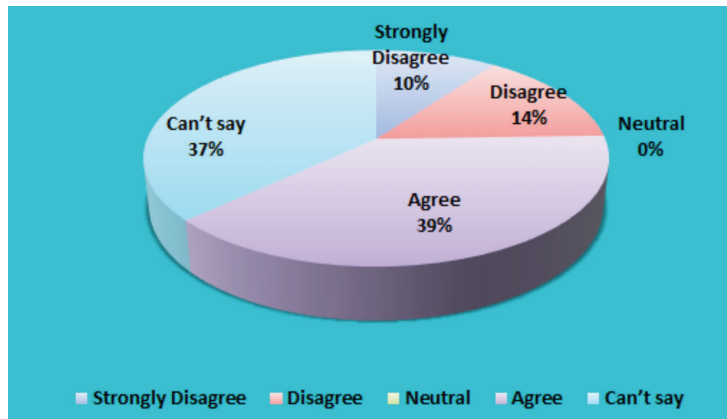


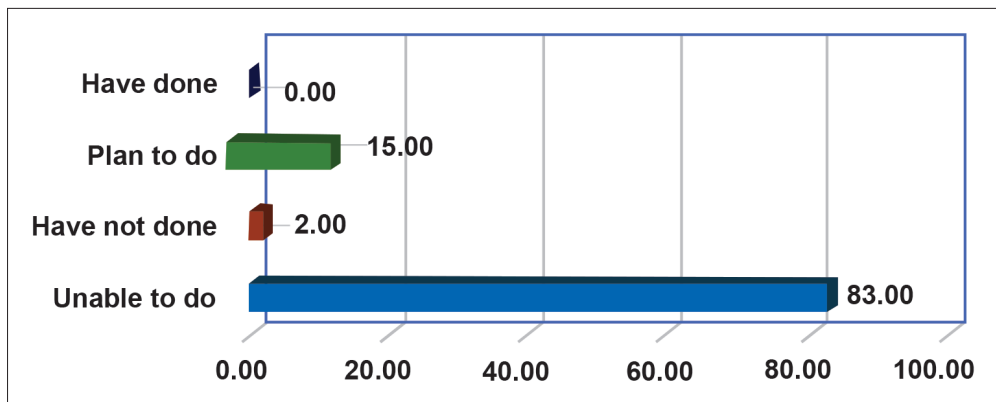
Figure 5 : Importance of Disaster Management Programme in CBDRM

It is now acknowledged that the role of communities during disasters is not limited to first responders but key stakeholders in managing risk and building long-term resilience to disasters. Based on the experiences and learning, the Disaster Risk

Management programme was found to be very effective in CBDRM at all levels (Myanmar Red Cross Society, 2013).

#### 4.3.4 Preparedness for Disaster

The next question was formulated to gain an insight into the level of preparedness and confidence for taking action during a disaster and how it had impacted the overall disaster management process at the community level. The results of the observations are illustrated below in Figure 6:



**Figure 6 : Preparatory steps taken by trained volunteers for probable disaster**

While 15% planned to take some steps, a negligible number (2%) didn't do anything. The majority of the trained study volunteers (83%) were unable to take any preparatory steps for probable disasters. It is observed that although most of the respondents were trained in the basics of disaster management skills, they were not able to take any preparatory steps at their respective communities for minimizing the impact of any probable disasters.

CBDRM is a comprehensive process of participation, partnership, inclusiveness, and ownership of the communities. CBDRM primarily focuses upon mobilizing the community to prepare and respond to extensive risk events. However, due to the lack of its effectiveness at the community level in addressing underlying risk factors of the community falling in various districts of Delhi, ownership of the programme has not been created.

It is noteworthy to mention here that community participation and self-help groups (SHGs) by women have been instrumental in drought mitigation programmes, as indicated by the National Disaster Management Guidelines on Management of Drought (National Disaster Management Authority, 2010a). Some of the important tasks undertaken by the SHGs involved rainwater harvesting, running Public Distribution System, and overseeing water distribution (National Disaster Management Authority, 2010b).

#### 4.3.5 Preparedness of the Community

The final agreement of the study participants was analyzed with respect to linking the preparedness of the community and the safety of the community. Respondents were asked if a prepared community is a safe community. While a majority of the respondents (47%) agreed, almost an equal number of participants could not give any response, and 7.50% of study participants gave neutral responses.

**Table 2 : People's Participation in CBDRM Plan**

A prepared community is a safe community	Percentage
Agree	47.00
Can't Say	45.50
Neutral	7.50

The response to Cyclone Phailin in India serves as a reminder of how enhanced community readiness to the changing impact of catastrophe hazards can lead to a notable decrease in fatalities. This has been possible because of ten years of preparedness training, disaster management planning exercises, raising awareness, and several structural and non-structural measures (including the construction of multi-purpose cyclone shelters) by multiple stakeholders, including state and national governments, UN agencies, NGOs, etc. However, the extensive damage caused to livelihoods, shelter, and other assets, as well as challenges to the long-term recovery of those affected, highlight the need for a systematic approach to building the resilience of communities (Parida et al., 2018).

## 4.4 Relevance of Social Work in CBDRM

### 4.4.1 Role of Social Workers in CBDRM

To assess the varied roles of social workers in disaster risk management, respondents were asked the following questions regarding the role of social workers:

- a) Mobilizing people;
- b) Providing awareness and training;
- c) Supporting in the development of Disaster Management Plan;
- d) Organising mock drills; and
- e) All of these.

While a majority (40.50%) of respondents felt that social workers will be able to mobilize affected people, 37.50% of participants confirmed all the enlisted significant roles to be played by social workers in the CBDRM process, and 7.50% of participants confirmed that the role of social worker involved providing awareness and training. None of the participants felt that social workers only will provide a supporting role in the development of a disaster management plan. Figure 7 provides the details of the response below:

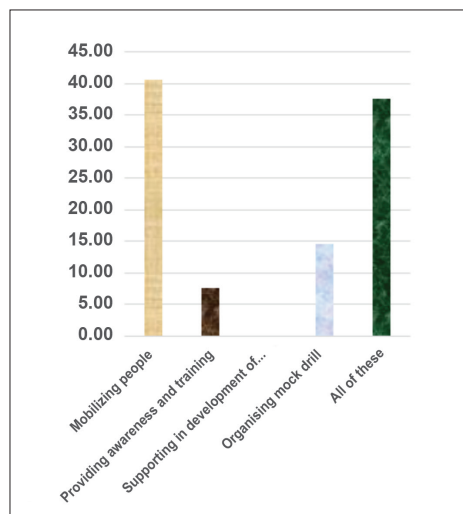


Figure 7 : Roles of Social Workers in CBDRM



Qualitative data revealed that all the experts from the field who were interviewed and the present study participants agreed that social workers play a significant role in the process of community-based disaster risk management. A pool of volunteers from organizations like AAPDA MITRA, NSS, NYKS, etc. contributed towards mitigating the impact of disasters at the community level. All these local facilitators including volunteers, leaders, CSOs, and NGOs, are an important aspect of the CBDRM process. However, all these volunteers need to get trained at regular intervals frequently on all significant aspects of CBDRM in order to support the community. Equal participation of the local community and volunteers is significant in the risk reduction process. Transparency and partnership are two significant components of CBDRM, which may be ensured with the support of local social workers and volunteers.

Social workers engage in a wide range of activities and collaborate with varied groups and organizations, including those involved in disaster response and also those focused on readiness. Thus, social workers can help in lowering the risk of disasters. Social workers play a crucial role as educators, community workers, and disaster planners during disaster preparedness and prevention; counsellors, case managers, and administrators of social protection during disaster response; and as advocates, monitoring and evaluation officers, and development facilitators during disaster recovery (Dickson et al., 2022).

#### **4.4.2 Importance of Participatory Tools to Ensure the Participation of People in the Disaster Management Process**

In order to ensure the participation of the people in the disaster management process, respondents were interviewed regarding the inclusion and implementation of any participatory tools. The collected responses are represented in Table 4 below. While 39.50 % of respondents agreed that participatory tools by social workers ensure the participation of people in the DM process, almost 45.50% of the participants disagreed, and 5% gave neutral responses for the same.

Table 4 : Use of Participatory Tools by Social Workers

Participatory tools by social workers may ensure participation of people in the DM process	Percentage
Agree	39.50
Disagree	45.50
Neutral	15.00

Participatory approach, wherein all members are encouraged to participate in decision-making, is vital in fostering effective community ownership. A participatory approach involves coordination and cooperation among various stakeholders of the community through mutual learning and voluntary participation. Social workers can encourage disaster risk reduction and preparedness by acting as a facilitator, enabler, and resource provider. They can play an important role in facilitating participatory disaster risk assessment by involving local people, community leaders, and subject experts.

Qualitative data revealed the following tools that may be used by social workers for ensuring people's participation:

- **A Seasonal Calendar** may be developed with the support of local people in the community meeting. The timeline and historical profile show when hazards occur and when livelihood activities and other significant events take place.
- **Venn Diagram** : A Venn diagram may be used to assess the needs of the community. The size of the circle represents the importance, significance, and impact of various felt and perceived needs of the community.
- **Interview Method** : Individual, group, and key informant interviews may be used to get historical data of disasters, develop resource inventory, and do hazard mapping.  
Focus Group discussion: Focus Group Discussion may be employed to ensure the perspectives and experiences of all stakeholders in the community across class, caste, and strata.
- **Transect Walk** : A systemic walk could be done within the community with a

semi-structured format to learn more about hazards, vulnerabilities and exposures of the potentially affected people.

Qualitative data revealed the relevance of the principle of community organization to CBDRM. Community Organisation is a means and not an end. Fact-finding, and needs assessment, identification, mobilization, and utilization of the available resources, participatory planning, community rights for self-determination, etc. are essential in community organisation. The notion of community organization developed when a variety of institutions and organizations came together to meet the basic needs of the community. It is a strategy that focuses attention on the needs of the community, fosters a sense of community integration, and facilitates interpersonal cooperation (Siddiqui HY, 1997). Most of the participants confirmed that some of the common and overlapping principles include ownership, partnership, and participation.

The most common principles of community organization and development include the following :

1. **Community Participation** encourages everyone in the community to participate at any level and welcome their valuable contribution. At all organizational levels, volunteers and community members play a crucial role in planning, decision-making, provision, participation, direction setting, and evaluation.
2. **Community Ownership** means members of the community actively participate in decision-making and also own all the activities.
3. **Inclusive Approach** : It is necessary to mainstream women, children, especially abled persons, aged in all government schemes and policies wherever possible and promote disaster management plans inclusive with defined Standard Operating Procedures for these vulnerable sections. A dual approach is required to strengthen the disability induced disaster response in the country by building the capacity of local and state level actors, including health practitioners, grassroots organizations, and social workers.

The fundamental principle of community-based disaster risk management (CBDRM) and community organization involves the development of bottom-up processes arising from the communities themselves. Social workers prefer to use three

primary methods, viz. casework, group work, and community organisation during natural hazards. They provide psychosocial counselling, and perform different roles of educator, counsellor, and broker, and work with other stakeholders during and after the occurrence of a natural hazard (Matlakala et al., 2022).

## 5. Conclusion

This study attempted to understand the involvement of community volunteers in disaster risk management programmes. As evident from the result, half of the participants were concerned about the occurrence of any emergency disaster, and it is apparent to mention here that more concern of the community is essential towards any disaster affecting their community. This will ensure greater participation of people in the planning of disaster management programmes. The study indicated that the awareness of the community regarding the types of disasters was significant, with an equal proportion of participants being aware of both natural and man-made disasters. Although the majority of the study participants agreed about the presence of hazards everywhere, a significant proportion of respondents were not able to develop any link between risk, capacity, and vulnerability. It is imperative to conclude that the awareness of the community regarding types of disasters and knowledge regarding hazards, and vulnerability is essential in planning any disaster management programme. The study also explored the involvement of the community regarding disaster risk management programmes, and it was found that a significant percentage of the study population (32 percent) were not aware about programmes being conducted by the District Disaster Management Authorities in the communities. Just half of the study respondents agreed for the need of people's participation in community-based disaster risk management plans. Similarly, a significant proportion of respondents (37 percent) couldn't decide on the importance of disaster management in community-based disaster risk reduction programmes and a majority of study participants reported being unable to take any preparatory steps for minimizing the impact of any probable disasters in their respective communities. It may be concluded that although there is a well placed mechanism in the prevention and management of disasters in India, the involvement of the community remains limited. The Community should be made aware of the presence of the disaster

management programme for more involvement and participation. Ensuring people's participation and envisaging their role in CBDRM plans is the need of the hour for making the community better prepared for any future occurrence of disaster. This study highlighted the relevance of social work and its methods, especially community organization, in ensuring greater community involvement in CBDRM programmes. A majority of the study participants reported that social workers are better equipped in mobilizing affected people. Tools of social work, viz. preparing a seasonal calendar, Venn diagram, interview method, focus group discussion, and transect walks may be used for ensuring people's participation. Community participation, community ownership, and an inclusive approach are some of the common principles in social work and CBDRM that may ensure greater involvement of the community in disaster risk management programmes.

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