MODEL FRAMEWORK

FOR

DISTRICT DISASTER MANAGEMENT PLAN
(DDMP)

June 2014

National Disaster Management Authority
Government of India

Chapter I: Introduction

1.1   Aims and Objectives of the DDMP (disability-inclusive)

1.2   Authority for DDMP: Disaster Management Act 2005 (DM Act)

1.3   Evolution of DDMP in brief: (A separate chapter is included in the Annexure on Evolution, Procedure and Methodology to be followed for DDMP preparation)

1.4   Stakeholders and their responsibilities

1.5   How to use DDMp Framework

1.6   Approval Mechanism of DDMP: Authority for implementation (State Level / District level orders)

1.7   Plan review and updation: Periodicity

Chapter 2: Hazard, Vulnerability, Capacity and Risk Assessment (HVCRA)

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

2.1.1   Socio — economic profile of the district. (Details in Annexure). The section would also provide an 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.

2.1.2   Matrix of Past disasters in the district

2.1.2.1 Year

2.1.2.2 Magnitude

2.1.2.3 Talukas and number of villages affected

2.1.2.4 Life and cattle loss

2.1.2.5 Damage to infrastructure

2.1.2.6 Economic losses

2.1.2.7 Environmental degradation, livelihood restoration and livestock management

2.1.3   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 Geographic Information System (GIS) maps.

2.1.3.1 Authority/Agency that carried out HVCRA

Tools, Techniques and Methodology used for HVCRA:

2.2.1   *Hazard Analysis*: List of hazards with probability of occurance (frequency and magnitude): It would consist 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 also 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.

2.2.2   Vulnerability Analysis: UN ISDR has defined "vulnerability" as the conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards. The analysis 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.

2.2.3   *Capacities and Resources Analysis:* It should highlight the capabilities and availability of resources with the district administration and stakeholders to reduce disaster risks and organize effective response. Capacities could include policies, institutions, equipments, early warnings trained human resources to handle variety of response & coordination functions and financial resources that the district stakeholders have for disaster risk reduction (DRR). The information and analysis gathered pertaining to the physical, technical and financial resources that are available with different departments and stakeholders would also be enlisted (number, type, location, condition etc). The inventory of resources available (equipment & skilled human resources) with each department & stakeholder, including private resources that can 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 would be done. 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.

2.2.4   Outcome and recommendations of the HVCRA is to be provided.

Chapter 3: Institutional Arrangements for Disaster Management (DM)

This section would describe the organizational structure that exists at the District, Block, Gram Panchayat, Municipality and community levels for DM. It would include information

about composition of the above institutions and their functions as per the DM Act, 2005 and the National Policy on Disaster Management 2009. However, District Disaster Management Authority (DDMA) may also identify functions of other institutions which they consider important such as Disaster Management Teams, Crisis Management Group / Incident Response System (IRS), Emergency Operation Centers (EOCs) and their operation, Site Operation Centres, Platforms such as inter-agency groups that would facilitate partnerships with NGOs, private sector, elected representatives, Community based Organisations (CBOs), other academic and technical institutions. Major industrial /service / infrastructure establishments and fair capability plans should be listed (detailed in annexure)

3.3.1   DM organizational structure at the national level,

3.3.2   DM organizational structure at the state level including IRS in the State

3.3.3   DM organizational structure at the district level

    3.3.3.1   District Crisis Management Group (CMG)

    3.3.3.2   District Disaster Management Committee and Task Forces.

    3.3.3.3   IRS in the District.

    3.3.3.4   EOC setup and facilities available in the district

    3.3.3.5   Alternate EOC if available and its location

3.3.4   Public-Private Partnership

    3.3.4.1   Public and private emergency service facilities available in the district

3.3.5   Forecasting and warning agencies

Chapter 4: Prevention and Mitigation Measures

4.1   *Prevention Measures*

    4.1.1 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)

    4.1.2 Specific projects for vulnerable groups

4.2   Mainstreaming DRR in development plans and programs. To develop synchronization between different Centre/State Sector Scheme and Flagship programmes.

4.3   List of on-going and proposed development projects and programs addressing disaster prevention - both directly and indirectly

    4.3.1 Individual level

    4.3.2 Community level

4.4   *Mitigation Measures-* This section would describe the strategies and interventions that the DDMA and other stakeholders will implement in order to reduce disaster risks. This may include both structural and non-structural measures. There should be a strategy for Information, Education and Communication (IEC) activities under the Non structural measures.

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

4.4.2 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 the 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, shelters (cyclone, floods) 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 an important area of analysis, as strengthening it would result in effective response.

5.1   Identification of stakeholders involved in disaster response

      5.1.1 Response and evacuation of disabled ((Availability of assistive devices and technologies for persons with disabilities in preparing for and responding to disasters)

5.2   Formation of Teams for -
      5.2.1 Early Warning
      5.2.2 Search & rescue
      5.2.3 Evacuation
      5.2.4 Damage and Loss Assessment

5.3   Activation of IRS in the district

5.4   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

5.5   Mechanisms for checking and certification of logistics, equipments and stores

5.6   Operational check-up of Warning Systems

5.7   Operational check-up for EOC

5.8   Seasonal inspection of facilities and critical infrastructure

5.9   Command and coordination – identification of quick response teams

5.10   NGOs and other stakeholders coordination   – identify their strengths and allocation of responsibilities in area/sector/duty/activities – Activate NGO coordination cell

5.11   Seasonal preparedness for seasonal disasters like flood and cyclone

5.12   Community Preparedness
      5.12.1 Community warning system

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

          6.2.3.1 Civil Defence/Volunteers

6.3   Disaster Management Education

     6.3.1   Schools,

     6.3.2   Colleges: medical, Engineering

6.4   Skill up gradation and follow up training programmes

6.5   Inventory of trained professionals, engineers, architects, masons, medical professionals, rescue specialists etc. (All details in the annexure)

6.6   Data documentation with sectoral emphasis for various vulnerable groups

Chapter 7: Response and Relief measures

7.1   Response planning (multi-hazard), preparedness and assessment

     7.1.1. Quick assessment of damages and need

     7.1.2   Response flow chart

     7.1.3   Warning and alert

          7.1.3.1 Early Warning Systems: Two way communication system between village and district

          7.1.3.1 Warning dissemination: Arrangements for dissemination to the last person DDMA to translate the alert warning in local language(s) and disseminate the same through various medium. Withdrawal of warning should also be done by DDMA

     7.1.4   District CMG meeting

     7.1.5   Activation of EOC

     7.1.6   Resource mobilization

     7.1.7   Seeking external help for assistance

     7.1.8 Pyscho Social care of affected population (Availability of psychosocial support service personnel that have the capacity to assist persons with disabilities affected by disasters)

     7.1.9   First assessment report

     7.1.10 Media management / coordination / information dissemination

     7.1.11 Development of SOPs/Checklists/formats related to ESFs etc (Specific details to be provided in the Annexure)

     7.1.12 Reporting:

          7.1.12.1 Information management

          7.1.12.2 Situation reports

          7.1.12.3 Media release

     7.1.13 Demobilization and winding up:

          7.1.13.1   Documentation

          7.1.13.2   Success stories

          7.1.13.3   Lessons for future

7.2   Responsibility Matrix should be evolved for each response measure within a time frame and the responsibility matrix for major stakeholders should be given in annexure

7.2.1 Hazard Specific "Responsibility Matrix" for emergency response functions for sudden disasters where Early Warning is available:

Time	Task	Department / Agency	Activity
1	2	3	4
D-72 Hr			
D-48 Hr			
D-24 Hr			
D0 Hr			
D +15 Min			
D +30 Min			
D + 1 Hr			
D +2 Hr			
D +3 Hr			
D +6 Hr			
D +12 Hr			
D +24 Hr			

7.2.2. Hazard Specific "Responsibility Matrix" for emergency response functions for sudden disasters where Early Warning is not available:

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

Chapter 8: Reconstruction, Rehabilitation and Recovery Measures

DDMP will describe the strategy required 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:

8.1 General Policy Guidelines (should also include prioritization of recovery process).
8.2 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.
8.3 Detailed damage and loss assessment

8.4　Restoration of
    8.4.1　Basic infrastructure
    8.4.2　Essential service as per the relief code of the State /District
    8.4.3　Livelihoods

8.5　Reconstruction/repair of
    8.5.1　Lifeline buildings/social infrastructure
    8.5.2　Damaged buildings
    8.5.3　Promote Owner Driven Approach in recovery

8.6　Recovery Program:
    8.6.1　Short-term recovery program: Short-term livelihood security measures, loans, assistance/aid/ grants
    8.6.2　Long-term recovery program: Sustainable livelihood

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

8.7　Insurance etc.

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.

9.1　State
    9.1.1　State Budget/Plan funds
    9.1.2　State Mitigation Fund
    9.1.3　State Response Fund

9.2　District
    9.2.1　District Disaster Mitigation Fund
    9.2.2　District Disaster Response Fund
    9.2.3　District Planning Fund
    9.2.4　District Response Fund: (Pre- authorization of DC to draw money from treasury in the event of an immediate emergency)

9.3　Disaster Risk Insurance

9.4　Other financing options for restoration of infrastructure / livelihoods, like utilization of flexi fund within Centrally Sponsored Scheme for mitigation/restoration activities in the event of natural calamities in accordance with the broad objective of the Central Sector Scheme.

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

10.1   Authority for maintaining and reviewing the DDMP

10.2   Proper monitoring and evaluation of the DDMP

10.3   Post-disaster evaluation mechanism for DDMP

10.4   Schedule for updation of DDMP : Regular updation process for the DDMP, reflecting sections that need updation at various intervals

10.5   Uploading of updated plans at DDMA/ SDMA websites

10.6   Conducting 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 and understand the population size and needs of vulnerable groups involving them in the actual exercise. It would also help to test the efficacy of the plans prepared. Based on feedback from such simulation exercises, the plans will have to be revised and capacity would be enhanced to fill the gaps. While indicating the mock drill plan of action, it is essential to list down

       10.6.1   The Responsible parties for organizing district drills,

       10.6.2   Schedule for organizing drills and

       10.6.3   Resources for organizing drills.

10.7   Monitoring and gap evaluation

       10.7.1   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.

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

Chapter 11: Coordination Mechanism for implementation of DDMP

This chapter shall include the following:

11.1   Intra and inter-Department coordination with horizontal linkages

11.2   Coordination mechanism with NGOs, CBOs, Self Help Groups (SHGs), Industries, private schools and hospitals with horizontal and vertical linkages

11.3   Coordination with block/ village level Task Force(s) with vertical linkages as also inter-block and inter-village coordination with horizontal linkages

11.4   Coordination system with state departments and training institutes at state and district level

11.5   Intra-block and intra-village coordination

11.6   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 of the DM Act 2005); hence the need for a vibrant coordination system at these levels.

11.7   Linkage with DDMPs of neighboring districts

11.8   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 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:

12.1   Definition of disaster situations

12.2   Action on receipt of warning and warning dissemination

12.3   Process to access financial and technical resources (departments and stakeholders) for emergency response;

12.4   Roles and responsibilities of the department or/and stakeholders in emergency response;

12.5   Information management and dissemination strategy;

12.6   Media management strategy during emergency response;

12.7   Request for state government assistance

12.8   Relief and Rehabilitation Norms (Standards) Emergency Response/ Support Functions:

    12.8.1   Evacuation

    12.8.2   Search and Rescue

    12.8.3   Cordoning the area

    12.8.4   Traffic control

    12.8.5   Law and order and safety measures

    12.8.6   Dead body disposal (Number of persons with disabilities who died or were seriously injured in disasters)

    12.8.7   Carcass disposal (Add more if necessary)

12.9   Humanitarian Relief and Assistance:

    12.9.1   Food

    12.9.2   Drinking Water

    12.9.3   Medicines

    12.9.4   Pyscho social and Trauma care

    12.9.5   Clothing

    12.9.6   Other essential needs

    12.9.7   Shelter Management (disability-inclusive accessible emergency shelters and disaster relief sites)

    12.9.8   Providing helpline

    12.9.9   Repairs and restoration of basic amenities (e.g. water, power, transport etc)

12.9.10 Management of VIP visits

12.9.11 Maintenance of Emergency reserves including those by private agencies (Add more if necessary)

Annexure:

1. District profile –: 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)
    ii.   Forests, agriculture, land use pattern, irrigation system and dams
    iii. Demography (size, growth trends, literacy rate, poverty level (BPL), income per-capita, main occupations, gender and vulnerable groups),
    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, types and estimated capacity)- 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 DRR
3. Shelter Management Plan
4. Evacuation plan
5. Media Management Plan
6. Medical and Hospital Management Plan
7. Projects for mitigation 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 (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 maps political and physical (ex if the District is prone to floods or landslides the physical map may indicate the area affected in previous floods)
2. District Administrative map showing division and its area
3. District Map showing distribution of population, houses, crops etc
4. District Hazard Map with hazard zonation on GIS base
5. District map showing vulnerability profile
6. District map showing Capacity and resource profile
7. District map showing Risk profile
8. District Map showing critical infrastructure and installation in the district such as roads, rail network, air ports and sea ports, nuclear installations
9. District Map showing important administrative buildings, hospitals, schools, monuments
10. District map showing forest and agriculture areas
11. Add more if necessary