

State and Local-level Disaster Management Planning

In the federal structure of administration in India, disaster management is a state responsibility. Thus, action from the states is crucial for planning and implementation. Moreover, in a country of subcontinental proportions, a unified national-level disaster management plan may not be able to address complex issues at local level. State and local-level plans are thus more viable because they can focus on specific hazards and vulnerabilities of the state.

State-level disaster management plans

After Independence in 1947, India had developed a system of relief administration based on the relief codes or manuals and contingency action plans prepared by each state, focusing on disasters such as floods and droughts that occur frequently. The contingency action plans prepared by each state according to its perception of hazards generally dealt with pre-disaster (primarily pre-monsoon) inspection and maintenance of irrigation canals, embankments, check dams, collection and analysis of local and upstream weather data, information on release of water from dams, and liaison with relevant departments. However, over the years, because disasters became increasingly complex, these measures were found to be inadequate and rather ad hoc.

High-powered Committee (HPC): guiding principles of state plans

Comprehensive state disaster management planning was discussed by the HPC in its consultations with state relief commissioners – the nodal officers for disaster management. Though it was initially suggested that HPC prepare a model state plan for all states to emulate, it was felt that it would not be feasible to develop a single plan that all states could follow, given the variation in contextual attributes of the different states. Hence, a set of guiding principles for preparation of ‘State Disaster Management Plans’ was formulated: these guiding principles were meant to facilitate consistency.

The basis of the guiding principles is that planning for disaster management has to be done in advance for action to be effective. The whole process of preparation of disaster management plans introduced by the HPC emphasises taking timely preventative measures by incorporating them into the development planning system. This promises to generate a nation-building exercise that will involve the poorest of the poor in their own development. As management of disasters is concerned with saving human lives, zero-error management is required, and for this planning in advance is imperative. Actions during a disaster can be anticipated to the greatest extent possible and guidance can be given in advance to facilitate this process in the most efficient manner when the need arises. The need to plan during the actual disaster phase should be as little as is possible given the circumstances. Box 3 presents some guiding principles for state disaster management plans.

Box 3. Salient features of guiding principles for state DM plan

- The plan will be structured along the L0 (preparedness) to L1 (district-level intervention required), L2 (state-level intervention required) and L3 (national-level calamity) activities. While the state intervenes only if the disaster has reached L2 level, it needs to be active and alert for other levels of disaster as well. For L1 level, it needs to monitor activities carried out by the districts, while for L3 level, it has to coordinate with the Central Government for response.
- Guiding principles advocate marking responsibilities to organisations, departments, and individuals in their primary or secondary roles.
- Immediate response actions (first 24 and 48 hours), resource mobilisation, donation management, impact assessment, and information dissemination will be identified.
- The recovery and rehabilitation section focuses on essential aspects of shelter, livelihood, and infrastructure and how they could be mainstreamed into normal development activities.
- A database will be prepared that enlists the vulnerability of the state to different types of disasters with due recognition accorded to promotion of indigenous knowledge.
- An annual summary of resources including events, personnel, and materials will be given.

Disaster Management Act 2005: provisions for state plans

Subsequent to notification of the Disaster Management Act of 2005, all the states are mandated to develop comprehensive disaster management plans at the state, district, block, and local levels. The National Disaster Management Authority (NDMA) established under the Act is mandated to formulate the guidelines to be followed by the State Disaster Management Authorities in drawing up the State Plan. The State Disaster Management Plan is to be prepared by the State Executive Committee with regard to the guidelines laid down by the national authorities and in consultation with

local authorities, district administration, and people's representatives. The state plans will have to be approved by the State Disaster Management Authority. The Act directs that state plans should include the following.

- Vulnerability of different parts of the state to different hazards
- Measures to be adopted for prevention and mitigation of disasters
- Manner in which mitigation measures will be integrated with development plans and projects
- Capacity-building and preparedness measures to be taken
- Roles and responsibilities of each department of the government of the state in relation to the above measures
- Roles and responsibilities of each department of the state government in responding to any threatening disaster situation or disaster

The act also directs the state governments to make appropriate provisions for financing the measures identified in the plan and for annual reviews and revision exercises.

Existing state disaster management plans

Although state disaster management plans under the provisions of the Disaster Management Act of 2005 are yet to be prepared, some Indian states have been proactive in preparing such plans on the basis of HPC guidelines or even before. Maharashtra was the first to draw up state (Annex 3) and district-level disaster management plans in the aftermath of the Latur Earthquake in 1993. The planning exercise was carried out in 1994-95, with assistance from the World Bank and the UNDP. Maharashtra, is located in the western part of the country and is vulnerable to floods, droughts, landslides, earthquakes, cyclones, and human-induced disasters. One of the poorest states in India, Orissa, is one of the most prone to hazards also. The 1999 super cyclone was a benchmark in disaster management efforts as there was a paradigm shift in the way the people's perspectives, policies, and actions on managing disasters changed. Orissa was the second state to draw up a plan for disaster management. Brief descriptions of these two plans follow (Box 4).

District disaster management plans

As most of the action takes place in the districts, preparation of comprehensive disaster management plans at the district level is given top priority. Pre-disaster planning is critical for ensuring an efficient response at the time of a disaster. A well-planned and well-rehearsed response system can deal with the exigencies of calamities and also establish a resilient coping mechanism. Optimal use of scarce resources for rescue, relief, and rehabilitation during and after crises is possible only through detailed planning and preparation. The district magistrates or district collectors are the nodal officers for emergency response in the event of disasters at district level. Preparation of District Disaster Management Plans (DDMPs) is necessary in order to provide a

Box 4: Briefs on the State Disaster Management Plans of Maharashtra and Orissa

Maharashtra (Annex 3)

Prepared in three phases with the assistance of the World Bank and UNDP, the first phase concentrated on preparing a document for Risk Analysis and Vulnerability Assessment, by a State Action Plan with District Disaster Management Plans for six districts initially and a Mitigation Strategy for the state. The state plan was developed as an integrated plan encompassing all disasters in a multi-hazard response approach. A common planning and operational framework was proposed for all disasters to ensure systematic assessment, communication, and management of risk (appropriate to the disaster), and identification of response.

Departments and agencies of the Government of Maharashtra and other non-governmental agencies were expected to participate in disaster management. The plan provides for institutional arrangements, roles, and responsibilities of the various agencies, their interlinkages in disaster management, and the scope of their activities. It focuses on the role of various government departments and agencies like the Emergency Operations' Centre in case of disasters. This plan concentrates primarily on a response strategy.

The institutional arrangements in the DMAP provide for bringing all agencies and departments with disaster-specific functions under a single umbrella of control and direction. The plan strengthens administrative arrangements, with the Chief Secretary as the team leader supported by the Relief Commissioner with branch arrangements at the Emergency Operations Centre at the Mantralaya (State Secretariat). The Emergency Operations' Centre (EOC) was proposed as the hub during a disaster. The primary function of an EOC is to implement the DMAP which includes coordination, policy-making, operations management, data collection, record keeping, public information, and resource management.

It estimates emergency needs and identifies the resources to meet these needs. It also involves preparation of well-designed plans to structure post-disaster response and familiarise stakeholders, particularly communities, through training and simulation exercises.

Orissa

Orissa's plan was the first attempt to bring out a common plan for 19 categories of possible disaster identified by the HPC. It has a 'multi-hazard approach' and incorporates actions that promote a 'culture of preparedness.' The State Disaster Management Plan only highlights the activities of state government agencies and departments of Prevention, Response and Recovery for L1 and L2 disasters and the activities during L0.

The State Emergency Response Plan, a constituent of the comprehensive disaster management plan, sets out the roles and responsibilities of the agencies involved in emergency response and coordination arrangements. Under response arrangements, incident control is vested in control agencies that are primarily responsible for responding to specific emergencies. Support agencies provide services, personnel, or material to support or assist control agencies or persons affected. Response agencies can perform the role of either control or support agencies depending upon the particular emergency.

Emergency response plans also provide for the operation of state, district, block, or municipal emergency response coordination centres where response coordinators and liaison officers from control and support agencies will be located to receive, collate, and disseminate information and coordinate the provision of resources. The concepts of NDRP like EOC, incident command, disaster level, and emergency support functions (ESF) have been incorporated into the state's disaster management concept.

framework for disaster managers and district administrations to prepare for and ultimately respond to disaster events. Each DDMP's preparations should be made on the basis of vulnerability of the district to various disasters and the resources available. Moreover, in preparing plans for the districts, the structure should facilitate quick retrieval of relevant information on which the authority or individual has to act.

District plans should be multi-hazard response plans that assist and equip district administrations to organise their emergency preparedness, response, and mitigation functions in a timely and efficient manner within each district and extend the necessary support to the state and central governments. Each district plan focuses on operations and defines the types of responder agencies within the district and from within and outside the government.

The DDMP establishes a structure for a systematic, coordinated, and effective response at the district level. Components of a district plan are given below.

- Defines a system of coordination at the district level
- Identifies all the responder agencies at the district level and assigns functional responsibilities to each of them
- Establishes a central facility in the district that enables all the responder agencies to interact and coordinate their efforts
- Suggests hazard-specific preparedness, response, and mitigation measures
- Plans resource requirements and coordinates with the state government to requisition additional resources
- Provides an inventory of resources, key facilities, and addresses for deployment and assistance for preparedness and mitigation

High-powered Committee (HPC): guidelines for district plans 2002

The High Powered Committee (HPC) prepared a model District Disaster Management Plan with the following responsibilities.

- Assigning responsibility to organisations and individuals to carry out specific actions for projected items (This includes defining lines of authority and organisational relationships. It also includes activities such as identification of personnel, equipment, facilities, supplies, and other resources.)
- Identifying and recording basic information about the district; viz., topography, communication links, and so forth
- Establishing procedures and organisational arrangements for hazard identification and vulnerability analysis at district level
- Identifying mitigation measures for long-term management of risk to reduce the adverse fall-out of disaster events on physical and social infrastructures
- Identifying functions that might be required during the response phase to protect lives and assets in the community

- Arranging to organise short-term and long-term recovery and rehabilitation of communities affected
- Establishing an interface with the media, NGOs, relief and donor agencies, and other stakeholders

The HPC emphasised the need for a district plan structured in a way that facilitates easy and rapid retrieval of relevant information on which the authority or individual may have to act.

District disaster management plan: NIDM template 2005

The National Institute of Disaster Management (NIDM) has prepared an indicative template for preparation of DDMPs (Annex 4). The template is only indicative of the components of a comprehensive district disaster management plan and needs supplementing with district-specific issues; in other words it is an indicative outline of a DDMP that can be adapted in the context of a particular district. Significant guidelines for preparing a DDMP are given in Box 5.

Box 5: Significant guidelines for preparing a DDMP

Identify the objectives, context, and the institutional mechanism or individual responsible for preparing, implementing, and revising the plan.

- Introduce the district in terms of its physical, socioeconomic, and critical infrastructure.
- Carry out a comprehensive hazard, risk, and vulnerability analysis of the district and risk assessment of specific hazards.
- Identify the structure of a disaster management mechanism available at the district level in terms of the presence of disaster management committees, incident command system, emergency operations' centres, and a coordination mechanism with line departments.
- Prepare a mitigation strategy for specific hazards and sectors, both structural and non-structural, including an implementation strategy.
- Carry out preparedness and response planning, including identification of response functions, assignment of specific tasks to individual response agencies, identification of equipment, supplies, and personnel required by the response agencies for performing the assigned tasks. (A response plan outlines the strategy and resources needed for search, rescue, and evacuation.)
- Identify recovery and rehabilitation interventions for the communities affected in terms of livelihood and vital support systems.
- Establish standard operating procedures (SOPs), clearly underlining the roles and responsibilities of various organisations and individual officials during various stages of the disaster management cycle.
- Integrate long-term mitigation measures into development activities in the district during normal times and into financial allocations.
- Establish procedures for monitoring, evaluation, and revision of the plan.

Disaster Management Act 2005: provisions for district plans

The Disaster Management Act 2005 provides for preparation of a Disaster Management Plan for every district. To be prepared by the District Disaster Management Authority, in consultation with district-level departments and organisations in line with the national and state plans, the district plan will include the following.

- The areas in the district vulnerable to different forms of disasters
- Measures to be taken for the prevention and mitigation of disaster by the government department at district level and the local authorities in the district
- The capacity-building and preparedness measures required 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 government departments at district level and the local authorities in the district;
 - prompt response to disaster and relief thereof;
 - procurement of essential resources;
 - establishment of communication links; and
 - dissemination of information to the public.

The act provides for annual review and revision of the plans. Copies of the plan have to be provided to all departments of the government at district level and to the State Disaster Management Authority which forwards it to the State Government. The District Disaster Management Authority has to review the plans periodically and issue appropriate instructions to the relevant departments for implementation. The act directs every office of the Government of India and state governments at district level and the local authorities to prepare a disaster management plan under the supervision of the district authority outlining the following mechanisms.

- Provisions for prevention and mitigation as provided for in the district plan and as assigned to the department or agency concerned
- Provisions for capacity-building and preparedness as described in the district plan
- Response plans and procedures in the event of any disaster threatening or occurring

In addition to plan preparation, each department or the agency is also expected to coordinate implementation procedures with those of other organisations at the district level such as the local administration, communities, and other stakeholders.

Existing district disaster management plans

As with the state plans, some districts had been proactive in preparing plans according to HPC Guidelines and the NIDM template before the act came into existence. Disaster management plans for all districts of Maharashtra were in existence even before the HPC was constituted. Plans have been prepared by Latur in Maharashtra, Kullu in Himachal Pradesh, Maharajganj in Uttar Pradesh (Annex 5), Darjeeling in West Bengal, and Coochbehar, West Bengal. The plans by and large deal with preparedness measures, institutional frameworks, and response centres and actions to be taken by the stakeholders involved. Some of them are disaster-specific and others analyse the district's vulnerabilities and focus on involving the communities. Box 6 contains a brief description of these plans.

Community-based disaster management plans

Community participation has been recognised as a necessary element in preparation for disaster occurrence, particularly for small- and medium-scale disasters. The experiences and practices of community-based disaster mitigation programmes show the positive impact of a participatory approach. The local community is the main focus of risk reduction programmes as it is the community that is adversely affected and the first responder to the event. Traditional coping practices and survival mechanisms come into use long before outside help reaches a site.

Transforming communities at risk into communities that have disaster resilience is the by-word of community-based disaster preparedness and its major strength. The concept of community preparedness assigns significant roles to organisations and individuals living in the community with a stake in its economic sustainability. The formation of a community-based response organisation or community-based volunteer team is an important step in mobilising communities for sustainable disaster risk reduction. These community groups play a vital role in the risk reduction process.

Community-based preparedness planning is a crucial area in the national framework. By means of a 'disaster risk management programme', the community is trained to undertake risk mitigation and disaster preparedness in a participatory framework. Village disaster management plans include resource mapping, risk and vulnerability mapping, and shelter and evacuation mapping exercises along with identification of hazard-specific mitigation activities. Mock drills are held at regular intervals, especially before the season in which most disasters take place to validate the plan and archive a state of preparedness. These village-level plans are integrated horizontally with block and district level plans and vertically with the operational plans of various departments. Disaster management plans have been prepared for 8,643 villages,

Box 6: Brief description of district disaster management plans

Latur DDMP, Maharashtra

Prepared in the aftermath of a devastating earthquake in 1996-97, the Latur DDMP is a multi-response plan with an institutional framework for managing disasters. It is disaster-specific in terms of action to be taken by various agencies. It gives a comprehensive analysis of the district's vulnerability, contact details of the responders, and actions for community mobilisation.

Kullu DDMP, Himachal Pradesh

Prepared in 2001, this plan deals primarily with preparedness measures and the organisational structure for responding to disasters by establishing disaster management committees at district, sub-divisional, block, and tehsil and sub-tehsil levels. It identifies the vulnerability and capacity of the district in the context of hazards and describes the powers and functions of each member of the disaster management committees before, during, and after disasters. NGOs and Community-based Organisations and prominent members of the community are members of the disaster management committees.

Maharajganj DDMP, Uttar Pradesh (Annex 5)

Prepared in 2002-03, the DDMP focuses on operations and defines responder agencies within the district, and from within and outside the government. It has an administrative structure for systematic, coordinated, and effective response at the district level. The focus is on floods as this is the main hazard; and the plan contains a brief overview, hazard analysis of the district, important socioeconomic indicators, flood and earthquake risk analysis, and likely impact on the population. The organisational structure of the district identifies responsibilities for disaster management and prevention and mitigation strategies adopted to reduce the impact of disasters.

Darjeeling DDMP, West Bengal

Darjeeling district in the northern part of West Bengal, bordering Sikkim, is a mountain district vulnerable to landslides and floods. The DDMP, prepared in 2004, is geared towards landslide and flash flood management, especially during monsoons. The plan is comprehensive to the extent that each vulnerable village is identified and contact details at village-level. Quick Response Teams, NGOs, and evacuation shelters are listed in detail.

Coochbehar DDMP, West Bengal

This district is in the northern part of West Bengal bordering Bangladesh and is a highly flood-prone area. The plan contains a list of rescue centres, district control room operations, nodal personnel and contact details, vulnerable areas, a district communication network, and the role of various government departments and NGOs.

1,046 gram panchayats (cluster of villages, lowest strata of governance), 188 blocks, and 82 districts.

Planning for disasters in India is a dynamic work in process involving all levels of administration and all stakeholders. The overall aim is to integrate various planning levels to enable specific local-level issues to be addressed within the local context,

while the broad spectrum is addressed by state and national-level plans. The initiative to integrate long-term planning and preparedness for disaster mitigation into development planning has facilitated the introduction of safe national development, as emphasised by the Tenth Five Year Plan.