

DRAFT

# **Model Framework**

**for**

# **District Disaster Management Plan (DDMP)**

## **Chapter I: Introduction**

- Aims and Objectives of the DDMP
- Authority for the DDMP : DM Act 2005
- Evolution of the Plan in brief: (A separate chapter is included in the Annexure on Evolution, Procedure and Methodology to be followed for plan preparation)
- Stakeholders and their responsibilities
- How to use the plan
- Approval Mechanism of the Plan: Authority for implementation (State level/District level orders)
- Plan review and updation: Periodicity

## **Chapter 2: Hazard, Vulnerability, Capacity and Risk Assessment**

This chapter is dynamic and would enhance common understanding amongst stakeholders on priority sectors areas that need attention for risk reduction and sustaining development gains. The depth of HVCRA will depend on the availability of resources. Therefore, analysis of existing information should form the basis of the plan and this section should be updated and relevant action points in the document should be suitably modified to address the new analytical findings.

- Socio – economic profile of the district. (Details in Annexure). The section would also provide analysis on issues and challenges in sustainable development of the district. It is better to use maps with short write ups to describe the analysis and explain the details in annexure.
- Matrix of Past disasters in the district
- Year
- Magnitude
- Talukas and number of villages affected
- Life and cattle loss
- Damage to property
- Economical losses
- Hazard Risk Vulnerability Assessment (HVCRA): Till a proper HVCRA is conducted, this section may include analysis of the matrix of past disasters on maximum severity and best practices. This section may also include GIS maps.
- Authority/Agency that carried out HVCRA.
- Tools, Techniques and Methodology used for HVCRA:

- *Hazard analysis*: List of hazards with probability (frequency and magnitude): It would consist of the type of hazards that the district is prone to, history of hazards, impact analysis of the worst case scenario, the area, people and infrastructure that are exposed to these hazards. It should provide information about the exposure levels of various villages and cities that fall in multi-hazard zones. This chapter could also look at issues that are being faced in the district due to climate variability.
- *Vulnerability analysis*: It would cover various social groups, infrastructure, properties, and environmental resources that are vulnerable to the impact of various hazards in the district. The vulnerabilities can be categorized as physical/material, economic, Social/organizational and Attitudinal/behavioral, and environmental. This section would also describe major trends and forces of development that push people to live in unsafe conditions that lead to generation of new vulnerabilities- e.g. population growth, industrialization, environmental degradation, etc. Details to be given in Annexure. List of vulnerable Talukas and villages (hazard-wise) be provided in the Annexure.
- *Capacities and resources analysis* should highlight the capability and availability of resources with the district administration and stakeholders to reduce disaster risks and to organize effective response. Capacities could be policies, institutions, equipment, early warning, and trained human resources to handle variety of response and coordination functions, financial resources that the district stakeholders have for disaster risk management. The information and analysis gathered pertaining to the physical, technical and financial resources that are available with different departments and stakeholders would be enlisted (number, type, location, condition etc). The inventory of resources available (equipment & skilled human resource) with each department & stakeholder including private resources that can be requisitioned that could be utilized for emergency response, should be prepared. Assessment of capacities and training needs of practicing engineers, architects and masons required for hazard resistant construction. A list of departmental focal points with contact details should also be prepared while doing this analysis. Only analysis and outcome is to be given here. List of resources, availability, and location is to be given in Annexure.
- Outcome and recommendations of the HVCRA is to be provided.

### **Chapter 3: Institutional Arrangements for DM**

This section would describe the organizational structure that exists at the District, Block, Gram Panchayat, Municipality and community levels for disaster management. It would include information about composition of the above institutions and their

functions as per the National Disaster Management Act, 2005 and in the National Disaster Management Policy. However, DDMA may also identify functions of other institutions which they consider important such as Disaster Management Teams, Crisis Management Group/Incident Command System, Emergency Operation Centers (EOCs) and their operation, Site Operation Centres, Platforms such as inter-agency groups that would facilitate partnerships with NGOs, private sector, Community based Organisations (CBOs), other institutions (academic) and elected representatives. Major industrial /service / infrastructure establishments and fair capability plans should be listed (detailed in annexure)

- D.M. organizational structure at the national level,
- D.M. organizational structure at the state level including Incident Response System(IRS) in the State
- D.M. organizational structure at the district level
  - District Crisis Management Group(CMG)
  - District Disaster Management Committee and Task Forces.
  - Incident Response System in the District.
  - EOC setup and facilities available in the district
  - Alternate EOC if available and its location
- Public and private emergency service facilities available in the district
- Forecasting and warning agencies

## **Chapter 4: Prevention and Mitigation Measures**

- *Prevention measures*
  - Special projects proposed for preventing the disasters (If the projects are more, then give it in the form of a matrix and details in Annexure)
  - Specific projects for vulnerable groups
- Mainstreaming in development plans and programs
- List of on-going and proposed development projects and programs addressing disaster prevention - both directly and indirectly
  - Individual level
  - Community level
- *Mitigation Measures-* This section would describe the strategies and interventions that the District Disaster Management Authority (DDMA) and other stakeholders will implement in order to reduce disaster risks. This may include both structural and non-structural kind of strategies. There should be strategy for Information, Education and Communication (IEC) activities under the Non structural measures.

- Hazard-wise Structural mitigation measures for natural as well as manmade disasters (including Chemical, Industrial, Biological and Nuclear Hazards)
- Hazard-wise non-structural mitigation measures for natural as well as manmade disasters (including Chemical, Industrial, Biological and Nuclear Hazards).

(Both structural and nonstructural measures should be given in responsibility matrix.)

**Summary of Mitigation measures:**

Task	Activity	Authority for implementation	Starting date	Date of completion	Cost	Funding source
1	2	3	4	5	6	7

## Chapter 5: Preparedness Measures

Preparedness analysis in terms of network of communication systems, public distribution systems, storage facilities, transportation facilities, medical facilities, emergency reserves (essential resources, food, medicines, water etc), fire stations, cyclone shelters with their capacity, availability of NGOs and other volunteers, availability of plans, teams to undertake various functions etc so as to enable quick response is one important area of analysis as strengthening these would result in effective response.

- Identification of stakeholders involved in disaster response
- Formation of Teams for -
  - Early Warning
  - Search & rescue
  - Evacuation
  - Damage and Loss Assessment
- Activation of Incident Response System in the district
- Protocol for seeking help from other agencies such as Govt. of India, State Government, Public Sector Undertaking (PSUs), Other State Governments, National Disaster Response Force (NDRF), State Disaster Response Force (SDRF), Army, Navy and Air Force, Central Para Military Forces
- Mechanisms for checking and certification of logistics, equipments and stores
- Operational check-up of Warning Systems
- Operational check-up for Emergency Operation Centre

- Seasonal inspection of facilities and critical infrastructure
- Command and coordination – identification of quick response teams
- NGOs and other stakeholders coordination – identify their strengths and allocation of responsibilities in area/sector/duty/activities – Activate NGO coordination cell
- Seasonal preparedness for seasonal disasters like flood and cyclone
- Community Preparedness
  - Community warning system
  - Community awareness, education
  - Community’s responsibility
- Standard Operating Procedures (SOPs)
  - Protocol and arrangements for VIP visits
  - Procurement (Tents, blankets, tarpaulins, equipment etc , SOP for Rate contracts)
  - Logistics
- Knowledge Management, networking and sharing
  - Uploading of information on resources on India Disaster Resource Network (IDRN) / State Disaster Resource Network(SDRN)
  - Documentation of lessons learnt and best practices after each event
  
- Media management / information dissemination
  - Training and interaction strategies with Media/pre-event awareness for the Media.
  - Identification and training to the Official Spokesperson

In addition to the above, this section could also include the nature and kind of preparedness required for response, starting from early warning. This would cover among other things, the community based preparedness efforts required.

- Awareness generation strategy
- Resource Mobilization
- Resource Inventory of Man and Material (IDRN/SDRN)
- Early warning Mechanism including last mile connectivity
- Kits- Family Relief Kits, First Aid etc.

This section should also articulate the need for Disaster Management Committees at various levels and the kind of actions at district level that would support establishment of such systems at sub-district levels.

## Chapter 6: Capacity Building and Training Measures

- Approach
- Capacity Building Plan
  - Institutional capacity building
    - ✓ Officials / policy makers
    - ✓ Engineers , Architects, Masons, Doctors, Nurses, Teachers and other professionals
    - ✓ Police, Fire Services, SDRF
  - Community capacity building
  - Training of Trainers
    - ✓ Civil Defence/Volunteers
- Disaster Management Education
  - Schools,
  - Colleges : medical, Engineering
- Skill up gradation and follow up training programmes
- Inventory of trained professionals, engineers, architects, masons, medical professionals, rescue specialists etc. (All details in the annexure)

## Chapter 7: Response and Relief measures

- Response planning (multi-hazard), preparedness and assessment
  - Quick assessment of damages and need
  - Response flow chart
  - Warning and alert :
    - ✓ Early Warning Systems: Two way communication system between village and district
    - ✓ Warning dissemination: Arrangements for dissemination to the last person DDMA to translate the alert warning to simple language and disseminate the same through various media. Withdrawal of warning should also be done by DDMA
  - District CMG meeting
  - Activation of EOC
  - Resource mobilization
  - Seeking external help for assistance
  - First assessment report
  - Media management / coordination / information dissemination
  - Development of SOPs/Checklists/formats related to ESFs etc (Specific details to be provided in the Annexure)
  - Reporting:
    - ✓ Information management
    - ✓ Situation reports

- ✓ Media release
  - Demobilization and winding up:
    - ✓ Documentation
    - ✓ Success stories
    - ✓ Lessons for future
- Responsibility Matrix should be evolved for each response measures with time frame and responsibility matrix for major stakeholders should be given in annexure
  - **Hazard Specific “Responsibility Matrix” for emergency response functions for sudden disasters where Early Warning is available:**

<b>Time</b>	<b>Task</b>	<b>Department / Agency</b>	<b>Activity</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
D-72 Hr			
D-48 Hr			
D-24 Hr			
Do Hr			
D +15 Min			
D +30 Min			
D + Hr			
D +2 Hr			
D +3 Hr			
D +6 Hr			
D +12 Hr			
D +24 Hr			

- **Hazard Specific “Responsibility Matrix” for emergency response functions for sudden disasters where Early Warning is not available:**

<b>Time</b>	<b>Task</b>	<b>Department / Agency</b>	<b>Activities</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
D +15 Min			
D +30 Min			
D + Hr			
D +2 Hr			
D +3 Hr			
D +6 Hr			
D +12 Hr			
D + 24 Hr			



## Chapter 8: Reconstruction, Rehabilitation and Recovery Measures

DDMP would describe the strategy to restore normalcy to the lives and livelihoods of the affected population. Short-term reconstruction requires return of vital life support systems to minimum operating standards while long term rehabilitation will continue till complete redevelopment of the area takes place. Thus, Recovery Plan would take into account the following components:

- General Policy Guidelines (should also include prioritization of recovery process). Relief and Recovery coordination to and when be done by DDMA: District Collector (DC) to announce what kind of support required from other agencies and when.
- Detailed damage and loss assessment
- Restoration of
  - basic infrastructure
  - essential service as per the relief code of the State /District
  - livelihoods
- Reconstruction/repair of
  - lifeline buildings/social infrastructure
  - damaged buildings
  - Promote ‘Owner Driven Approach’ in recovery
- Recovery Program :
  - Short-term recovery program : Short-term livelihood security measures , loans, assistance/aid/ grants
  - Long-term recovery program : Sustainable livelihood , Insurance etc.

(Matrix for both the program should be evolved)

S/N	Task	Department/ agency	Activities	Time period	Cost	Source of Fund
1	2	3	4	5	6	7

## **Chapter 9: Financial Resources for implementation of DDMP**

This chapter would focus on the budget and other financial allocations made at district level in preparing and executing the disaster management plan, all relevant Government Orders (GOs) issued from time to time would find a reference here with important ones attached in Annexure.

- State
  - State Budget/Plan funds
  - State Mitigation Fund
  - State Response Fund)
- District
  - District Planning Fund
  - District Response Fund: (Pre- authorization of DC to draw money from treasury in the event of an immediate emergency)
- Disaster Risk Insurance
- Other financing options for restoration of infrastructure / livelihoods.

## **Chapter 10: Procedure and methodology for monitoring, evaluation, updation and maintenance of DDMP**

- Authority for maintaining and reviewing the DDMP
- Proper monitoring and evaluation of the DDMP
- Post-disaster evaluation mechanism for DDMP
- Schedule for updation of DDMP : Regular updation process for the DDMP, reflecting sections that need updation at various intervals
- Uploading of updated plans at DDMA/ SDMA websites
- Conducting of mock drills at district and sub district levels, at least annually, is important for the district as per approved Mock drill calendar. It would ensure that all parties understand their roles and responsibilities clearly. It would also help to test the efficacy of the plans prepared. Based on feedback from such simulation exercise, the plan will have to be revised and capacity build to fill the gaps. While indicating the mock drill plan of action it is essential to list down
  - the Responsible parties for organizing district drills,
  - Schedule for organizing drills and
  - Resources for organizing drills.
- Monitoring and gap evaluation
  - Checking whether all the personnel involved in execution of DDMP are trained and updated on the latest skills necessary in line with the updated plans

- Check that the on –site /off-site emergency plan of major chemical, industrial and nuclear installations are received at District Collector’s Office.

## **Chapter 11: Coordination Mechanism for implementation of DDMP**

This chapter shall include the following:

- Intra and inter-Department coordination with horizontal linkages
- Coordination mechanism with NGOs, CBOs, Self Help Groups (SHGs), Industries, private schools and hospitals with horizontal and vertical linkages
- Coordination with block/ village level Task Force(s) with vertical linkages as also inter-block and inter-village coordination with horizontal linkages
- Coordination system with state departments and training institutes at state and district level
- Intra-block and intra-village coordination
- Coordination with local self government (Panchayat Raj - Zila Parishad, intermediate level, if any, and Gram Panchayat and Urban Local Bodies). The responsibilities of local authorities are already listed in the Act. However, these local authorities are required to function “subject to the direction of district authority” (section 41); hence the need for a vibrant coordination system at these levels.
- Linkage with DDMPs of neighboring districts
- Linkage with SDMP

## **Chapter 12: Standard Operating Procedures (SOPs) and checklist**

SOPs and checklists could be prepared for various stakeholders’ effective response. These can be made based on the functioning of Emergency Support Function (ESF) groups or Incident Response System (IRS). Depending on the hazard profile and level of exposure the district should decide in a participatory way the number of ESF covering all the above. The SOPs would briefly describe the following:

- Definition of disaster situations
- Action on receipt of warning and warning dissemination;
- Process to access financial and technical resources (departments and stakeholders) for emergency response;
- Roles and responsibilities of the department or/and stakeholders in emergency response;

- Information management and dissemination strategy;
- Media management strategy during emergency response;
- Request for state government assistance
- Relief and Rehabilitation Norms (Standards) Emergency Response/ Support Functions:
  - Evacuation
  - Search and Rescue
  - Cordoning the area
  - Traffic control
  - Law and order and safety measures
  - Dead body disposal
  - Carcass disposal
  - (Add more if necessary)
- Humanitarian Relief and Assistance:
  - Food
  - Drinking Water
  - Medicines
  - Trauma care
  - Clothing
  - Other essential needs
  - Shelter Management
  - Providing helpline
  - Repairs and restoration of basic amenities (e.g. water, power, transport etc)
  - Management of VIP visits
  - Maintenance of Emergency reserves including by private agencies
  - (Add more if necessary)

## **Annexure:**

1. District profile – History of past disasters : This section would provide a brief review of the following:
  - i. Climate (temperature, rainfall and weather patterns), vegetation, geological features (fault lines, mountain areas) topography (rivers, deserts), forest areas,
  - ii. Forests , agriculture, land use pattern , irrigation system and dams
  - iii. Demography (size, growth trends, literacy rate, poverty level ( APLVs BPL), income per-capita, main occupations),
  - iv. Society (religious, ethnic groups, social structure, situation of cohesion/conflict),
  - v. Economy (key sectors, percentage of their share in economy, growth and development trends),

- vi. Infrastructure and services (roads, telecommunications, hospitals, educational institutions, water sanitation etc),
  - vii. Shelter, if any (number and types)- Flood/Cyclone Shelters or Earthquake resilient Bunkers
  - viii. Political system and social systems (local government system, councils, etc)
  - ix. Administrative system (administrative units, number of blocks, Gram Panchayat, villages) in the district.
2. Laws and policies related to disaster risk management
  3. Shelter Management Plan
  4. Evacuation plan
  5. Media Management Plan
  6. Medical and Hospital Management Plan
  7. Projects for prevention of disasters
  8. Formats for post disaster damage, loss, needs and capacity assessment
  9. List of vulnerable talukas and villages with risk ranking (hazard-wise)
  10. List of resources available in district (public and private)
  11. List of infrastructure in the district (public and private) such as police stations, shelters etc
  12. List of NGOs, CBOs List of public Volunteers – their areas of specialty and capabilities
  13. List of Trained Personnel : machinery & equipment available in the district with different stakeholders
  14. List of emergency supplies needed along with Contacts for emergency suppliers
  15. Definitions of commonly used terms
  16. Directory of departmental focal points for emergency response
  17. List of Radio & TV stations contacts
  18. Distribution List (20 the agencies/individuals to whom the plan will be distributed)
  19. List of Acronyms
  20. Contacts directory (Nodal officers in different departments, NGOs, suppliers etc) to be updated every month)
  21. Add more if necessary

## Maps:

1. District political and physical administration map
2. Administrative division and its area
3. District Map showing distribution of population, houses, crops etc
4. District Hazard Map with hazard zonation
5. on GIS base
6. District map showing vulnerability profile
7. District map showing Capacity and resource profile
8. District map showing Risk profile
9. District Map showing critical infrastructure and installation in the district such as roads, rail network, air ports and sea ports, Nuclear installations

10. District Map showing important administrative buildings, hospitals, schools, monuments
11. Forest and Agriculture related issues
12. Add more if necessary