Project Report

on

Community Involvement in Disaster Management

Prepared by

Micro Mission-02: Community Policing National Police Mission Bureau of Police Research & Development 2020-21

COMMUNITY INVOLVEMENT IN DISASTER MANAGEMENT

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गृह मंत्रालय भारत सरकार Ministry of Home Affairs, Govt. of India

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Project Version	Final Revised Draft for Circulation and Feedback
Date	11 January 2021

1.0 PREAMBLE

1.1 Introduction

The UN has ranked India as third, after China and the US, in recording the highest number of natural disasters over the last 20 years (2000-19) paying a huge economic and human cost. In a report titled 'Human cost of disasters, an overview of the last 20 years' released by the UN Office for Disaster Risk Reduction (UNDRR) in September 2020, global economic losses have been estimated at \$3 trillion in the last two decades. The study has avoided giving country specific data in the report. The study reveals that global warming is causing more climate related disasters, the frequency of which has increased by more than 60% in the last two decades compared to the previous two. Extreme weather events – floods, storms, heatwaves, droughts and wildfires -accounted for almost 91% of the 7,348 natural disasters in the last 20 years as compared to 4,212 recorded between 1980 and 1999. The study found that disasters have claimed approximately 1.2 million lives, an average of 60,000 per annum and affected over 4.0 billion people over the last two decades. COVID -19 is the latest proof of how disasters are fundamentally changing human life in all its aspects. The role of the community which bears the first and direct impact of the disaster becomes important for any sustainable, efficient and effective disaster management and mitigation program.

Disasters can occur anywhere in our country due to India's very high vulnerability. Only a few of the states in the country are fully sensitized and equipped to deal with them effectively. Various aspects of Disaster Management (DM) cannot be dealt with without sensitizing the affected population and enlisting their active cooperation in the implementation of various components of the DM plan. However a lot remains to be done in this direction.

This project focuses on recognising the community as an important stakeholder, strengthening its involvement, and reinforcing the bond between the district authorities and the community for a more effective and robust disaster management program.

1.2 Project Description

Community members can play a vital role in reducing the impact of a disaster. They are generally not passive victims; they are the most vulnerable to disaster and experience its maximum impact. Because of their knowledge of the local topography, resources and livelihoods options available, local communities must be involved in disaster management programmes from the start, and supported by initiatives to develop their capacities and linkages so that they can help overcome the damage. This approach to mitigation can avoid many of the dis-economies and mismatches which characterize conventional DM programmes. Local knowledge in decision making results in the best use of available local resources, thus giving optimum results. There are a few states where the strength and expertise of the community has been harnessed and utilized very effectively for saving human life and property during disasters.

To achieve this, a new approach and a different set of skills for disaster mitigation planning are required. Instead of starting off from a global analysis of hazards and their effects, within which specific mitigation measures are designed, the new methodology would begin with an analysis of local conditions of vulnerability. This means that mitigation must become an enabling activity, and disaster planning must build incrementally from a series of small-scale interventions incorporating these gradually into a wider synthesis.

The key to this approach is to strengthen the District Disaster Management Authority (DDMA) so that it can work with and through communities and their organizations. The DDMA should give priority to the following tasks:

- Fulfill all the responsibilities envisaged in the DM Act, 2005, and play a
 more functional and dynamic role in the preparatory phase of disaster
 management and mitigation.
- Strive to integrate the community in all its endeavors for more effective and efficient utilization of the available resources.
- Involve the community in disaster management and mitigation by building up their capacities and giving their involvement a form and structure for an effective, cooperative, sustainable and robust disaster management mechanism.

- Create opportunities for deliberation and learning from disasters, building up awareness for making disaster management more effective.
- Provide technical and expert advice to communities to help them to implement their own mitigation projects and programmes, and to partner effectively with government agencies.
- Focus on the preparatory and response aspects of disaster management for saving human lives and property.

The DDMA is strategically placed to play the most pivotal role in understanding and evaluating the strengths of the community during a disaster/crisis situation. Its functionaries can interact with the various village level citizen groups/volunteer groups who have traditionally played a very important role in disaster management. These interactions can be used to develop joint training regimens, inventories and protocols which will go a long way in making these community interventions more efficient and will also help in strengthening the organic link between the community and the administrative machinery. This project will be implemented under the overall superintendence and control of the DDMAs.

1.3 Role of Police in Disaster Management

A question may arise why the police should have a project to prepare itself for Disaster Management while many of the actions recommended in this project report should ideally be done by the DDMA. No one doubts that police organisations have a major role in disaster management not only in rescue as a first responder but also in relief operations and providing a variety of services to the distressed population. Given its more frequent and close interactions with the community and the community policing programs that many police forces have been implementing, the police is better placed than other government departments to enlist community support and involvement in DM. Moreover, its responsibilities during DM are quite varied and widespread. Its role is so vital that other agencies involved will find it extremely difficult to operate in a disaster situation without its active support. It will have to keep the areas where search and rescue operations are going on free of crowds of onlookers who will hamper the operations. It will have to keep roads/pathways free for the movement of rescue and relief teams, emergency services and supplies and evacuation of the injured. It will have to provide security to relief camps, storage and distribution points of relief material, hospitals, men and equipment's involved DM work etc. and will have to deploy

several mobile and static parties for this. The police will have to take steps to prevent looting, thefts etc. which unfortunately are fairly common in disaster situations. The disposal of dead bodies of human and cattle causalities also often fall on the police. The local Police, whose resources will be highly stretched at such times, will have to enlist the help of loyal community volunteers to perform all these. It will have to provide security to/liaise with/give guides to relief workers and uniform agencies like SDRF, NDRF, Army, Navy, Air Force etc. Above all, in any major disaster the local community and the police quickly come together to undertake rescue and relief work even if there are no orders, SOPs, or prodding from their seniors. Though there is an overlap of many of the abovementioned functions with that of DDMA and other government agencies, looking to the fact that DDMAs a generally not well prepared in places that are not vulnerable to disasters regularly, it is necessary for the police to be prepared in advance as when any disaster strikes, the police will have to take up many of these tasks. Even where disasters are common and DDMAs are well managed, generally the police are called upon to do much more than its legal responsibilities. A recent example is the Corona pandemic that has been going on in the country since the early part of 2020, along with most other countries of the world, when police were among the prominent 'Corona Warriors', along with medical staff, having a hand in almost every activity related to the management of the pandemic and the consequent lockdown. Because of somewhat different nature of this disaster, a separate write up on the role played by the police has been prepared and is at Annexure 1. Details of the role of police in general in DM have been spelt out in Annexure 2.

1.4 Disasters

The UNISDR (United Nations International Strategy for Disaster Reduction) (2009) defines disaster as: "A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources."

UNISDR considers disaster to be a result of the combination of many factors such as the exposure to hazards, the conditions of vulnerability that are present, and insufficient capacity or measures to reduce or cope with the potential negative

consequences. Disaster impact may include loss of life, injuries, disease and other negative effects on people's physical, mental and social well-being, together with damage to property, destruction of assets, loss of services, social and economic disruption and environmental degradation.

The Disaster Management Act, 2005, uses the following definition for disaster: "Disaster" means a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or manmade causes, or by accident or negligence which results in substantial loss of life or human suffering or damage to, and destruction of, property, or damage to, or degradation of, environment, and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area. The various definitions of disaster risk management are elaborated in **Annexure 3.**

1.4.1 Hazards

A hazard is a process, phenomenon or human activity that may cause loss of life, injury or other health impact, property damage, social and economic disruption or environmental degradation.

Hazards may be natural, anthropogenic or socio-natural in origin. Natural hazards are predominantly associated with natural processes and phenomena. Anthropogenic hazards, or human-induced hazards, are caused entirely or predominantly by human activities and choices. This term does not include the occurrence or risk of armed conflicts and other situations of social instability or tension which are subject to international humanitarian laws and national legislations. Several hazards are socio-natural in the sense they are associated with a combination of natural and anthropogenic factors, including environmental degradation and climate change.

Hazards may be single, sequential or combined in their origin and effects. Each hazard is characterized by its location, intensity or magnitude, frequency and probability. Biological hazards are also defined by their infectiousness, toxicity or other characteristics of the pathogen such as dose-response, incubation period, case fatality rate and estimation of the pathogen for transmission etc.

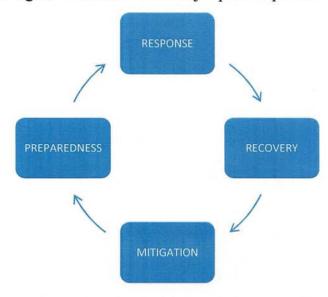
Multi-hazard means (1) multiple major hazards that a country faces, and (2) the specific contexts where hazardous events may occur simultaneously, cascading or cumulatively over time, and taking into account the potential inter-related effects. Hazards include (as mentioned in the Sendai Framework for Disaster Risk Reduction 2015-2030, and listed in alphabetical order) biological, environmental, geological, hydro-meteorological and technological processes and phenomena. Details of different kinds of hazards are given in Annexure 4.

1.4.2 Vulnerability Profile

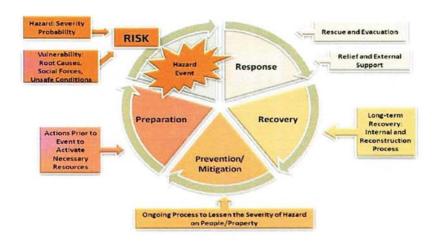
According to the data released by the National Disaster Management Authority (NDMA), India is vulnerable, in varying degrees, to a large number of disasters. More than 58.6 per cent of its landmass is prone to earthquakes of moderate to very high intensity; over 40 million hectares (12%) of its land is prone to floods and river erosion; close to 5,700 kms, out of the 7,516 kms, long coastline is prone to cyclones and tsunamis; 68% of its cultivable area is vulnerable to droughts; and, its hilly areas are at risk from landslides and avalanches. Moreover, India is also vulnerable to Chemical, Biological, Radiological and Nuclear (CBRN) emergencies and other man-made disasters. Maps of the vulnerability profile of India are at **Annexure 5.**

1.4.3 Disaster Management

Any Disaster Management Plan has four major parts depicted below:



A graphic representation of the four phases in Disaster management



Mitigation refers to the lessening or minimizing of the adverse impacts of a hazardous event. The adverse impact of hazards, in particular natural hazards, often cannot be prevented fully, but their scale or severity can be substantially reduced by various strategies and actions. Mitigation measures include engineering techniques and hazard-resistant construction as well as improved environmental and social policies and public awareness. It should be noted that in climate change policy, "mitigation" is defined differently, and is the term used for the reduction of greenhouse gas emissions that are the source of climate change.

Preparedness refers to the knowledge and capacities developed by governments, response and recovery organizations, communities and individuals to effectively anticipate and respond to and recover from the impact of likely, imminent or current disasters.

Response refers to the actions taken directly before, during or immediately after a disaster in order to save lives, reduce health impact, ensure public safety and meet the basic subsistence needs of the people affected. Disaster response is predominantly focused on immediate and short-term needs and is sometimes called disaster relief. Effective, efficient and timely response relies on disaster risk-informed preparedness measures, including the development of the response capacities of individuals, communities, organizations, countries and the international community.

The institutional elements of response often include the provision of emergency services and assistance by public and private sectors and the community, including community and volunteer participation. "Emergency services" are a critical set of specialized agencies that have specific responsibilities in serving and protecting people and property in emergency and disaster situations. They include civil protection authorities, police and fire services, among many others. The division between the response stage and the subsequent recovery stage is not clear-cut. Some response actions, such as the supply of temporary housing and water supplies, may extend well into the recovery stage.

Recovery refers to restoring or improving of livelihoods and health, as well as economic, physical, social, cultural and environmental assets, systems and activities, of a disaster-affected community or society, aligning with the principles of sustainable development and "build back better", to avoid or reduce future

disaster risk. It includes actions taken in the long term, after the immediate impact of the disaster has passed, to stabilize a community and to restore normalcy. Typical recovery actions include debris clean up, financial assistance to individuals and governments, rebuilding of roads, bridges and other infrastructure, rehabilitation of displaced people and addressing the issues of mental health.

1.5 Disasters and Communities

Disaster risk is on the rise throughout the world due to global warming and other factors. Over the past two to three decades, the economic losses and the number of people who have been affected by natural disasters have increased more rapidly than the rates of both economic and population growth. The physical, social and economic losses caused by these disasters are particularly harsh for developing countries since they have a long lasting effect on the development process. The impact of the disasters is deeply related to the local topography, climate, and the socio-economic conditions, traditions, and culture of the communities.

To minimize the damage caused by disasters, various steps have been taken by governments and the international community, including donor agencies. However, in spite of the participation of these agencies during disasters, it has been observed that many of the disaster management programmes have failed to be sustainable at the local level after the completion of rescue and relief work. For making disaster management sustainable, participation of the communities in these activities is a critical need. The most crucial elements of community involvement are partnership, participation, empowerment and ownership by the local people. There is need to create an opportunity for the people to be involved as important stakeholders from the initial planning stage of disaster management activities itself, along with the government and expert agencies, to make them sustainable and minimise the scale of the tragedy and losses. This would result in a sense of ownership among the people which will ensure their continuous engagement and long term commitment to these activities. Community involvement is important in both pre-disaster mitigation and post-disaster response and recovery process. The concept of CBDM (Community Based Disaster Management) is further discussed in Annexure 6.

2.0 APPROACH AND OBJECTIVES

2.1 Mission Statement

"Sustainable organic involvement of the local community in every stage of disaster risk mitigation and disaster management"

2.2 Vision

"To make communities disaster-resilient, achieve substantial disaster risk reduction, and significantly reduce losses of life, livelihoods, and assets – economic, physical, social, cultural, and environmental – by maximizing the ability to cope with disasters at all levels by recognizing the overarching importance of community participation in all disaster management strategies and bringing communities and government agencies together as equal stakeholders. To prepare the community, the first responders, for disaster mitigation, build disaster-resilient environment and minimize the vulnerability to disasters to significantly reduce the loss of lives, livelihoods and environment."

2.3 Scope

Community participation has been recognized as an added element in disaster management necessary to reverse the world-wide trend of exponential increase in disaster occurrence and loss of life and property from small and medium scale disasters. It also builds up a culture of safety and ensures sustainable development for all. The local community is taken as the primary focus of attention in disaster reduction since that is the common unit which is affected by disaster and, more importantly, responds immediately to deal with the event.

While preparing a module for this, the focus should be on the principal resource, the people, due to their local knowledge and experience. A good community participation initiative in any field must be a pragmatic programme handled by suitable personnel. The base for this initiative must be strongly founded on a deep and solid aspiration to develop and maintain a human relations approach which is crucial to this project. In other words, central to this project is developing the ability of individuals and groups in the community to participate in a democratic process of promoting learning and social development using a range of formal and informal methods.

The emphasis of this project is on the following key factors for enhancing community participation and capacity building:

- Harnessing the already existing "culture of coping with crisis" and "culture of disaster reduction" within society.
- Participation of people in risk assessment process and incorporating their perception of vulnerability and capacity in making the disaster management plan.
- Community and supporting agencies sharing common motivation and ownership for the initiation and sustainability of CBDM.
- Genuine people's participation in capacity building, with specific focus on sectorial groups like women, elderly, children and ethnic minorities.
- Well-delivered training inputs in accordance with the objectives of the project and the needs of the community for training.
- Wider stakeholders' involvement and participation.
- Mobilization of physical, technological and economic assets to reduce hazards and vulnerability.
- Integration of these elements into regular development planning and budgeting to ensure sustainability.

2.4 Approach

A holistic and integrated approach will be evolved towards disaster management with emphasis on building strategic partnerships at various levels. The themes underpinning the project are:

- Persuade the community to understand the importance of preparedness for a disaster situation.
- Community based DM, including last mile integration of the policy, plans and execution.
- Capacity development in all spheres by providing basic training in mitigation and preparing the community for building a disaster resilient environment.
- Multi-sectorial synergy, including consolidation of past initiatives and best practices.
- Building sustainable teams for rescue and relief operations during disasters with the help of police, other departments concerned, community leaders, volunteers, NGOs, and other organizations.

- Preparing the community for implementation of the DM plan by periodically conducting mock drills.
- Coordination and cooperation among all the state and national level agencies, NGOs and other institutions as partners to reduce and manage disaster risks.

2.5 Objectives

- Promoting a culture of prevention, preparedness and resilience in communities at all levels through knowledge dissemination, education and innovation to achieve community preparedness for a disaster.
- Encouraging mitigation measures based on technology, traditional wisdom and environmental sustainability.
- Facilitating the first responders from the community to train, evaluate, mitigate and become self-reliant for disaster management.
- Providing reliable, timely and precise information on disasters by developing contemporary, responsive and fail-safe communication systems backed by information technology support for linking the forecasting and early warning systems.
- Capacity building of communities in disaster management by providing training and at the grass root level.
- Promoting a productive and proactive partnership with the media for disaster management.
- Developing Standard Operating Procedures (SOPs) for various activities involved in Disaster Risk Reduction (DRR).

3.0 Project Statement

3.1 Stakeholders

Today governance and day to day administration have become very complex subjects. Every state has its own unique culture and administrative traditions. These have crystallised over decades of administrative functioning and are interwoven with the expectations of the local community and the day to day challenges being faced by the local populace. Administrations have their unique time tested strategies for involving the community in their day to day work. A strategy successful in one geographical area may not be so in another. No single project can give a detailed common plan for all the districts catering to all the

possible disasters and emergencies. The local authorities have to play a big role in making this successful. Detailed planning will have to be done at the district level depending upon the local conditions and available resources. The DDMAs constituted in pursuance of the DM Act, 2005, will have to make their plans specific to the needs and challenges of their areas in order for this project to be successful and to achieve its objectives for community participation.

The project should be jointly sponsored by both the Central and State Governments. As the first step in the implementation of this project, pilot projects may be taken up in six states in at least two districts each. The pilot projects may be implemented in areas prone to different types of disasters and in the states where the DM systems are not very well established. Ministry of Home Affairs (MHA) may provide funds for implementation of pilot the projects. BPR&D may provide support in terms of the initial briefing of the officers of various States and UTs as well as arranging independent evaluation of the programme. A selected group of officers from the BPR&D, state and central governments may be constituted to monitor the implementation of the project in States/UTs and suggest improvements, if any.

3.2 Institutional and Legal Arrangements

The DM Act, 2005, lays down institutional, legal, financial and coordination mechanisms at the National, State, District and Local levels. These institutions are not parallel structures and will work in close harmony with the State Governments. The primary responsibility for disaster management rests with the States. The institutional mechanism put in place at the Centre, State and District levels will help the States to manage disasters in an effective manner. The Act mandates the State Governments *inter alia* to take measures for preparation of Disaster Management Plans, integration of measures for prevention or mitigation of disasters into development plans, allocation of funds, establishment of early warning systems, and to assist the Central Government and other agencies in various aspects of Disaster Management. At the District level, DDMAs will act as the district planning, coordinating and implementing body for disaster management and will take all measures in accordance with the guidelines laid down by NDMA and SDMA. The details are given below.

The Disaster Management Act (2005) provides for a detailed action plan right from the central government to the district and local levels to draw implement and execute a disaster management plan. The Act calls for the establishment of nodal authorities at the national, state and district levels across the country. It specifies the functions, responsibilities and duties of these authorities and thereby establishes the country wide administrative grid for disaster management.

3.2.1 National Disaster Management Authority

The Act calls for the establishment of National Disaster Management Authority (NDMA), with the Prime Minister as Chairperson. The NDMA may have no more than nine members including a Vice-Chairperson. The NDMA is responsible for "laying down the policies, plans and guidelines for disaster management" and to ensure "timely and effective response to disaster". A chain of responsibilities and duties down to the local authorities have also been laid down.

3.2.2 State Disaster Management Authority

All State Governments are mandated under Section 14 of the Act to establish a State Disaster Management Authority (SDMA). The SDMA consists of the Chief Minister of the State, who is the Chairperson, and no more than eight members appointed by the Chief Minister. State Executive Committee is responsible (Section 22) for drawing up the state disaster management plan, and implementing the National Plan. The SDMA is mandated under section 28 to ensure that all the departments of the State prepare disaster management plans as prescribed by the National and State Authorities. The main responsibilities of SDMA under the Act are as follows:

- Lay down the State disaster management policy.
- Approve the State Plan in accordance with the guidelines laid down by the National Authority.
- Approve the disaster management plans prepared by the departments of the Government of the State.
- Recommend provision of funds for mitigation and preparedness measures.
- Review the measures being taken for mitigation, capacity building and preparedness by the departments of the Government of the State and issue such guidelines as may be necessary.

Section 23 of the Act, envisages a plan for disaster management for every State to be called the State Disaster Management Plan. The State Plan shall be prepared by the State Executive Committee having regard to the guidelines laid down by the

National Authority and after such consultation with local authorities, district authorities and the people's representatives as the State Executive Committee may deem fit. The State Plan shall include

- The vulnerability of different parts of the State to different forms of disasters.
- The measures to be adopted for prevention and mitigation of disasters.
- The manner in which the mitigation measures shall be integrated with the development plans and projects.
- The capacity-building and preparedness measures to be taken.
- The roles and responsibilities of different Departments of the State Government in responding to any threatening disaster situation or disaster.

3.2.3 District Disaster Management Authority

Chapter IV of the Disaster Management Act, 2005, dwells on the constitution, powers and functions of the District Disaster Management Authority. Every State Government shall, as soon as may be after issue of notification under sub-section (1) of section 14, by notification in the Official Gazette, establish a District Disaster Management Authority for every district in the State with such name as may be specified in that notification.

The District Authority shall consist of the Chairperson and such number of other members, not exceeding seven, as may be prescribed by the State Government, and unless the rules otherwise provide, it shall consist of the following, namely:—

- The Collector or District Magistrate or Deputy Commissioner, shall be Chairperson, ex officio.
- The elected representative of the local authority shall be the Co-Chairperson, ex officio. (Provided that in the Tribal Areas, as referred to in the Sixth Schedule to the Constitution, the Chief Executive Member of the district council of autonomous district, shall be the Co-Chairperson, ex officio)
- The Chief Executive Officer of the District Authority, ex officio.
- The Superintendent of Police, ex officio.
- The Chief Medical Officer of the district, ex officio.
- Not exceeding two other district level officers, to be appointed by the State Government.

The District Authority shall act as the district planning; coordinating and implementing body for disaster management and take all measures for the purpose of disaster management in the district in accordance with the guidelines laid down by the National Authority and the State Authority. As per the DM Act, 2005, the DDMAs are required to

- Prepare a disaster management plan including district response plan for the district.
- Ensure that the areas in the district vulnerable to disasters are identified and
 measures for the prevention of disasters and the mitigation of its effects are
 undertaken by the departments of the Government at the district level as well
 as by the local authorities.
- Give directions to different authorities at the district level and local authorities to take such other measures for the prevention or mitigation of disasters as may be necessary.
- Monitor the implementation of disaster management plans prepared by the Departments of the Government at the district level.
- Review the state of capabilities for responding to any disaster or threatening disaster situation in the district and give directions to the relevant departments or authorities at the district level for their up gradation as may be necessary.
- Review the preparedness measures and give directions to the concerned departments at the district level or other concerned authorities where necessary for bringing the preparedness measures to the levels required for responding effectively to any disaster or threatening disaster situation.
- Organize and coordinate specialized training programmes for different levels of officers, employees and voluntary rescue workers in the district.
- Facilitate community training and awareness programmes for prevention of disaster or mitigation with the support of local authorities, governmental and non-governmental organizations.
- Set up, maintain, review and upgrade the mechanism for early warnings and dissemination of proper information to public.
- Prepare, review and update district level response plan and guidelines.
- Ensure that the Departments of the Government at the district level and the local authorities prepare their response plans in accordance with the district response plan.

- Advise, assist and coordinate the activities of the Departments of the Government at the district level, statutory bodies and other governmental and non-governmental organizations in the district engaged in the disaster management.
- Review development plans prepared by the Departments of the Government at the district level, statutory authorities or local authorities with a view to make necessary provisions therein for prevention of disaster or mitigation.
- Identify buildings and places which could, in the event of any threatening disaster situation or disaster, be used as relief centers or camps and make arrangements for water supply and sanitation in such buildings or places;
- Establish stockpiles of relief and rescue materials or ensure preparedness to make such materials available at a short notice.
- Encourage the involvement of non-governmental organizations and voluntary social welfare institutions working at the grassroots level in the district for disaster management.
- Ensure communication systems are in order, and disaster management drills are carried out periodically.

3.2.4 District Plan

There shall be a plan for disaster management for every district of the State. The District Plan shall be prepared by the District Authority, after consultation with the local authorities and having regard to the National Plan and the State Plan, to be approved by the State Authority. The District Plan shall include—

- The areas in the district vulnerable to different forms of disasters.
- The measures to be taken, for prevention and mitigation of disaster, by the Departments of the Government at the district level and local authorities in the district.
- The capacity-building and preparedness measures required to be taken by the Departments of the Government at the district level and the local authorities in the district to respond to any threatening disaster situation or disaster.
- The response plans and procedures, in the event of a disaster, providing for—
 - ✓ Allocation of responsibilities to the Departments of the Government at the district level and the local authorities in the district.

- ✓ Prompt response to disaster and relief thereof.
- ✓ Procurement of essential resources.
- ✓ Establishment of communication links.
- ✓ The dissemination of information to the public.

The District Plan shall be reviewed and updated annually. The District Authority shall, review from time to time, the implementation of the Plan and issue such instructions to different departments of the Government in the district as it may deem necessary for the implementation thereof.

As evident from the above, all powers and responsibilities are vested in the DDMA. These powers and responsibilities span a wide range – from the preparation of a disaster plan and mitigation measures to regulatory activities during a crisis, procurement of essential resources, dissemination of information, and capacity building of the community so that the response is targeted and effective in disaster management and mitigation.

3.2.5 Challenges for DDMA

The DDMAs have been entrusted with the responsibility of

- Identifying the vulnerable and disaster prone areas.
- Enhancing the capabilities of the locals for responding adequately to disasters.
- Imparting training to the concerned departments for prevention mitigation of disasters.
- Raising awareness levels in the community and response agencies.

The DDMA by its very nature and constitution is more of an overarching authority and does not have a direct working executive arm to carry out its objectives. In many states it becomes active only during the onset of a disaster. The role of the DDMA during the non-disaster phase is of crucial importance and it requires the office bearers to work continuously during this stage for disaster planning and preparedness including the active involvement of the community in all aspects.

3.3 Challenges and Constraints

The DM Act, 2005, is a very detailed and exhaustive piece of legislation. It clearly specifies the role and responsibilities of the DDMA during the non-disaster phase, during and after a disaster strikes. However in many districts the DDMAs become active and functional only during a crisis or when there is an advance warning of the impending disaster. The important aspect is fine-tuning and practicing the government's response during the lean period, i.e., non-disaster phase. The objective is to prepare in advance by having the district administration, all the government departments concerned, the police, and the community on the same page so that they can together prepare for the crisis and respond seamlessly if required to.

Response will always be shaped by the work done during the preparatory phase. Hence, the DDMA should continuously review the preparedness and/or readiness to counter the disaster threats both anticipated and unanticipated. Readiness may be defined as the "the ability of DDMA to fight and meet the demands of any crisis that affects a major part of the community". Readiness is the synthesis of two distinct but interrelated levels. There is individual readiness, which relates to the training, equipping, and performance capabilities of an individual or unit, and there is system readiness—the ability to provide capabilities required by the exigency to execute their assigned missions, i.e., effective relief and safety operations during disasters.

Naturally, these definitions raise the question of how to measure preparedness or readiness. Several elements of readiness are quantifiable through set criteria such as equipment inventory, material status, community resources, individual and joint training, logistics stocks, or adherence to directives. Other elements of readiness or preparedness do not easily lend themselves to being measured because they involve non-quantifiable judgments about leadership, unit/crew morale, personal interactions, mission execution, and the like. Given that fact that disasters may be unanticipated and hence by definition unpredictable in its details but inevitable, it is unrealistic to attempt to prepare for all contingencies and surprises. As surprise is anticipated but unknown as to timing, scope, direction, and so on, a clear understanding of the mission and purpose of the operation by all personnel and the community is important when preparing for unanticipated events.

The government departments have to change their approach and adopt disaster management function as a one of their primary duties. In a crisis situation, the State and district level authorities do not have the luxury to wait for the deployment of resources from the Central or the State Government; hence the district administration must be prepared to effectively respond.

Assumptions....

- 1. It will be possible for the senior officers of government to convince the local officers and staff about the feasibility and utility of this project and get their willing cooperation and commitment.
- 2. The community will be willing to get trained about and work for disaster risks, preparedness and mitigation.
- All state departments concerned and individuals involved will show adequate eagerness and sincerity at all times – before, during and after a disaster.
- 4. In the event of disaster, all volunteers and government agencies shall be able to work in harmony and produce the desired results.
- 5. Help from other sources, NGOs and government will reach the area affected by disaster within 24 hours of the disaster.
- 6. All volunteer teams will have representation of various backgrounds of people residing in that community.

Constraints....

- 1. Attitudinal road blocks and mind-set issues like unwillingness on the part of government personnel to reach out to the community.
- 2. Lack of willingness on the part of the government departments and agencies to involve the local community.
- 3. Absence of readiness among community to accept the challenges of risk mitigation and preparedness for any disaster.
- 4. Challenges in imparting training and generating awareness in the community.
- 5. Reluctance to conduct regular mock drills to evaluate, review and assess the disaster plan.

4.0 Implementation Strategy

4.1 Strategy

The primary strategy of this project is to focus on the preparatory phase or nondisaster phase. This phase deals with the knowledge and capacities developed by governments, response and recovery organizations, communities and individuals to effectively anticipate and respond to and recover from the impact of likely, imminent or current disasters. Preparedness action is carried out within the context of disaster risk management and aims to build the capacities needed to efficiently manage all types of emergencies and achieve orderly transition from response to sustained recovery. Preparedness is based on a sound analysis of disaster risk and good linkages with early warning systems. It includes such activities as contingency planning, the stockpiling of equipment and supplies, the development of arrangements for coordination, evacuation and public information, and associated training and field exercises. These must be supported by formal institutional, legal and budgetary capacities. The related term "readiness" describes the ability to quickly and appropriately respond when required. A preparedness plan establishes arrangements in advance to enable timely, effective and appropriate responses to specific potential hazardous events or emerging disaster situations that might threaten the society or environment. The main objective of the project is to involve the community in all aspects of planning and preparations during this phase.

4.2 DDMA Working Group (DDMA-WG)

The role and responsibilities of the DDMA are clearly defined in the Act, which has to be implemented with a missionary zeal, both in letter and spirit. This project has been designed to enable and empower DDMAs to execute the plan effectively as per its design. The emphasis is on the non-disaster phase or the preparation phase. This will require a systematic approach for getting the support of the community in a sustainable and wholesome manner. The DDMA has the most important institutional role for managing disasters in the district. However, almost all the DDMAs are mere committees without any secretarial support or experts. Unless such an infrastructure is provided, the DDMAs would not be effective. There is also a view that specific responsibilities should be given to individual functionaries. The Act does not clearly articulate specific roles of the District

Collector and other functionaries as has been done by the Gujarat State Disaster Management Act.

It is recommended that the DDMA may set up a Working Group (DDMA-WG) with the Collector as the chairman and Superintendent of Police as co-chairman to oversee the vital aspect of community participation. The working group should also have representatives from the Home Guards and Civil Defense organizations. The working group can secure secretarial assistance from the already available pool with the district administration and police department. This is vital for this project as this working group will be responsible for involving the community in all aspects during the preparatory phase of disaster management which will *inter alia* include:

- · Hazard identification and vulnerability mapping
- · Community awareness and sensitization
- · Resource and building inventory
- Formation of volunteer teams
- Selection of volunteers
- Training of volunteers
- · Joint disaster response drills and mock exercises

4.2.1 Hazard identification and vulnerability mapping

As per the DM Act, 2005, the DDMA is vested with the responsibility of preparing a district plan and issuing guidelines in relation to every hazard according to the guidelines of National Institute of Disaster Management (NIDM). Community Contingency Plans (CCP) for different type of disasters has already been standardized for different type of disasters and has been rehearsed for role clarity by the SDMAs. This exercise has been conducted in some states at a micro level with emphasis on both preparedness and training components and need not be replicated. The disaster management plan should be in writing and be detailed, but as simple as possible.

The DDMA-WG will list out important activities to be carried out, major work distribution to be followed by volunteers and broad outline of rescue plans to be implemented in respect of anticipated disasters affecting each community. A description of effects of the hazard will help to identify their community vulnerability—what is likely to happen in an accident, incident, emergency or disaster involving a single hazard or multiple hazards in each community. Hazard

awareness alone does not lead directly to people adopting risk-reduction measures. It has been found that people take action only when:

- They know what specific actions can be taken to reduce their risks.
- They are convinced that these actions will be effective.
- They believe in their own ability to carry out the tasks.

The working group of the DDMA, based on the hazard mapping, should identify the critical area which will be affected first and that will have the largest impact due to a disaster situation. The focus of all the disaster management plans should be those critical areas, where the maximum impact is anticipated in the initial phase of the disaster and requires immediate attention. The districts may have their own formats for vulnerability mapping. Templates for guidance are given in **Annexures 7-9.**

4.2.2 Community Awareness and Sensitization

Community awareness about disasters is an important prerequisite for involving all the stakeholders and fostering a culture of prevention, preparedness and mitigation. Sensitization of all the community members, especially the vulnerable population, about the effects of potential disaster should be done on a regular basis by widespread public awareness campaigns, to make them aware about the disaster faced by them and educating them about the steps that they can take to minimize the damage. Public awareness and public education for disaster reduction seek to turn available knowledge into specific local action plans to reduce disaster risks. It mobilizes people through clear messages, supported with detailed information. Community should also be made aware that all their personal documents should be properly secured and digitization of records should be done for future use in case they get lost or destroyed.

Disasters are most critical for the first 72 hours. The working group should strive to make the community aware about the importance of family emergency preparedness kits especially in identified areas where the frequency of disasters is more. The kit should have non-perishable food to last 72 hours, water, first-aid kit, prescription medicines, sanitary items, torch, spare batteries, radio batteries, emergency cash, list of emergency telephones, copies of valuable documents etc. Items like medicines and batteries should be checked for expiry date and the stock should be updated from time to time.

Dissemination of community-based disaster plan should be done for the entire local community. Various mediums like televisions, radio and print media, PA systems mounted on vehicles, drones or handheld, folk art, street plays, graffiti, competitions in schools, distribution of IEC materials, etc. may be used. WhatsApp groups can be effectively used for dissemination of important information to the community and also to issue directions to the various teams. Briefing sessions for the community at the Panchayat, village *chaupal* etc. will be useful. The services of various organized groups, NGOs, village elders etc. may be enlisted for awareness generation. Community should disseminate practices in disaster risk management at the grass root level.

School children should be made aware with the help of school teachers and officers of police and DDMA should visit schools periodically for sensitizing the teachers and children and through them their elders. Disaster management should be taught in school curriculum and talked upon at every forum in each community. Schools need to teach children at a very young age, the importance of preparedness and basic dos and don'ts during a disaster.

4.2.3 Resource and Building Inventory:

This inventory will be for the equipment and buildings which are already available with the government and the community that will be required for carrying out relief operations during a disaster situation. Police should obtain copies for use in emergencies.

4.2.3.1 Resources and Equipment:

It is very important to maintain an inventory of essential equipments available in the district that can be collected and deployed before the onset of a disaster and used for saving life and property. These equipment's will include machinery, tools, gadgets and implements required for earth moving, communication, transportation, lighting, barricading and subsistence etc. The working group should be responsible for identifying, locating and documenting these equipments for inventorying the same. The owners of these inventory items should be part of a functional group in constant touch with the working group. The training regimen should include the manner of communicating with these resource owners and the pre-positioning of the resources in a pre-planned manner in cases of disasters which can be predicted in advance. For other kind of disasters, the working group can make area specific

robust protocols for the utilization of these resources according to the nature and extent of disaster. The local police should be in regular contact with the resource owners and should be part of the training exercise, so that they can ensure timely deployment of the essential equipment as and when required. Templates for guidance are given are given in **Annexures 10-11**.

4.2.3.2 Inventory of Buildings:

The district administration along with the police should identify buildings and campuses which are easy to access and could be used as relief centers /relief camps and godowns for storage of food grains and other rescue and relief materials. The working group should make an inventory of all such buildings and protocols may be devised with respect to the time and manner in which the buildings/resources may be made available during emergencies. Theses protocols may be part of the joint training programs.

4.2.4 Formation of Volunteer Teams:

For the implementation of the above plan, the working group should plan for the constitution of several teams, the most important of which will be the **Core Team** of the district responsible for directly supervising and monitoring all the matters relating to DM. The number of teams and their constitution will depend on the type of disasters anticipated. The working group can constitute more teams depending upon the local requirements. Assignment and allocation of specific responsibilities by clarifying of their task and role is very important so that every team is clear about what the teams have to do and how to do them during a disaster situation. Allocation of the task to be performed by each individual in the team would be done by the respective team leaders. These aspects have to be included in the training sessions. The constitution and roles of the various teams are given in the schedules attached.

- 1. Search & Rescue Team
- 2. First Aid Team
- 3. Security & Law and Order Team
- Cordon-off Team
- 5. Traffic Regulation Team
- 6. Communication Team
- Control Room Team

The names of the teams given above are illustrative in nature – their number can be increased or reduced and more than one combined as per local needs. The number and type of teams to be formed, whether they are to be formed for the whole of the district, sub-division-wise, or Panchayat-wise etc. will depend upon the type and intensity of disasters to which the area is vulnerable, the spirit of voluntarism among the local populace and other local conditions. The working group of the DDMA should have the discretion in this regard. There is no need for duplication. Districts which already have volunteer groups and organizations that have experience in DM and have worked with the district administration may be formally divided in groups for constituting the aforementioned teams. Accordingly, the working group should nominate team leaders and deputy team leaders for a more organized and formal community involvement. Templates for guidance are given in **Annexure 12.**

4.2.4.1 Core Team

Core Team will be the nucleus and the most important part of this project. Primarily, it should have all the members of the working group and any other official/s nominated by the DDMA. Besides the government representatives, it should have a few dedicated civilian members who have the commitment and experience of working in DM scenarios. They may be the most experienced members of the CLGs/FOPs/DVRs/persons who have worked in relevant agencies etc. depending upon the type of community involvement in DM that district has witnessed in the past. Other experts/volunteers from the community can also be included in the Core Team. The Core Team may have the authority to co-opt members depending upon the circumstances and requirements. Ideally the Core Team should have 25 members. The DDMA should have a final say on this issue. However this number should not exceed 30.

The Core Team will be the functional arm of the DDMA and will be responsible for strategizing and planning during the non-disaster phase. They will be directly in touch with the community with regard to disaster management and will work out the manner in which the existing volunteer groups will be formally inducted in this initiative. The Core Team will have the district disaster profiles. In case the same are not already available, the DDMAs should have them prepared and updated based on the past nature and intensity of disasters and new emerging threats like CBRN etc. This mapping and profiling should be according to the guidelines issued by the National Institute of Disaster Management (NIDM). Seasonal

calendar of the hazard events and frequency of the hazards should also be available with the Core Team to plan relief operations accordingly. They should then make exhaustive SOPs and training programs in consultation with the community volunteer groups for putting in place in advance, an effective community disaster management drill. The Core Team should also be responsible for coordinating with the other government and non-government organizations during the non-disaster preparatory phase. They should be ready with the aforementioned five plans and should have robust training programs which should include all the government actors and the community groups. This will enable better coordination and will also facilitate assignment of specific tasks to the various teams which will become very useful during disaster situations.

Core Team should have a very close coordination with the forecasting and early-warning agencies. Weather forecasts through wireless sets, radio bulletins and television should be monitored without fail. Core Team and the Communication Team should be trained to understand meteorological warnings and act fast to spread the warning throughout the village and surrounding community in an effective manner. Early warning should be spread in the community by sirens, megaphones, drums, WhatsApp Groups, and other communication aids. Communication system of each community should be inspected before each season.

The Core Team will assist the authorities concerned to earmark safe and specific emergency shelters and temporary settlements, and document their locations, the number of people to be accommodated, and the resources available and required. Shelters should be earmarked for animals also. Evacuation routes should also be defined and hurdles should be removed for safe and easy movement of men and material. Provision should be made so that these emergency shelters and temporary settlements can be stocked quickly as per a given time table with lifesaving goods at short notice. These will include food and clean water, reserve provisions, milk powder, water purifying tablets, antiseptics, medicines, kerosene, bandages, splint, scissors, blades, iodine, ointment, ORS, safe delivery kits, clean cloth, candles, matchboxes, etc. The working group of the DDMA will have to work in close coordination with the district supply officers and other agencies that are responsible for supplying the same. A detailed SOP will have to be worked out and training of the volunteers will have to include this aspect also.

Teams should undertake visits to emergency shelters at regular intervals and keep the working group informed about its maintenance etc. so that the authorities concerned may be tasked for carrying out regular maintenance of the shelters regularly. Earmarking of evacuation sites and safe shelter areas should be alternate to educational institutions as far as possible, since education is the first casualty during a disaster situation.

In short, the Core Team will be the compact and functional working face of the DDMA with community representation and adequate authority to prepare for disaster management during the non-disaster phase.

The functional requirements and charter for the other teams are given below:

4.2.4.2 Search and Rescue Team

Search and rescue volunteers will be the backbone of all disaster relief operations for saving precious lives. Search and rescue operations are dependent on the nature and intensity of disasters. Different expertise is required for different kinds of disasters. Disasters like floods/earthquakes/road accidents/industrial accidents etc. will require different kind of training. The team members should be selected from among the existing volunteer organizations and given training by the state disaster response forces. They may require specialized equipment which may be procured in consultation with the SDRFs so that there is no duplication and the volunteers can work independently as soon as a disaster occurs and can assist the SDRFs once they arrive on the scene. Resources required: torches, hammers, drillers, ropes, helmets, ladders etc.

4.2.4.3 First Aid Team

This team should be got trained by medical professionals to give primary first aid to injured disaster victims. The team members should be selected from among the existing volunteer organizations and all those volunteers having previous experience and training in this field should be given priority. They should have fully equipped first aid kits with access to fast transportation to move the patients to professional medical care units.

4.2.4.4 Security & Law and Order Team

Security and Law and Order volunteers will have an important role to play during a disaster situation. These teams should work directly under the supervision of the local police units. Gazetted officers at the SP office should coordinate the training of these volunteers and supervise their deployment in disaster situations. Willing volunteers may be sent for duties to other places in the districts in case of emergencies. During such occasions the local police will be tasked to look after their travel, food and accommodation.

Security volunteers will be divided in pairs of two each. Each volunteer will have a stick and a whistle to tackle security issues and check persons, secure places in the affected area and it's near vicinity. These volunteers will ensure that specific areas are secure for movement of people, vehicles, and animals and if found otherwise they would take immediate action. Volunteers should ensure that people do not crowd around affected areas unnecessarily hampering rescue work, and there is no theft, looting and vandalism. They will guide the people to the earmarked safe and specific emergency shelters and temporary settlements. They will guide people where to go, what to do, and give appropriate information about the disaster. They will render all the required assistance to women, children, the elderly and differently abled persons. They will also ensure that there is no stampede during air-dropping/distribution of relief materials. Efforts should be made to maintain queues at distribution points. These volunteers should ideally be associated with police parties deployed for maintaining law and order and assist them in their tasks. Resources required would be badges, sticks, whistles, torches etc.

4.2.4.5 Cordon off Team

This team will function under the direct supervision of the local police and assist in their operations of cordoning off particular areas and providing clear passages for transportation of relief and other important material. The resources required for cordoning off of the disaster site will be long sticks with red and green flags and long ropes which the volunteers of this team will carry to cordon off the disaster site from the community for minimizing loss and proper regulation of response and rescue of the trapped people. Each volunteer will also carry a whistle and torch with him for signals to be passed among them. Cordon off volunteers will plant sticks with red flag at least 100 meters away, or at an appropriate distance, from the disaster site to prevent further risk to any human life. They will plant sticks

with green flags near the earmarked emergency shelters and temporary settlements. Locations with green flag will be safe zone. The local people with their local knowledge and expertise are very important in rescuing stranded persons during disasters. During the Kerala floods in 2018, it was the local fishermen who rescued those who were stranded in water where NDRF and Navy boats couldn't reach. The cordon of teams will play a very important role in facilitating the work of those who are engaged in rescue by removing unwanted crowd from the rescue site.

4.2.4.6 Traffic Regulation Team

These teams should work directly under the supervision of the local police traffic units. Gazetted officers at the SP office should coordinate the training of these volunteers and supervise their deployment in disaster situations. Willing volunteers may be sent for duties to other places in the districts in case of emergencies. During such occasions the local police will be tasked to look after their travel, food and accommodation. Traffic regulation volunteer will have a whistle, red flag, green flag, torch, and maybe a traffic reflector for night traffic regulation. The volunteers will be trained to assess the importance of regulating the traffic towards the safe zone, and diverting the traffic so that traffic jams can be prevented during a chaos. Road blocks can be used to divert the people away from the disaster site to safe zones.

4.2.4.7 Communications Team

Communication both during the build up to a disaster and during the occurrence is of utmost importance. Pre-disaster communication is vital for informing the community about the safeguards to be adhered to and for setting in motion the relief and rehabilitation operations which have been planned and practiced in advance. It is also essential to communicate with and activate all the stakeholders so that they have time to organize and equip themselves and take up their respective stations. Disasters usually result in complete breakdown of conventional communication systems like telephones, mobiles, television etc. in the disaster zone. It is essential that a robust and reliable communication system is available for the control team to communicate with the various teams and administrative units who are in the field providing relief and rehabilitation services.

Almost all major media houses, Internet Service Providers, mobile service providers, cable and DTH operators have establishments in each and every district. The communication teams should co-opt their representatives for an effective communication-dissemination strategy. All the information channels available to the community should be effectively utilized to feed controlled important information so that there is clarity about the prevailing circumstances, the planned response, and role of each and every stakeholder, including that of the community. During the disaster, when normal communication systems are not functional, the police wireless systems should be pressed into service. The Communication Team should have experts from the district police wireless unit along with representatives from the NIC, mobile service providers etc.

The primary objective of the teams should be to be the communication channel between the control team and the other teams, the affected population, and also between the control team and the district authorities and media agencies. The team should -

- Have a list of equipment/devices which can be made available at short notice at different parts of the district
- Have a physical inventory of wireless sets and other important communication equipment's which should be with the police/district administration and can be used as and when required without any delay (like VHFs sets with automatic repeaters, mobile phones with publicized numbers, HF radio sets, two-way radios, loud speakers with power backups, radios, torches, Ham radios etc.)
- Devise a training regimen for capacity building of the members of the other teams so that they are comfortable with these communication equipments and can use the same if a situation comes up
- Establish communication channels between the control team and other teams/district level functionaries/media centers etc.
- Establish a link between the feedback/complaints/SOS being received from the members of the community in distress with the various teams conducting relief operations

4.2.4.8 Control Room Team

Control Room/Emergency Operations Centre (EOC) will be set up by the DDMA at a strategic location which is already equipped with communication devises and facilities. Those from the working group and important members of the core team, whose presence will help should be closely associated with the EOC.

EOC will act as the nodal center of all activities. It would take care of data management, media and resource allocation which are essential for the smooth functioning during crisis situations. Equipment and supplies of the EOC should be adequate to support prolonged operations and include back-up power, multiple communications systems, information management systems, maps and geographic information systems, etc. EOC would be manned round the clock. It will have all necessary logistics and relevant information like telephone numbers, list of resources, and list of important persons with resources who would aid during the disaster situation. EOC will have the list of volunteers in each team along with description of roles and tasks assigned to each team.

Resources required for CR/EOC Team will be communication apparatus, backup power systems which can work even without external power in the event of power cut or damage during a disaster situation, sufficient space to accommodate 15 to 25 persons at all times during a disaster situation.

The Control Room will be responsible for the monitoring the relief and safety operations in the disaster zone. The CR personnel should be in a position to make assessment of the disaster situation and respond to it by deploying the trained personnel and relief material for the distressed population in the disaster zone. They will also play a vital role in coordinating and communicating between various agencies /volunteers conducting operations in the field.

4.2.5 Selection of Volunteers

Selection of volunteers will be done with utmost care as effectiveness of DM work will to a considerable extend depend upon the enlistment of sincere and suitable volunteers. Volunteers should be highly committed, focused, intelligent, flexible, and dedicated towards the implementation of the disaster plan. Volunteers may be selected from local members in existing police community programs like *Janamaithri* Police (People Friendly Police), SPC (Student Police Cadet),

Community Liaison Group Members, Friends of Police, and from NCC, NSS, Scouts, retired personnel of armed/security forces, local youth organizations etc. Some districts have volunteer groups that are working with the district administration for disaster management. Members of such groups should be given priority. Small groups of volunteers would be paired combining quality with quantity with a minimum of ten to fifteen members or more in each group depending upon the manpower required to accomplish a task during the implementation of the disaster plan. The working group of the DDMA should consult the local administrative authorities, NGOs, civil society groups, local police stations and other organizations which they deem fit to select the volunteers for the aforementioned teams. Templates for guidance are given in **Annexure 13**.

4.2.6 Training of Volunteers

Training of volunteers should be done in a scientific manner. Training need analysis should be done by the working group with the help of local organizations. Local resources available in the district should be identified and utilized for this purpose. District police resources should be used for providing training for law and order, traffic, cordon off and search teams. The experience of the volunteer groups and disaster response forces should be relied upon and experts may be culled out of these units for providing training to the volunteers. Knowledge regarding different types of hazards/disasters, rescue techniques and dos and don'ts would be imparted to the team members periodically using video footages, case studies, live rescue drills of SDRF/NDRF and rescue missions. Knowledge about how to help victims, and techniques of assistance in various situations would be made available to the community-based teams. Training of the volunteers and team members would be held at the community level and qualified rescue personnel will impart the training. In areas which are regularly prone to natural disasters, training of trainers programs may be organized for selected trainers.

The teams should be exposed to the inventory of equipment and trained manpower prepared under the supervision of the working group of the DDMA. This inventory consists of available resources including human resources (masons, veterinary doctor, trained midwives, mechanics etc.) materials, transport, special equipment (e.g. earth-moving, water purification, tarpaulin, gas cutter heavy jack) etc. The teams once assigned a specific role should regularly check all the resources assigned to them so that they can secure them in an emergency and use

them for providing relief. The team members should be made familiar with the SOPs concerning the work assigned to them.

4.2.7 Joint Disaster Response Drills and Mock Exercises

The DDMA and the police should organize periodic rehearsals/mock drills/simulation exercises in which the various teams, volunteers and community members should participate. Based on these, the plans should be reviewed, evaluated and updated regularly to identify weaknesses, shortcomings and gaps in existing knowledge and skills which can be corrected and upgraded to the required standards. These should be attended by outside agencies and experts to monitor and asses the preparedness. Media should be invited during mock drills to disseminate information and persuade members of the community in maximum numbers to participate. Mock drills should last between 4 and 6 hours to achieve the potential effect of an emergency situation for participants. Various teams should monitor the response time, to enable the community to learn how to minimize loss. Core Team should ensure proper coordination among the stakeholders. It should prepare a detailed event chart (i.e. information of the event, warning dissemination, place of occurrence, response time of core team, effect/impact of disaster, de-warning and de-briefing) with time and activities every time a drill is conducted. A review and analysis should be done after the drill. Activities in the emergency response plan drill should be well planned, practiced, rehearsed and synchronized so that they take place simultaneously with precision and minimum loss of time.

4.2.8 Role of Community in Implementation of Post-Disaster Plan

Though the role of community is primarily for assisting the authorities in rescue and relief work, community volunteers with dedication can assist the police and other authorities in various interventions needed to restore normalcy after a disaster has struck, like-

- Damage Assessment.
- Collecting dead bodies, their photography and preparation of records with descriptions for families to identify them.
- Cremating carcasses and bodies and disinfecting the area.

- Shelters can act as centres for relief distribution so that supplies are not looted or hoarded by unscrupulous people and the materials can be given against identification slips.
- · Clearance of debris.
- Help in assessing damages to infrastructure like roads, water supply, electricity, markets and distribution networks.
- Assisting the government enumeration process to assess the damage and loss incurred.
- Helping families with paperwork for compensation, insurance etc.
- Monitoring distribution of relief material received from various sources, NGO and Corporate Social Responsibility (CSR).
- Ensuring that the officials start the enumeration procedure immediately, so that the affected persons can undertake repair/re-building of damaged structures.
- Community volunteers would assist the various government agencies in evaluation of the loss suffered by the community. Since these agencies are likely to face information overload and fake news, community volunteers can become a medium for collection and communication of reliable feedback to them.
- Confirm number of human losses.
- Number of livestock losses and their estimated value.
- Damage to crops and estimated cost of produces.
- Number of houses damaged or destroyed and their estimated value.
- · Rough estimation of the financial losses in rupees.
- Help the survivors in contacting their relatives so that they can get social support.
- Emphasis on engaging the disaster survivors in some kind of activities that interest them in order to give them a sense of being productive.
- Make efforts to re-start schools as soon as possible and encourage children to attend school regularly.
- Facilitate economic rehabilitation with a view to bring the affected community into the mainstream again. Provide for agricultural rehabilitation of disaster affected area by necessary assistance, with the help of state government, to affected farmers in activities such as sowing/harvesting.
- Social rehabilitation with the help of local community, NGOs and other stakeholders.

- Make children participate in activities pertaining to restoration of normalcy in the school.
- Prepare school safety plans, conduct regular drills and mock exercises to prepare the children and school management for future disasters, ensure proper counselling of traumatized children and teachers.
- Reconstruction and Rehabilitation by Build Back Better (BBB) technique.
- To make arrangements for ex-gratia payments for lives lost compensation for wholly and partially damaged houses from the government
- To ensure access of reconstruction materials to the community.
- Accessing government services for rebuilding damaged public infrastructure and following it up till rebuilding is completed.
- To help families in reconstruction of their houses.
- Helping families to initiate livelihood through loans and other financial services.
- Ensure provision of nutritional aspects of food for disaster victims and privacy for young girls, pregnant women and elderly.
- Start community-based rehabilitation programme.
- The community volunteers should make damage assessment in terms of human, animals, building structures, agricultural, social, economic loss to the community.
- Assist in the economic reconstruction of the community.
- Social rehabilitation with the previous neighbour.
- Emotional networking with the family, friends and neighbours.

5.0 Deliverables

- 1. Regular meetings of the DDMA so that it is equipped to fulfil all its responsibilities and roles as envisaged in the DM Act 2005.
- 2. Detailed updated contingency plans for the district if the same have not already been prepared. The same should be done in consultation with local experts based on the previous history of disasters in the districts, geographical imperatives, industrialization, urbanization, and new threats like CBRN etc.
- 3. Preparation of inventories of equipments and human resources available in the district which can be utilised during crisis situations.
- 4. Setting up of the Working Group of the DDMA which will function as the executive arm of the DDMA that is responsible for the day to day

- operations during the preparatory and response phases of disaster management and later on for relief and rehabilitation.
- 5. Sensitization of the communities and generating awareness about their important role in all aspects of disaster management.
- 6. Extensive interaction with volunteer groups, NSS, NCC, Home Guard organisations, community liaison groups and other organisations linked to the district administration and the police.
- Formation of volunteer teams which will work along with the government and relief agencies for preparing for all contingencies related to disaster management etc.
- 8. Selection of volunteers from the community for the aforementioned teams
- 9. Training of the community volunteers
- 10.Mock drills and rehearsals based on real situations for continuously upgrading the skills of the teams and the disaster management infrastructure in the district

6.0 Milestones

- 1. Submission of the project to BPR&D January 2021.
- 2. Submission of the project by BPR&D to MHA.
- 3. Final approval of the project by the MHA.
- 4. Drafting of GOs and Standing Orders by MM2 will be done after getting the approval of the MHA for the project.
- 5. Issue of advisory to States/UTs by MHA to adopt the project within 15 days of approval.
- 6. Meeting of Nodal Officers of States/UTs within one month of approval.
- 7. Issue of GO by Home Departments of States/UTs within two months of approval.
- 8. Sanction of budget by Government within three months of approval.
- 9. Issue of Standing Orders by the state governments within three months of approval.
- 10. Completion of execution of the project by the DDMA for two years.

7.0 Budget Requirements

In some States, the community is playing a very important role in disaster management and is working along with the District and State Disaster Authorities

(SDMA and DDMA) in disaster planning, preparedness and mitigation. There are very robust local volunteer organisations that are engaged continuously with the district administration and police authorities during the non-disaster phase and preparing to deal with any emergency situation which a disaster may cause. However there are a number of states where the DDMAs are still in the stage of developing robust institutional practices for involving the community in disaster management. It is suggested that the project be implemented in six States on a pilot basis – two projects per State, in different districts.

Since the size of the settlements, their requirements in terms of basic amenities and other facilities would differ and since many of the requirements can be met out of the existing schemes, it is difficult to come to a specific calculation of the budget required for implementation of the project. Hence it is suggested that the Central Government may initially sanction Rs. 25 lakhs per annum to each of the twelve pilot districts in six states for a period of two years. This budget may be made available to the DDMA and should be utilised by the working group set up for this purpose.

The budget provided should be utilised for the following purposes:

- Community sensitization and awareness
- · Selection of volunteers
- · Training of volunteers and purchase of training equipments
- Mock drills and rehearsals

7.1 Community Sensitization and Awareness

The working group should focus on increasing the awareness of the community regarding disaster planning preparedness and response. The important role of the community in all aspects of disaster management needs to be highlighted. Various civil society organisations, youth clubs, community groups need to be tapped for this purpose. The Working Group may conduct workshops, street plays, school awareness campaigns, for the same. Social media campaigns and other means should be explored for the same. The best practices for disaster management and the important role of the community in the same needs to be emphasised. The whole purpose is to convince community that they are important stakeholders and the first responders to any disaster situation. The role of the community in the post disaster phase is given in **Annexure 14**.

7.2 Selection of Volunteers:

The working group should give preference to the community groups which have traditionally assisted the district administration in relief operations and other aspects of disaster management. The various groups and forums attached to the district administration and the police should be also given priority. A template regarding the age group and the number of members of the team are given in the **Annexure 12-13**. The working group is the final authority on this and their decisions will be based on the local requirements and community profile. The working group should widely publicise and use the print, visual and social media to attract the most qualified volunteers from the community.

7.3 Training

- Audio visual and other training aids required for providing training to the various teams
- Equipment like whistles, flags, badges, ropes, loudspeakers, medical kits etc. required for providing training to the teams
- Honorarium for experts to impart training

7.4 Drills and Practice Sessions

 Arranging regular drills and practice sessions for the community members and concerned government departmental employees

The district resources should be utilised liberally for this project. Government training centres etc. should be utilised. The limited budgetary support by the central government should be used judiciously by the working group for the limited purpose of involving the community. The budget already available in the district for disaster management should be utilised for equipping the various teams and providing the infrastructure discussed above.

8.0 Work Plan

- 1. Meeting of the DDMAs of the selected districts.
- 2. Setting up of the working group by the DDMA.
- 3. Setting up of a small functional secretariat for the working group.

- 4. DDMA to undertake vulnerability mapping of the district if not done already
- 5. Community Contingency Plans to be made by DDMA if not done already.
- 6. Working Group to map the volunteer groups in the district especially those who have prior exposure to disaster management.
- 7. On the basis of the vulnerability profile of the district, the Working Group will plan the constitution of teams of community volunteers. The plan should be detailed and include the nature of work to be assigned to the teams and the strength and equipment required for the same.
- 8. The WG will then select the members for the team.
- 9. WG will with the help of other agencies make a training need analysis of the teams and prepare a detailed training program.
- 10. Preparation of inventory of equipments and human resources in the district required for disaster management.
- 11. Mock drills to be conducted regularly for evaluation of the disaster plan.
- 12. Organising meetings of the teams with other government departments concerned at the district level.
- 13. Continuous monitoring and review by the DDMA and the State Nodal Officer and Project Coordination Committee.
- 14. Annual evaluation and audit by an external agency approved by the State/MHA/BPR&D

9.0 Conclusion

In case of any disaster or emergency, before any government machinery and support reaches or outside help gets galvanized, it is the community which has to respond immediately. As the community plays the role of First Responder, it is critical that there is adequate awareness and preparedness at the community level, especially amongst the communities residing in the most vulnerable areas. Therefore, it would be useful to invest in efforts for strengthening Community Risk Resilience at all levels to be able to adequately address Disaster Risk Reduction. In order to build disaster-resilient communities, they first need to be empowered so that community members can cope with the adverse effects of natural hazards. This is the most effective approach to achieve sustainability in dealing with natural

disaster risks. Many countries are carrying out various community-based programmers to establish disaster prevention as an essential component of sustainable development. Its activities include improvement of the safety levels of core community facilities such as schools, dissemination of best practices in disaster risk management at the community level, and formulation of integrated programs for sustainable development through disaster risk management initiatives. In the end, facilitating local involvement in disaster preparedness and response is as important as providing resources for basic and logistical needs. It ensures that local voices are heard, local initiatives are recognized, and the dignity of local people is respected. With this capacity established, local citizens can respond and recover in a manner that improves their and the local community's life. The response and rebuilding process will belong to the front line of disaster responders – community volunteers – who will reinvest in their communities.

The CBDM approach provides opportunities for the local community to evaluate their own situation based on their own experiences initially. Under this approach, the local community not only becomes part of creating plans and decisions, but also becomes a major player in its implementation. Although the community is given greater roles in the decision-making and implementation processes, CBDM does not ignore the importance of scientific and objective risk assessment and planning. The CBDM approach acknowledges that as many stakeholders as needed should be involved in the process, with the end goal of achieving capacities and transferring of resources to the community, who would assume the biggest responsibility for disaster reduction.

Annexure 1

Police Arrangements and Involvement of Community during Covid-19 Pandemic.

If anyone entertained any doubt why the police should make a project for community involvement in handling disasters, the extent of the involvement of police in various aspects of managing Covid-19 pandemic and the manner in which it worked shoulder to shoulder with the community may have set these doubts at rest. Police's involvement in managing the pandemic was somewhat different from that of managing other kinds of disaster situations to which we have been regularly exposed during the recent decades. When a countrywide lockdown was imposed on March 25, 2020, with a mere four hours' notice, it caught all the authorities involved in managing the pandemic, including the police, totally unawares since there were hardly 500 cases of Covid in the country and there was no expectation about such harsh measures. Naturally, in spite of the instructions flowing down from the central and state governments and the district authorities in quick succession, nobody had a clear idea what exactly to do - there were no SOPs or precedents to follow, and it is unlikely that anyone got an opportunity even to brief the personnel being deployed to undertake several unfamiliar tasks. Hence, there is a need to understand what exactly the men in the field did, how they coped, innovated, and sought the assistance of local community leaders and organisations and draw lessons from these so that we can be better prepared to face such situations that are quite likely to arise in future also. This is all the more important because new deadly viral diseases have been appearing with uncomfortably high frequency and the high probability of rogue states and non-state actors using virus as an effective means of biological warfare in future in view of the extensive damage caused by Covid to world populations and economy. Generally, during other disasters, the role of police is mainly in rescue and relief operations and to a lesser extent in regulation and maintenance of order. During the pandemic, there was not much scope for rescue, the role expected from the police in regulation and enforcement was disproportionately higher compared to other disasters, and the police on its own volition undertook relief work of every type to an extent that was unheard of till then.

Problems

The problems that the police had to deal with included (i) enforcement of lockdown conditions countrywide, including curfew in large number of containment zones simultaneously for unusually long periods; (ii) identification, testing and quarantining of infected persons and those who came in contact with them; (iii) dealing with the extreme distress faced by the population, especially the disadvantaged sections; (iv) the restiveness and large scale reverse migration of migrant labour and other stranded people like students, tourists, foreigners etc.; (v) circulation of mischievous messages, fake news and rumours on social media or other means with a view to create panic and resistance against testing, quarantining, etc. or to exacerbate communal divide; (vi) attacks on/harassment of 'Corona Warriors', particularly medical and paramedical personnel by mischievous elements, landlords, RWAs, local residents etc.; (vii) resistance to opening of quarantine centres near residential localities; (viii) maintaining smooth supply of essential items and medicines; (ix) information overload; (x) increase in cybercrimes and some types of crimes against women; (xi) protection of police personnel and their families from contagion; (xii) dealing with morale, fatigue, burnout of police personnel due to long hours of duty and lack of rest; (xiii) minimising the possibility of police excesses during enforcement, etc.

Enforcement Functions: Unlike the other disasters, when specialised forces from the central and state governments are used to deal with disaster situations, the Covid-induced problems were almost exclusively dealt with by the local police who generally are the least trained and equipped – there was no need to involve SDRFs, NDRF or the Armed Forces as they mainly carry out rescue operations because there was no need for the typical 'rescue' operations during the pandemic. Several experts attribute the slow spread of Covid in India during the initial phases to strict enforcement of lockdown and the credit for this goes to the police. Apart from doing foot and mobile patrolling, particularly the urban and semi-urban areas, the police had to completely seal areas under curfew and containment zones, and put up nakas with medical screening facilities at state boarders to screen people coming from neighbouring states. In some places flag marches were also undertaken for the ostensible purpose of keeping up the morale of the community and to instil fear among potential violators - the utility of such flag marches is debatable since there was no organized resistance to the harsh lockdown. Almost all police forces established dedicated control rooms/war rooms, set up crisis



management teams and deputed senior police officers to red zones and hot spots to monitor and coordinate these activities. Strict enforcement resulted in some excesses by police personnel including a few alleged deaths due to police torture and in such situations the senior leadership has to take adequate steps to minimize the possibility of these by briefing the personnel, close supervision and corrective action.

Compared to other disasters, there was substantially higher need for enforcement functions during the pandemic due to the need to stop people from moving around freely as the virus is very contagious. This resulted in large scale action against the public including seizure of vehicles, and prosecutions for violation of provisions of the IPC, the Disaster Management Act, 2005, and the Epidemic Act, 1897 – another unprecedented action during a disaster situation.

However, a very unfortunate development is that with passage of time the strictness in enforcement and other precautionary measures taken by the police and other authorities gradually tapered off, perhaps due to the unusually long period for which these measures have been in force. Today, when the official figures of Covid affected in India has crossed 10 million, the care and precautionary measures taken by all these agencies as well as the public is only a small fraction what they were doing when the number of cases were in few thousands. Perhaps there is a lesson for all authorities in this – when there is an unknown pandemic, no one knows how long it is going to last and hence enforcement and other responses from the authorities should be done in a need-based calibrated manner. It may be necessary to consider whether stern measures need to be put in place in the very beginning or they should be reserved for the time when they are actually required so that the momentum is not lost when it is most required.

Movement of Migrants and Other Stranded People: Though all categories of people, particularly the disadvantaged sections, faced several problems, they were more acute in the case of migrant labour stranded in states far away from their homes. When the lockdown was extended their patience ran out and they took to the streets and since no public transport was available, started walking or cycling hundreds of kilometres to their native places with their meagre belongings. Nobody anticipated this reverse migration and the consequent humanitarian and administrative problems. There was rioting in a few places and it was a remarkable achievement for the police not to allow it to spread or go out of control – it was the empathetic manner in which the police behaved with them that prevented any

major trouble. With hindsight, it can be said that even these incidents could have been avoided with better intelligence collection, alerting those conducting relief work among the migrants to be on the lookout for warning signals and undertaking proper counselling and other preventive steps. Apart from maintaining order, the police attended to their genuine needs and arranged food, water, sanitizer, and in many places even footwear for them. In some areas they even arranged free transport for them to their destinations with the assistance of local philanthropists. The empathetic manner in which they reached out to these people in distress was a significant reason why there was no major problem in handling them. There were also problems of separated families and others like students, pilgrims, tourists, etc. stranded in distant places – virtually everyone, even many who had fully secure professions, wanted to get back home and there was no public transport available. Police in several places used philanthropic organizations to help them.

Identification and Quarantining of Affected Persons: The authorities dealing with the pandemic were heavily dependent on the police for locating and monitoring people who came from outside, particularly hotspots and quarantining or hospitalising the affected persons and those who came in contact with them. Help of religious leaders and other community volunteers was sought to identify suspected patients, infected persons who were careless, potential 'super spreaders', etc. They assisted the authorities in areas where there was resistance to these actions in the initial phases by removing misconceptions and countering false propaganda spread through rumours and social media.

During this period, the authorities had to guard against spread of infection among police personnel and their families. Many police units used disinfection sprays/rooms/tunnels to disinfect their personnel and visitors. Experts have questioned their safety – a way out was shown by Puducherry Police which provided to every police station disinfection boxes that functioned on Ultraviolet Germicidal Irradiation Technology.

Sensitization of the Community: The awareness generation programmes targeted at the general public were meant to educate them about the disease, dos and don'ts, preventive measures like physical distancing, personal hygiene, use of mask, sanitizer, and importance of hand washing and physical distancing etc. The police and other authorities have been using community leaders and volunteers for this and also to reduce the hostile mind-set towards the Covid-affected during the initial period. A variety of means were used for this which included

announcements through PA system, sensitisation through social media platforms, broadcasting recorded messages from religious leaders and celebrities, use of folk art, skits, graffiti etc.

'The Corona Warriors' from the medical and local authorities have been the target of attack from some misguided elements and face resistance in several localities – police had to provide escorts to them in areas of resistance. Medical and paramedical professionals had to face harassment from their landlords, RWAs and neighbours and police had to intervene in such matters as well. The police also had to deal with public opposition to burial of bodies of those who died of Covid and to opening of quarantine facilities near residential localities. To deal with these problems the police widely used the assistance of religious leaders and community volunteers.

Maintenance of Essential Supplies: Keeping the supply lines open for essential commodities, medicines, etc. was another task in which the police had to play a major role during the lockdown. They also had to take several steps to ensure that there was no overcrowding in the shops allowed to open and in the distribution centres of food and other essential items. Several police forces arranged for the visit of vegetable sellers with handcarts in residential areas, some even persuaded vendors to do home deliveries. In some places crowded markets were even divided and shifted to different locations. Queues were maintained with physical distancing or token system introduced where people tend to assemble like fair price shops, milk booths, ATMs, etc.

Use of Technology: Though the spate of orders emanating daily from the central and state governments or district authorities made no mention about the use of technology for dealing with the problems arising out of the pandemic, the state and district police authorities used a variety of technologies to find solutions to the problems they were facing and this was the most distinctive feature of pandemic management by Indian Police. Social media platforms like WhatsApp, Facebook, and Twitter were extensively used to sensitize the public, expose and counter fake news and rumours - Meghalaya even had a special portal to identify fake news. WhatsApp was very extensively used by all for sensitisation, communication of important information and the like. For this, intra-departmental and inter-departmental WhatsApp groups, groups of police and public volunteers and only of members of public were formed to deal with different issues. Most police forces developed special Mobile Apps to help their own personnel and members of the

public to perform a variety of tasks including issue of e-passes to them and their vehicles; others provided extra facilities in their existing Apps. Drones were used for several purposes like surveillance of containment zones and places where crowds were likely to assemble, making of important announcements for the sensitisation of public, sanitising areas, etc. The existing CCTV networks and the communication systems also were put to effective use. Cyber cells of the states and districts were busy tackling the increasing incidents of cyber frauds, cyber harassment, doing contact tracing and also fighting fake news and rumours. Many used call detail record analysis to facilitate contact tracing. Several cities used geotagging of Covid patients or their homes to restrict their movements; Bengaluru City Police used geo mapping and tagging to monitor supply of essential goods.

Relief Work: Since economic activities came to a virtual standstill and millions of poor who lost their work were on the verge of starvation, the most prominent relief activity of all police forces across the country, including most of the CAPFs, during the pandemic has been distribution of cooked/uncooked food to the poor, particularly to migrant workers, street dwellers, people in curfewbound/containment areas, etc. NGOs and community volunteers assisted in this and funds, transport and other resources were provided by local benefactors and philanthropic organisations. Many forces set up several kitchens. Personnel of almost all police forces and CAPFs distributed masks, sanitizers, soap, sanitary pads, etc. to the public and explained the importance of their use. Border guarding forces like BSF and SSB attended to such needs of the border population and also provided drinking water and medicines etc. where required. Some CAPFs gave their premises for opening of quarantine centres. Their family welfare organizations also chipped in by stitching masks and these items were also supplied to police by various organizations for their own use or for distribution. In several places they arranged PPE kits for doctors and paramedical staff. Food kits, masks, gloves, boots, sanitizers, etc. were distributed among sanitation workers to show appreciation for their work.

Blood donation to blood banks that were facing shortages due to lockdown was also done by most forces. Police ambulances were freely used to transport patients to hospitals – in many cases ordinary police vehicles also were used for this. CRPF organized a telemedicine service that any indisposed person could contact for free medical advice. Many police personnel who had recovered from Covid donated plasma. Police also rendered assistance in cremation of those who died of Covid. Most local police units ensured doorstep delivery of medicines in deserving cases.

Mentally ill persons wandering during the lockdown were handed over to their relatives after tracing them. Requirements of senior citizens, pregnant women, etc. were given top priority and some had special programs for such vulnerable groups. Some even arranged cakes for birthdays and anniversaries when they came to know of these. Some units arranged funds for orphanages and old age homes facing fund crunch, some adopted families in distress, others adopted villages. Personnel of almost all police forces contributed at least one day's pay to Chief Minister's Relief Fund – in one state it was ten days' pay.

Almost all state forces launched several helplines and help desks for various purposes for different categories. Some police organizations did online counselling to deal with domestic disputes and violence. Mental health helplines manned by clinical psychologists were launched by some. Kerala Police organized several programs for children – a priority segment for them – who were facing problems like social isolation, emotional distress, online addictions, behavioural changes, etc. due to extended closure of schools. A panel of 40 psychiatrists, 60 psychologists, 285 Student Police Cadets trained as 'peer mentors' and 100 'elder mentors' did counselling through a helpline set up for distressed children. Peer counselling was done by trained SPC cadets telephonically to educate children about the pandemic, how to stay safe, maintain personal hygiene, and how to spend time creatively and effectively. Every week they have been organizing two very popular online interactions for children and youth – one in which young achievers of reputed educational institutions from across the world and another in which eminent persons from different walks of life motivate participants to stay positive and inspire and guide them about their education and career. To help destitute children who were divested of the benefit of online education due to digital devices, the police were provided 6,000 TV sets, 300 smartphones, 70 laptops and 262 DTH/cable connections to enable them to pursue their studies.

Use of Community Resources: The resources of the police and other disaster management authorities were highly stretched due to the need for doing a whole lot of things simultaneously; the police had to do several enforcement and other functions across the country for unprecedented long periods. Hence, inevitably they took the help of everybody from the community who were willing to help – even police forces that had no history of community policing and officers who had no faith in their utility used the community. Other government officers who were averse to community members and NGOs meddling in their affairs also turned to them for help. Community members have been particularly active in organizing

relief operations and securing their localities against the spread of Corona – but the latter has resulted in some acts of vigilantism – the police will have to take steps to prevent them. Police forces that have been implementing community policing used the volunteers working with them for a variety of purposes during the pandemic. They included CLG members, FoPs, SPC cadets, RWAs, Village Defence Volunteers, Peace Committee members, etc. Others also used NGOs, other community organisations, trade/industry associations, community volunteers, NCC/NSS cadets, etc. Uttarakhand Police even appointed Special Police Officers to assist them.

Conclusion: BPR&D has complied the details of the work done by all state police forces and CAPFs and published a compendium "Indian Police Response to Covid-19 Crisis" (available https://bprd.nic.in/WriteReadData/userfiles at /file/202010140259504434560BookonIndianpoliceresponsetocovid.pdf). Three things stand out from the manner in which Indian Police dealt with the extended lockdown and other problems that the pandemic gave rise to - (i) police giving equal importance to providing relief to distressed people at a time when they were overburdened with enforcement duties, (ii) widespread use of technology for a variety of purposes, and (iii) full use of community members and organisations not only in relief work but also in other activities to deal with problems arising out of the pandemic and consequent lockdown. The successful and empathetic manner in which they managed all these generated an unprecedented surge in goodwill for the police. A series of surveys conducted by C-Voter (2020) from 23-30 April, 2020, revealed that the trust in police jumped from 29.9% in 2018 to 69.9% in 2020. Out of the 18 organisations they rank, police was at 18th position in 2010, 14th in 2018 and an impressive 4th in 2020. The survey took place at a time when across the country, the police were for several weeks engaged in enforcing the most severe lockdown, with curfews or harsh restrictions, prosecuting violators and impounding their vehicles and interfering in almost everything which the public did outside their homes and sometimes even within their homes – actions that generally make the police very unpopular. This reiterates the view of some experts that disasters provide the police an opportunity to do something very positive for the community and earn its goodwill - something no amount of PR work can achieve.

Annexure 2

Role of Police During Disaster-Emergency Response Phase

Police organisations have a major role in disaster management. From the government's side, it will continue to be the first responder given its proximity to the incident site and relationship with the people. This responsibility will always have to be shouldered by the department due to the following reasons:

- Generally the first to be informed about such incidents by the affected people and one of the first responders to arrive at the scene of the crisis is the police.
- Police field formations and reserve forces work round the clock on all days.
- Police units possess a well-developed communication system and are familiar with the local terrain and have a wide reach.
- They generally have extensive contacts among the local community and better knowledge of the sentiments and mind-set of the local people.
- Being uniformed and the most visible arm of the government, the community will expect the police to respond quickly in any emergency.

The police play a pivotal role as the first responders along with the community they take several crucial steps before specialised agencies reach the affected area.

They are involved in the following functions:

- (i) Search and Rescue (SAR): It is the primary function during any disaster. Policemen must be trained and equipped to begin rescue at the earliest and should be able to provide immediate relief to the victims till specialized forces arrive.
- (ii) Prevention of commission of crimes including all offences against property, human body and public tranquillity
- (iii) Security during relief operations: Police will have to provide adequate security
 - At designated relief distribution centers which are generally located in the interiors
 - For distribution of relief payments to the affected beneficiaries
 - For mobile banks and ATMs
 - For food grains, food packets and other relief material being transported from different places to distribution centers and further to the targeted beneficiaries
 - For food godowns, railways stations where relief materials are channelized for further distribution

- For crowd management at local relief centers to ensure regulated distribution of aid and relief to the affected population
- For cordoning of disaster sites and securing access control for the safety and security of affected people in the debris and of rescue teams at the site
- For the security of relief camp inmates, officials, health workers and volunteers engaged in operating the camps
- For the security of hundreds of government and non-government employees/volunteers engaged in the operation of kitchens, medical centers, sanitation services etc.
- For facilitating the movement of men and material for rescue, medical, fire and other essential services
- For keeping highways roads free for movement of rescue teams and relief material
- For establishing check posts at important junctions for secure and regulated transportation of relief material. Similarly mobile patrols will have to be deployed to ensure smooth passage of Army/Navy/NDRF/SDRF convoys, boats and other resources.
- (iv) Inter-Agency Coordination: Various agencies such as NDRF, SDRF, paramilitary forces such as BSF, CRPF, CISF etc., Army, IAF, Navy, Cost Guard, medical teams deployed at the disaster sites. The police have to coordinate with them and provide liaison officers and other local support for these agencies to work efficiently.
- (v) Casualty information/disposal of dead bodies: The identification of people involved in accidents/emergencies is the responsibility of the police. All enquiries should be handled by police station staff.
 - Tracing of missing persons and notification to their next of kin is another of the police
 - Disposal of dead bodies and documentation of dead and the missing for the benefit of next of kin to claim the compensation and ex-gratia will have to be ensured

The responsibilities being shouldered by the police agencies are huge and ubiquitous. Police forces not only perform their own duties but also play vital role in the functioning of other agencies involved in disaster management. COVID 19 epidemic bears testimony to the all-pervasive and important role of the police organisations across the country in providing relief and ensuring preventive measures are taken by all the communities.

Annexure 3

Disaster Risk Management

The UNISDR defines disaster risk management as the systematic process of using administrative decisions, organization, operational skills and capacities to implement policies, strategies and coping capacities of the society and communities to lessen the impacts of natural hazards and related environmental and technological disasters. This comprises of all forms of activities, including structural and non-structural measures to avoid (prevention) or to limit (mitigation and preparedness) adverse effects of hazards. No definition for the term 'Disaster Management' is included in the UNISDR's handbook of terminology. However, the proposed, but not yet adopted, 'Updated Terminology on Disaster Risk Reduction' of UNISDR3 has proposed to define 'Disaster Management' as "The organization, planning and application of measures preparing for, responding to and, initial recovery from disasters" (UNISDR 2015). As per this definition, 'Disaster Management' focuses on creating and implementing preparedness and others plans to decrease the impact of disasters and build back better. Failure to create/apply a plan could result in damage to life, assets and lost revenue. However, it may not completely avert or eliminate the threats.

The term Disaster Management as used in the NPDM 2009 and the DM Act 2005 document is comprehensive covering all aspects – disaster risk reduction, disaster risk management, disaster preparedness, disaster response, and post-disaster recovery. This document uses the term with the same meaning as defined in the DM Act 2005: "A continuous and integrated process of planning, organizing, coordinating and implementing measures which are necessary or expedient for the following: 1) Prevention of danger or threat of any disaster, 2) Mitigation or reduction of risk of any disaster or its severity or consequences, 3) Capacity-building, 4) Preparedness to deal with any disaster, 5) Prompt response to any threatening disaster situation or disaster, 6) Assessing the severity or magnitude of effects of any disaster 7) Evacuation, rescue and relief, and 8) Rehabilitation and reconstruction."

Annexure 4

Types of Hazards

Biological hazards are of organic origin or conveyed by biological vectors, including pathogenic microorganisms, toxins and bioactive substances. Examples are bacteria, viruses or parasites, as well as venomous wildlife and insects, poisonous plants and mosquitoes carrying disease-causing agents.

Environmental hazards may include chemical, natural and biological hazards. They can be created by environmental degradation or physical or chemical pollution in the air, water and soil. However, many of the processes and phenomena that fall into this category may be termed drivers of hazard and risk rather than hazards in themselves, such as soil degradation, deforestation, loss of biodiversity, salinization and sea-level rise.

Geological or geophysical hazards originate from internal earth processes. Examples are earthquakes, volcanic activity and emissions, and related geophysical processes such as mass movements, landslides, rockslides, surface collapses and debris or mud flows. Hydro-meteorological factors are important contributors of some of these processes. Tsunamis are difficult to categorize: although they are triggered by undersea earthquakes and other geological events, they essentially become an oceanic process that is manifested as a coastal water-related hazard.

Hydro-meteorological hazards are of atmospheric, hydrological or oceanographic origin. Examples are tropical cyclones (also known as typhoons and hurricanes), floods, including flash floods, drought, heat waves and cold spells, and coastal storm surges. Hydro-meteorological conditions may also be a factor in other hazards such as landslides, wild land fires, locust plagues, epidemics and in the transport and dispersal of toxic substances and volcanic eruption material.

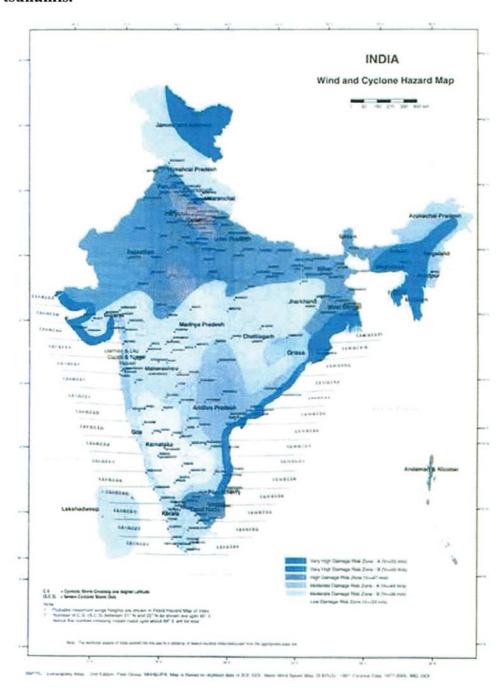
Technological hazards originate from technological or industrial conditions, dangerous procedures, infrastructure failures or specific human activities. Examples include industrial pollution, nuclear radiation, toxic wastes, dam failures, transport accidents, factory explosions, fires and chemical spills. Technological hazards also may arise directly as a result of the impacts of a natural hazard event.

Annexure 5

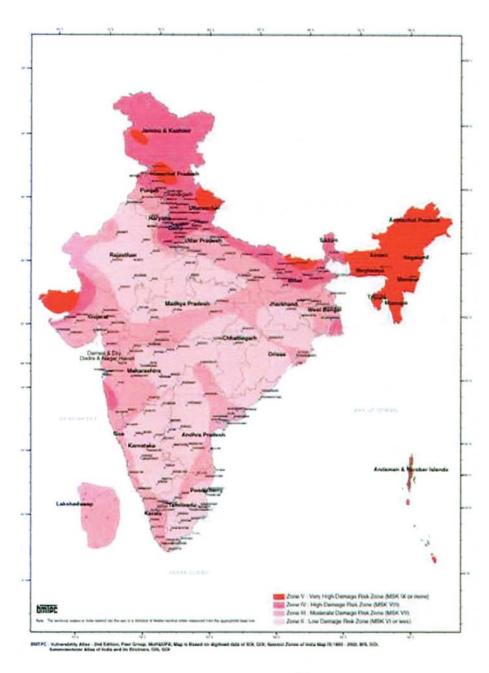
Vulnerability Profile

Disaster risks in India are further compounded by increasing vulnerabilities related to changing demographics and socio-economic conditions, unplanned urbanization, and development within high-risk zones, environmental degradation, climate change, geological hazards, epidemics and pandemics. Clearly, all these contribute to a situation where disasters seriously threaten India's economy, its population and sustainable development.

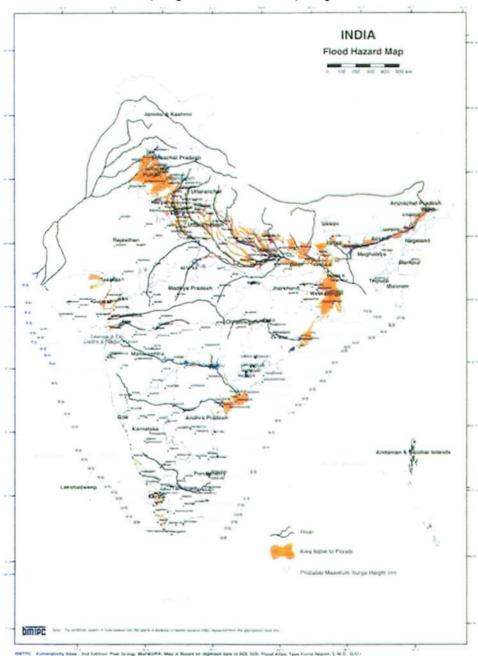
Of the 7,516 km long coastline, close to 5,700 km is prone to cyclones and tsunamis.



58.6 per cent of the landmass is prone to earthquakes of moderate to very high intensity.



40 million hectares (12 per cent of land) is prone to floods and river erosion



Annexure 6

Community Based Disaster Management (CBDM)

Most of the disaster responses are command and control functions characterized by top-down and with logistics-centred approach. Because of this, we observe, lack of community participation that results in failures in meeting the appropriate and vital humanitarian needs, unnecessary increase in the requirement for external resources, and general dissatisfaction over performance of official agencies despite the use of exceptional management measures. Recognizing these limitations, the Community Based Disaster Management (CBDM) approach promotes a bottom-up approach working in harmony with the top-down approach, to address the challenges and difficulties. To be effective, local communities must be supported in analysing their hazard conditions, vulnerabilities and capacities as they see themselves.

In the case of disasters, the people at the community level have more to lose because they are the ones directly hit by disasters, whether major or minor. They are the ones who are vulnerable to the effects of such hazardous events. They have the most to gain if they can reduce the impact of disasters on their community. This concept gave rise to the idea of community-based disaster management where communities are put at the forefront. Through the CBDM, the people's capacity to respond to emergencies is increased by providing them with more access and control over resources and basic social services.

Using a community-based approach to managing disasters certainly has its advantages. Through CBDM, it is hoped that communities will be empowered and equipped to undertake programmes for disaster preparedness and mitigation. The CBDM approach provides opportunities for the local community to evaluate their own situation based on their own experiences. Under this approach, the local community not only becomes part of creating plans and decisions, but also becomes a major player in their implementation. Although the community is given greater role in the decision-making and implementation processes, CBDM does not ignore the importance of scientific, professional and objective risk assessment and planning. The CBDM approach acknowledges that as many stakeholders as needed should be involved in the process, with the aim of developing capacities and transferring of resources to the community, which would assume the biggest responsibility over disaster reduction.

The National Policy on Disaster Management (2009) has also emphasised on 'Partnerships for Mitigation and Community Based Disaster Preparedness'. During any disaster, communities are not only the first to be affected but also the first responders. Community participation ensures local ownership, addresses local needs, and promotes volunteerism and mutual help to prevent and minimise damage. Therefore, the efforts of the States/UTs in this regard need to be encouraged. The needs of the elderly, women, children and differently able persons require special attention. Women and youth will be encouraged to participate in decision making committees and action groups for management of disasters. As first responders to any disaster, communities will be trained in the various aspects of response such as first aid, search and rescue, management of community shelters, psycho-social counselling, distribution of relief and accessing support from government/agencies etc.

A caring approach for the special needs of vulnerable sections is also important. The existing and new institutional arrangements need to ensure an integrated, synergised and proactive approach in dealing with any disaster. This is possible through contemporary forecasting and early warning systems, fail-safe communication and anticipatory deployment of specialised response forces. A well-informed and well-prepared community can mitigate the impact of disasters considerably. According to the national policy the participation of civil society stakeholders will be coordinated by the SDMAs and DDMAs. Civil Defence, NCC, NYKS (Nehru Yuva Kendra Sangathan), NSS and local Non-Governmental Organisations (NGOs) will be encouraged to empower the community and generate awareness through their respective institutional mechanisms. Efforts to promote voluntary involvement will be actively encouraged. Prompt and effective response minimises loss of life and property.

Format: Village Profile

Revenue details

Name of the Shelter/Village

Villages/Hamlets

Nearest School

Gram Panchayat

Post office

ANM Centre

Anganwadi Centre

Hospital

Fire Station

Police Station

Electric Sub Station

Telephone Exchange

Annexure 8

Format: Hazard Mapping

- · Hazard Type
- Location
- · Type of hazard: Natural/Manmade
- · Probability of occurrence
- · Frequency of hazard
- Likely duration (how long the event may continue)
- Pattern of impact
- Short-term predictability (forecast capability)
- Area of Impact
- Timing
- · Warning capability
- Preparedness levels
- · Frequency of occurrence
- Pattern
- · Potential magnitude

Format: Hazards/Disaster Mapping

S.N.	Name of Village	Type of Hazard (in order of Priority)	Year of Occurrence	No of Live stocks Lost & Cause	Type of Crop & Approx. Acreage Lost	Sub Merged	Area Fully Safe with Boundary	Approx. taken people Come home	time for to back	Remarks

Format: Search and Rescue Equipment

S.No	Resources	Total No	Contact person and Telephone Number	Distance from the Village
	Crane			
	Bulldozer			
	Gas Cutter			
	Tree Cutter			
	RCC Cutter			
	Dumper			
	Loader			
	Rope			
	Chain			
	Heavy Hammer			
	Crowbar			
	Hand Saw			
	Heavy Axe			
	Heavy jack			
	Shovels			
	Short Ladder			
	Generator			
	Tarpaulin			
	Lamps &Torches			

Format: Community Resources

S.No	Resources	Total No	Contact person and Telephone Number	Distance from the Village
	Hospitals			
	Public/Community			
	Health Centre			
	Dispensaries			
	Veterinary Hospital			
	Private Hospital			
	OPD Facility			
	X Ray Facility			
	Ambulance Service			
	Medicine Shops			
	Doctors			
	Veterinary Doctor			
	ANM			
	Paramedical Staff			
	Trained Midwives			
	Nurses			
	Carpenters			
	Masons			
	Mechanics			
	Others			

Format: Preparing Details of Various Teams (to be prepared separately for each team)

- 1. Name of the team:
- 2. Name of team leader
- 3. Names & contact particulars of team leader and members

Sl. No.	Name & Address	Telephone/Mobile/WhattsApp Nos. & email address	Remarks
1.			
2.			
3.			
4.			

4. Equipment's/Resources assigned to the team

Sl. No.	Name resource/equipment	of	Particulars of places where the resources are kept	Remarks
1.				
2.				
3.				
4.				

5. Any other relevant information about the team:

Annexure 13

Format: Volunteer's Selection by Core Team

		Age group	Experience	Numbers
•	Cordon off	20-45	Yes	10-15
•	Control room	30-50	Yes	15-25
•	Monitoring	20-40	Yes	10-15
•	Security	20-45	Yes	20-30
•	Law and order	20-45	Yes	20-30
•	Communication	30-45	Yes	15-20
•	Traffic regulation	25-50	Yes	20-25
•	Search and rescue	25-45	Yes	30-40