

# District Disaster Management Plan [DDMP] Template

For School of Good Governance & Policy Analysis,  
Government of Madhya Pradesh, Bhopal

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Madhuri Swamy

Intern SGGPA

XIMB

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## Structure of District Disaster Management Plan (DDMP)

### A . GENERAL

#### A 1 Overview

##### Location and administrative divisions

The district of Dewas is sprawled on an area of 7020 sq.kms within the latitudes of 20.17 and 23.20 N and longitudes of 77.54 and 77.08 E. There are 4 subdivisions, 8 tehsils, 6 blocks and 14 municipal boards. There are 497 gram panchayats and 1125 villages constituting this district. On a linguistic basis , Dewas was formed in the year 1956. It is surrounded by Ujjain in North, Indore in west, west-Nimar in South west, east nimar in south, hoshangabad in south east, Sehore in the east and Shajapur in North east.

<b>Location (in degrees) -</b>	Latitude – 20.17’ – 23.20’ N Longitude – 77.54’ – 77.08’ E
<b>District Area (in sq. kms.) -</b>	7020.00
<b>Administrative information-</b>	
<b>No. of sub divisions:</b>	4
<b>No. of Tehsils:</b>	8
<b>No. of Municipal Boards</b>	14
<b>No. of Blocks:</b>	6
<b>No. of Gram Panchayats:</b>	497
<b>No. of Villages:</b>	1125
<b>Year of district formation:</b>	1956
<b>Name of adjacent districts:</b>	Ujjain in North, Indore in west, west-Nimar in South west, east nimar in south, hoshangabad in south east, Sehore in the east and Shajapur in North east.

	<b>Police stations</b>	<b>Police chowkees</b>	<b>Post offices</b>
Tonkhurd:	<b>1</b>	<b>1</b>	<b>15</b>
Khategaon	<b>2</b>	<b>2</b>	<b>28</b>
Kannod	<b>3</b>	<b>0</b>	<b>36</b>
Dewas	<b>3</b>	<b>2</b>	<b>37</b>
Bagli	<b>3</b>	<b>2</b>	<b>32</b>
Sonkach	<b>3</b>	<b>2</b>	<b>24</b>

Source: District statistical book (Dewas)

#### **A 1.1.2 Geography and Topography**

The rivers of Narmada, Shipra, Lodhari, Jamner and Kalisindh are the important rivers that run across Dewas district. The Indira Sagar Dam in Satwas tehsil acts as a major dam of the district. Shakraad and Naadinkari are the mountains prevailing here. The highest elevation in Dewas is near the Bharatpura village in Bagli tahsil with a magnitude of 2372m. The reserve forest covers around 1889.141 sq.km while the protected counterpart covers 134.336 sq.kms.

<b>Name of rivers and lakes:</b>	Narmada, Shipra, Lodhari, Jamner, Kaalisindh. No of lakes: 241.
<b>No. of dams, embankments:</b>	Indira Sagar Dam (Satwas tehsil)
<b>Name of existing mountains:</b>	Shakraad and Naadinkari in south.
<b>Highest elevation (in meters):</b>	2372, near Bharatpura village in Bagli tahsil.
<b>Forest cover in the district:</b>	Reserve: 1889.141 sq km. Protected: 134.336 sq km

Source: District statistical book (Dewas)



### A 1.1.3 Demographic and socio economics

The total number of households in Dewas are 2,97,652. The total population according to the latest records is 1563107, 805212 being men and 757895 being women. Population density comes to around 223 people per sq km. The total number of APL families are 179806, BPL 117846 and AAY ones are 27605. Majority of the people at Dewas take up agriculture as their main occupation and labor, masonry and factory work as secondary occupation.

<b>Total household:</b>  <b>Total population:</b>  <b>Male:</b>  <b>Female:</b>  <b>Population density:</b>	2,97,652 (Source: Census 2011 data)  1563107 (Source: Census 2011 data)  805212 (Source: Census 2011 data)  757895 (Source: Census 2011 data)  223 per sq km (Source: Census 2011 data)
<b>Income -</b>  <b>Per capita income:</b>  <b>Total APL, BPL families:</b> Source: Department of Food Dewas	Calculated at the state level  <b>Total APL: 179806 BPL: 117846 AAY: 27605</b>
<b>Occupation -</b>  <b>Main occupation of people:</b>  <b>Secondary occupation of people:</b>	<b>Agriculture</b>  <b>Daily labor, Factories, Migrant labors.</b> Source: Planning Department (Dewas)

	APL	BPL	AAY
<b>Dewas city</b>	<b>49020</b>	<b>30165</b>	<b>3736</b>
<b>Dewas rural</b>	<b>24529</b>	<b>12467</b>	<b>3129</b>
<b>Sonkach</b>	<b>21138</b>	<b>11185</b>	<b>3606</b>
<b>Tonkhurd</b>	<b>15041</b>	<b>9496</b>	<b>2566</b>
<b>Bagli</b>	<b>30168</b>	<b>19933</b>	<b>6079</b>

<b>Kannod</b>	<b>22540</b>	<b>19411</b>	<b>5595</b>
<b>Khategaon</b>	<b>17370</b>	<b>15189</b>	<b>2894</b>

#### A 1.1.4 Climate and weather

The average rainfall for the last 10 years comes to around 1067.1 mm. the average maximum temperature is around 47 degree centigrade and average minimum goes to 25.3 degree centigrade. Floods may take place in the months of July, August and September and the months of April, May and June might witness drought.

<p><b>Rainfall-</b></p> <p><b>Total annual rainfall of last year:</b></p> <p><b>Average rainfall ( last 10 years):</b></p>	<p><b>The excel sheet for whole of last 10 year's rainfall available.</b></p> <p><b>1067.1 mm</b></p>
<p><b>Temperature-</b></p> <p><b>Average Temperature:</b></p> <p><b>Average Temperature:</b></p> <p><b>Maximum</b></p> <p><b>Minimum</b></p>	<p><b>47.00 degree centigrade</b></p> <p><b>25.3 degree centigrade</b></p>
<p><b>Demarcation of crucial seasons-</b> <i>(Pl. refer data of last 10 years)</i></p> <p><b>Months of excess rainfall, leading to flood situation:</b></p> <p><b>Months of water scarcity, leading to drought situation:</b></p>	<p><b>Mid July, August, September.</b></p> <p><b>April, May, June.</b></p>

Source: Home Commandant Dewas

#### A 1.1.5 Health (Medical)

The district hospital is situated in Dewas block. There are Community health centers, primary health centers, sub health centers catering to the requirements of people all across the various blocks. Medical officers and paramedics at the institutions are been appointed according to the requirements of the hospitals. The number of ambulances and beds are provided in the table below.

Sn	Name of District	Block Name	DH	CHC	PHC	SHC	MO	Paramedicals at Institutes	Total No. of Beds	Total No. of Ambulance
1	Dewas	Dewas Urban	1	--	--	--	28		400	2
2		Baroatha		1	3	35	7	15	22	0
3		Sonakatch		1	2	26	5	16	40	0
4		Tonkkhurd		1	1	19	4	11	18	1
5		Bagli		1	6	44	4	29	70	1
6		Khategaon		1	3	25	2	15	25	2
7		Satwas (Kannod)		1	8	31	10	29	82	4
<b>Total</b>			<b>1</b>	<b>6</b>	<b>23</b>	<b>180</b>	<b>60</b>	<b>115</b>	<b>657</b>	<b>10</b>

### List of all hospitals blockwise available in hardcopy.

Source: Health Department Dewas

#### A 1.1.6 Education

Schools of all cadres are present across the Dewas district. Enrolment of students in every level block wise is provided in the table below. There is one college catering to Engineering students (Synergy) and one medical college (B.U.M.S). There are 9 government degree colleges and 11 private degree colleges.

#### Literacy rates block wise including the total number of males and females.

	Bagli	Dewas	Kannod	Khategaon	Sonkach	Tonkhurd
Literacy rate	<b>51.86</b>	<b>71.46</b>	<b>50.80</b>	<b>55.82</b>	<b>63.73</b>	<b>63.20</b>
Total male	<b>58004</b>	<b>63325</b>	42597	<b>37632</b>	41893	41971
Total female	29033	30231	18602	18742	20094	20660

#### Number of schools:

	Sonkach	Bagli	Dewas	Kannod	Khategaon	Tonkhurd
Primary and pre primary	229	427	324	270	237	169
Middle	84	156	286	87	89	78
High	8	20	20	12	12	12
Upper	4	8	11	3	3	3

middle						
Ashram	2	5		4	3	2

#### Teachers in high schools and higher secondary:

	Govt	Private	Total
Dewas	324	418	742
Sonkach	93	62	155
Tonkhurd	78	74	152
Bagli	99	60	159
Kannod	124	63	187
Khategaon	68	58	126

**No. of Anganwaris:** 1493

**No. of Engineering colleges:** 1 (Synergy college)

**No. of Medical colleges:** 1 (B.U.M.S)

#### No. of Other colleges:

9 government degree colleges, 11 private colleges.

**KP college:** profs=44 students=2727

**GDC college:** profs=15 students=1091

**Sonkach college**=10 students=314

**Hatpiplia college**=6 students=150

**Bagli college**=7 students=190

**Kannod college**=6 students=508

**Khategaon college**=13 students=427

Source : Education Department Dewas

#### A 1.1.7 Agriculture and Land use

The major crops grown in Dewas are Soya bean, Jowar, Maize , Sugarcane and Wheat. The cropping seasons are Kharif and Rabi based on the summer and winter times of cropping. The land is classified into uncultivated or barren land, cultivated and pasture land

which account to 469.40, 3,91,000 and 206636 hectares respectively. The soil in Dewas is medium , deep black cotton soil and it comes under the Malwa zone.

<p><b>Cropping pattern -</b></p> <p><b>Type of major crops:</b></p> <p><b>Cropping seasons:</b></p>	<p><b>Soya bean, Jowar, Maize, Sugarcane, Wheat.</b></p> <p><b>Kharif and Rabi</b></p>
<p><b>Land classifications-</b></p> <p><b>Forest land:</b></p> <p><b>Barren &amp; Uncultivated land:</b></p> <p><b>Cultivated land:</b></p> <p><b>Pasture land:</b></p>	<p><b>Reserve: 1889.141 sq km.</b></p> <p><b>Protected:134.336 sq km</b></p> <p><b>469.40 hectares</b></p> <p><b>3,91,000 hectares</b></p> <p><b>206636 hectares</b></p>
<p><b>Soil classifications</b></p>	<p><b>Medium , deep black cotton soil</b></p> <p><b>Malwa zone.</b></p>

**Source:** Agriculture Department Dewas

#### A 1.1.8 Housing Pattern:

The most general housing pattern found in Dewas is Pucca. RCC structure which adopts a certain structure with a beam supporting the house is followed. Mostly, bricks are used for the walls and flooring material and tiles are used for flooring. G+1 pattern is generally seen but there are G, G+2 and G+3 as well in some places.

<p><b>Housing pattern-</b></p> <p><b>Type of housing construction:</b></p> <p><b>Type of material used:</b></p> <p><b>Flooring types: (Ground and above)</b></p>	<p>Standards for district housing pattern and numbers of houses available in hardcopy</p> <p>Pucca houses</p> <p>RCC structure used. Bricks used for walls and flooring material and tiles used for flooring.</p> <p>G+1 is the general pattern observed all</p>
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	across though G and G+2 and G+3 are observed intermittently.
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According to census, 40.5% of houses have unburnt brick walls and 0.5% have stone walls. Category A has 41.0% houses, category B has 42.8% houses and category C has 12.9%.

Source: Nagar Nigam Dewas, Vulnerability atlas.

#### A 1.1.9 Industrial set ups

There are 239 small and micro industries and 52 large and medium industries in Dewas district. The workforce involved in the small and micro industries are 5217 people and in large and medium are 20104. Till now, no industrial hazards have occurred in the district of Dewas.

<p><b>Total no. of industries</b></p> <p><b>a) No. of Major Accident Hazard Units/ Polluting industries/ Industrial Areas:</b></p> <p><b>Total workforce involved in these industrial units:</b></p> <p><b>b) No. of Medium and small scale industries :</b></p> <p><b>Total manpower involved in these units:</b></p>	<p><b>Available in hardcopy.</b></p> <p><b>Information or records on hazards or pollution are not explicitly shared.</b></p> <p><b>No of Micro and Small: 239</b></p> <p><b>Workforce Micro and small: 5217</b></p> <p><b>No of Large and medium: 52</b></p> <p><b>Workforce in Large and medium:20104</b></p> <p><b>(Details of all industries available in hardcopy)</b></p>
<p><b>Any major accident occurred in any of the industrial units (Loss of life &gt;10, or Financial loss &gt; 1 Crore).</b></p>	<p><b>No such record</b></p>

Source: Department of Industries , Dewas

#### A 1.1.10 Transport and communication network

##### **AIR**

Nearest airport situated at Indore are about 40 km away from Dewas. Domestic air carrier like Indian airlines and private airlines like Sahara, Jet airways connect Indore to Delhi, Mumbai, Chennai and all major cities.

##### **RAIL**

Dewas is well connected by good train services to Delhi, Mumbai, Calcutta, Madras, Jaipur and all major cities.

##### **Road**

Dewas is situated on National Highway No. 3 ( AGRA-BOMBAY Road). The town of DEWAS is centrally located having links to adjoining districts viz. Ujjain (The religious city of Mahakal), Sehore, Bhopal (M.P.State Capital) and Indore. The city is well connected by road. It is situated at a distance of 560 K.M. from Agra, 160 K.M. from Bhopal, 33 K.M. from Ujjain and 35 K.M. from Indore by road.

**Communication:**

There are around 35000 GSM and 3109 CDMA connections in Dewas. There are 88 telephone exchanges out of which 81 are rural and 7 are urban. the total number of telephone connections are 13923 according to the census 2011. There are around 63 broadband stations and no HAM stations at all.

<p><b>1) Communication network</b></p> <p>i) <b>No. of wireless stations in the respective blocks</b></p> <p>ii) <b>Availability of telephone, mobile services in each block</b></p> <p style="padding-left: 40px;">Total telephone exchange</p> <p style="padding-left: 40px;">Rural</p> <p style="padding-left: 40px;">Urban</p> <p style="padding-left: 40px;">Total connections</p> <p style="padding-left: 40px;">Per 100people</p> <p>iii) <b>Availability of internet facility in the blocks</b></p> <p>iv) <b>No. of HAM Radio Stations in the blocks</b></p>	<p><b>GSM: 35000</b></p> <p><b>CDMA: 3109</b></p> <p>The table is attached in the Annexure</p> <p><b>88</b></p> <p><b>81</b></p> <p><b>7</b></p> <p><b>13423</b></p> <p><b>0.86</b></p> <p><b>Broadband:63 stations.</b></p>
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	Tonkhurd	Khategaon	Kannod	Dewas	Sonkach	Bagli
<b>Pucca</b>	<b>154</b>	<b>129</b>	<b>202</b>	<b>761</b>	<b>192</b>	<b>212</b>
<b>Kucha</b>	<b>11</b>	<b>11</b>	<b>26</b>	<b>15</b>	<b>27</b>	<b>29</b>
<b>No of villages connected by road</b>	<b>18</b>	<b>18</b>	<b>31</b>	<b>121</b>	<b>18</b>	<b>67</b>

No of railway stations in Dewas block = 3

**A 1.1.11 Power stations and electricity installations**

The district of Dewas has no power stations but instead has power substations.

<p><b>List of power stations in the district:</b></p> <p><b>Electricity outreach in the district:</b></p>	<p><b>Enclosed in hardcopy</b></p> <p><b>Outreach for the months of Jan, Feb and March available in hardcopy</b></p>
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<p><b>Available sources of electricity in district, like DG sets etc:</b></p>	<p><b>There has been monitoring on this from 2 years and hence data was inaccessible</b></p>
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Source: Department of Power and Electricity , Dewas

**A 1.1.12 Major historical, religious places, tourist spots**

Dewas is well known for its famous Maa Chamunda tekri mandir to which people from all over flock to visit the deity. There has been a record of 1-1.5 lacs of people visiting on Amavasya. The Kela deva temple is also a religious place to which devotees come in large numbers on Chaitra navaratri. Mahakaleshwar temple gets devotees on the eve of Mahashivaratri. The historical places in Dewas are Pawar Chattries, Gidya Khoh and Fatehgarh Fort. The tourist spots in the district are Kavadia hills and Kitty falls.

<p><b><u>List of historical places in the district:</u></b>                  Pawar Chattries                  Gidya Khoh                  Fatehgarh Fort</p> <p><b><u>List of religious centers in the district:</u></b>                  Chamunda tekri, Dharaji ( 1 – 1.5 lacs of people on Amavasya)                  Siddheswar Mahadev                  Kela deva Temple (high density of people on chaitra navaratri)                  Mahakaleshwar temple (lakhs of devotees on Mahashivratri)</p> <p><b><u>List of the tourist spots in the district:</u></b>                  Kavadia hills                  Kitty falls</p>
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Source: Home Commandant office, District Portal, NIC.

**A 1.2 Scope and Ownership of District Disaster Management Plan**

*The portion from 1.2 to 1.5 will primarily address the necessity of the plan, changing context of disaster management, policy, responsibility and authority of the district plan, aims and objectives of the plan, multi hazard approach towards the disasters, when the plan was prepared and any other information that helps to understand the context and relevance of the Disaster Management (DM) plan.*

**A 1.2.1 Authority of the Plan**

**A 1.2 Scope and Ownership of District Disaster Management Plan**



Any type of disaster, be it natural or manmade, leads to immense loss of life, and also causes damage to the property and the surrounding environment, to such an extent that the normal social and economic mechanism available to the society, gets disturbed.

The Govt. of India, recognized the need to of a proactive, comprehensive, and sustained approach to disaster management to reduce detrimental effects of disasters on overall socio-economic development of country, and came out with Disaster Management (DM) Act 2005, and highlighted the role and importance of District Disaster Management Plan. The Govt. of Madhya Pradesh (GoMP) also believes that there is a need for a Disaster Management Plan in every district that articulates its vision and strategy for disaster management in the state. In this context the Madhya Pradesh State Disaster Management Authority (MPSDMA) provides guidelines to various entities involved in disaster management in the state to discharge their responsibilities more effectively.

Further, as per the DM Act, the District Disaster Management Authority to be formed in each district and it will be the nodal agency for preparation, functioning and review of the District Disaster Management Plan (DDMP).

The scope of district disaster management plan is very wide, and it is applicable in all the stages of disasters (before, during, after & non disaster time). The DDMPs can help officials in taking important decisions and also provide guidance to direct subordinates in emergency. The DDMP helps in saving the precious time, which might be lost in the consultations, and getting approval from authorities.

It will be the responsibility of the District Disaster Management Authority members to look after the district and sub district level institutionalization activities pertaining to the disaster management, including the periodic review of district disaster management plan and allied functions.

DDMP is an operational module for district administration (owned by the DDMA) and it helps to effectively mitigate the different types of disasters with locally available persons and resources. It also ensures a checklist for all the stakeholders for an action oriented response structure and to study their preparedness level.

## **A 1.2 Purpose of the Plan**

To make the district safer, and respond promptly in a coordinated manner in a disaster situation, mitigate potential impact of disasters in order to save lives of people and property of the respective district.

### A 1.3 Key Objectives

Complying with the DM Act 2005, the objectives guiding the formulation of the plan are:

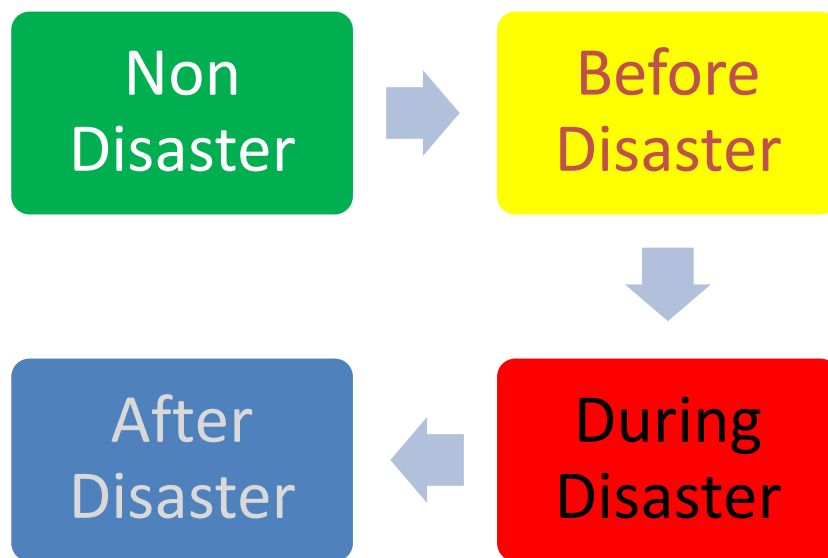
- Assess all risks and vulnerabilities associated with various disasters in the district
- Promoting prevention and preparedness by ensuring that Disaster Management (DM) receives the highest priority at all levels in the district.
- Prevention and minimization of loss of human lives and property by gearing up preparedness, prevention & mitigation of disasters
- To provide clarity on roles and responsibilities for all stakeholders concerned with disaster management so that disasters can be managed more effectively
- Assisting the line departments, Block administration, urban bodies and community in developing coping skills for disaster management & Ensuring that community is the most important stakeholder in the DM process.
- To strengthen the capacities of the community and establish and maintain effective systems for responding to disasters
- Developing convergence of action in addressing, preventing and mitigating disasters and to equip with maximum possible relief measures and to resort to pre-disaster, during and post-disaster steps.
- To establish and maintain a proactive programme of risk reduction, this programme being implemented through existing sectoral and inter-sectoral development programmes and
- Mainstreaming DM concerns into the developmental planning process.
- Encouraging mitigation measures based on state-of-the-art technology and environmental sustainability.
- To address gender issues in disaster management with special thrust on empowerment of women towards long term disaster mitigation
- Developing contemporary forecasting and early warning systems backed by responsive and fail-safe communications and Information Technology support.
- Encourage training and create awareness, rehearsals, dissemination of knowledge, and information on DM among all the citizens living in the district.
- Ensuring relief/assistance to the affected with care, without any discrimination of caste, creed, community or sex
- Undertaking reconstruction as an opportunity to build disaster resilient structures and habitat.
- Undertaking recovery to bring back the community to a better and safer level than the pre-disaster stage
- To develop disaster management as a distinct management discipline and creation of a systematic and streamlined disaster management cadre

### A 1.4 District Plan Approach

The aim of the plan is to establish necessary systems, structures, programs, resources, capabilities and guiding principles for reducing disaster risks and preparing for and responding to disasters and threats of disasters in respective district, in order to save lives and property, avoid disruption of economic activity and damage to environment and to ensure the continuity and sustainability of development.

The district disaster management plan has a holistic and integrated approach with emphasis on prevention, mitigation and preparedness by ensuring that Disaster Management receives the highest priority at all levels in the district. It has a paradigm shift, similar to the lines of national and state level, from reactive and relief centric approach to disasters. The approach is aimed to conserve developmental gains and also minimize losses to lives, livelihood and property.

For efficient execution of the District Disaster Management Plan, the Plan has been organized as per these four stages of the Disaster Cycle.



Non disaster stage: Activities include disaster mitigation, leading to prevention & risk reduction.

Before disaster stage: Activities include preparedness to face likely disasters, dissemination of early warnings.

During disaster stage: Activities include quick response, relief, mobilization of search & rescue, damage assessment.

After disaster stage: Activities include recovery & rehabilitation programs in disaster affected areas.

## A 2. Institutional Arrangements

### A 2.1 District Disaster Management Authority (DDMA)

<b>Date of inception of DDMA</b>	<b>Under the process</b>
<b>Members of DDMA, their name, along with actual designations, and current position in DDMA like Chairman, Secretary or Member etc</b>	<b>Chairman: District Collector</b> <b>Secretary: Chairman, Zilla Panchayat</b> <b>Members: Upper Collector, Dewas</b> <b>Police Commissioner, Dewas</b> <b>Chief Medical Officer, Dewas</b> <b>Karya paalan Yantri, Lok nirman vibhag</b> <b>District Commandant, Dewas.</b>

According to the DM act 2005, the DDMA should constitute of the following members:

- |   |                    |
|---|--------------------|
| <b>1. Deputy Commissioner</b>                 | <b>Chairperson</b> |
| <b>2. Supdt. Of Police</b>                    | <b>Member</b>      |
| <b>3. Chief Medical Officer</b>               | <b>Member</b>      |
| <b>4. Superintending engineer (PWD)</b>       | <b>Member</b>      |
| <b>5. Superintending Engineer (I&amp;PH)</b>  | <b>Member</b>      |
| <b>6. Superintending Engineer (MPP&amp;P)</b> | <b>Member</b>      |
| <b>7. Chairperson of the Zila Parishad</b>    | <b>Member</b>      |

#### DDMA roles:

- Ensuring that prevention, mitigation and preparedness activities are carried out in accordance with the appropriate guidelines.
- Providing inputs to MPSDMA relating to various aspect of disaster management including early warnings, status of preparedness etc
- Ensuring that relevant officials in the district possess the knowledge to deal with disaster management issues
- Developing an appropriate relief implementation strategy for the district taking into account the unique circumstances of the district and prevailing gaps in institutional capacity and resources of the district

- Facilitating and coordinating with local govt bodies to ensure that pre disaster DM activities in the district are carried out optimally
- Facilitating community training, awareness programs and the installation of emergency facilities with the support of local administration, NGOs and the private sector
- Establishing adequate interdepartmental coordination on issues related to disaster management
- Reviewing emergency plans and guidelines
- Involving the community in the planning and development process
- Ensuring that local authorities including municipal corporation, gram panchayatss etc in the district are involved in developing their own mitigation strategies
- Ensuring appropriate linkage between DM activities and planning activities
- Revisiting or re assessing contingency plans related to disaster management
- Ensuring that proper communication systems are in place and contingency plans maximize the involvement of local agencies

**DDMC** is not yet formed but these are the members proposed for the committee:

1	Deputy Commissioner	Chairperson
2	Superintendent of Police	Member
3	Chairperson, Zila Parishad	Member
4	Additional Deputy Commissioner	Member
5	Additional District Magistrates	Member
6	Commissioner Municipal Corporation	Member
7	Chief Medical Officer	Member
8	Superintending Engg. (I&PH)	Member
9	Superintending Engg. (PWD)	Member
10	Superintending Engg. (MPSEB)	Member
11	District Food & Supplies Controller	Member
12	Commandant, Home Guards	Member
13	Commandant, ITBP (Hqrs.)	Member
14	Commandant, GREF	Member

15	District Fire Officer	Member
16	District Public Relation Officer	Member
17	Divisional Manager, HRTC	Member
18	General Manager, Telecommunication	Member
19	Conservator of Forests	Member
20	District Revenue Officer	Member Secretary
21	From two prominent NGO's working in the district in the field of Disaster Management	Member

Source: Department of Relief, Home Commandant office, NDMA.

### A 2.3 District Emergency Operations Center (DEOC) / District Control Room (DCR)

<b>Location of the DEOC / DCR:</b>	<b>Collectorate</b>
<b>Involved agencies in DEOC / DCR, Roles and responsibilities of the officials / nodal persons (phase wise):</b>	<b>All the 24 line departments are involved. Homeguard dpt, health, food, fire, relief etc.</b>
<b>Equipments installed (software and hardware):</b>	<b>A landline phone and a mobile phone</b>

#### **Composition of DEOC as prescribed:**

Logistics Officer

Finance Officer

Liaison Officer (volunteer/Interagency)

Public Information

District In charge

Extension ESF Heads

Source: Department of Relief (Collectorate)

#### **A 2.4 Urban Area Disaster Management Committees:**

Subject to the directions of the District Authority, the Urban Area disaster management committees will be responsible for the development and implementation of their respective urban area disaster management plans.

#### **A 2.6 Gram Panchayat/Village Disaster Management Committee**

Subject to the directions of the District Authority, the *Gram Panchayat* Disaster Management committees will be responsible for the development and implementation of GP level disaster management plans.

#### **A 2.6 Block Level Disaster Management Committee (With details of telephone numbers in Annexure)**

As proposed by the DM act 2005, block level DM committees should consist of:

1	Block Development Officer	Chairperson
2	SHO, Police Station	Member
3	Chairperson, Panchayat Samiti-Block	Member
4	Medical Officer In charge, Dispensaries	Member
5	Assistant Engineer, I&PH	Member
6	Assistant Engineer, PWD	Member
7	Assistant Engineer, MPSEB	Member
8	Inspector, Food & Supplies	Member
9	Platoon Commander, Home Guards	Member
10	Range Officer, Forests	Member
11	In charge, Fire Station	Member
12	Junior Engineer (JTO), Telecom	Member
13	SEBPO	Member Secretary
14	From two prominent NGO's working in the block in the field of Disaster Management	Members

## **B . HAZARD, VULNERABILITY ASSESSMENT AND RISK PROFILING (HVRC)**

### **B 1. Hazard Assessment**

**Table B.1.1 Major applicable hazards**

**FLOOD:**

The reasons behind the occurrence of floods in Dewas are excessive rainfall in short span of time, obstruction to natural drainage of rainfall water, poor maintenance of drains leading to their damage, construction of bhawans extremely near to drains, lack of standard technology in previously constructed drains, problem in drainage of water due to construction by the administrative construction agencies over the drains, lack of cleanliness lead to choking of drains by plastic and polythene. But the most important reason behind the floods are the presence of major rivers like Narmada, Kalisindh , etc. which overflow onto the banks and pose hazard for the people and property in there.

**EARTHQUAKE:**

Dewas district comes under zone 3 and some part of it has been proposed for zone 4. Therefore preparedness planning for earthquake in the district is must. Moreover keeping in view the housing structures preparedness for earthquake is nil. Therefore PWD should be the nodal agency that will work towards making the houses earthquake prone in order to minimize the mishap.

**FIRE:**

Dewas is vulnerable to fire hazards. Also there is need to develop techniques to overcome the fire hazard for multi-storied buildings.LPG, propane, motor spirit, high speed diesel and superior kerosene are major chemicals to create emergency situations in the district. Based upon the physical and chemical properties of these chemicals, it has been identified that following hazards should be considered for the on-site and off-site emergency planning:

- Fire: Pool fire, Jet fire, flash fire liquid
- Explosions: Vapour cloud explosions(VCE), Boiling Expanding Vapour Explosions (BLEVE)

**Table B.1.2 History of past disasters**

Type of hazard	Year of occurrence	Area affected	Impact on life	Livelihood	Livestock	Hazard prone zone in district
Flood	1971,83,84,86,91,96,97,98,99,2004,2006,2007.	Villages on the Banks of River				



Illiprakop	October 2007	Narmada Soya fields		Loss in Soya crop		
Olla(Hailstorm )	11 <sup>th</sup> March 2010	Anywher e in the district		217.88 lakhs of property loss 170 families disturbed	Affected	Anywhere in the district
Fire	March 2010	Urban Dewas	180 peopl e died	36.43 lakhs worth property lost.		Urban Dewas,M oti bangla kshetra
Drought	2011	Bagli				

Source: Department of relief.

Table B.1.3 Seasonality of hazards

Hazard	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Flood		yes	yes	yes	yes	yes	Yes yes	Yes yes	Yes yes	yes	yes	yes
Earthquake	yes			Yes	Yes	Yes						
Loo												
Tag(hindi)												
Accidents	yes	yes	Yes	yes	Yes	yes	Yes	Yes	Yes	Yes	yes	Yes
Tussar/ pala( hindi)	yes	yes					Yes	yes	yes	Yes		Yes
Illiprakop		yes	yes									Yes
Olla vrusti	yes											

Source: Department of Relief

## B 2 Vulnerability Analysis

Name of Hazard	Hazard prone Block, GPs
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<b>Flood</b>	<b>(Annexure)</b>
<b>Earthquake-</b>	<b>Niran, Premgadh, Semali Narmada, nayapura, narsinghpura, devjhiri, kothmeer, guvadi, kanad,dhardi.</b>
<b>Fire</b>	<b>udaynagar,</b>
<b>Drought-</b>	<b>Tehsil Bagli, karnavad, bagli</b>
<b>Industrial :</b>	<b>indore- namavir road(inflammable tankers keep moving there)</b>
<b>Road accidents:</b>	<b>indore –nemawar state highway no 59,SH-22, Robery: Khedakhil forest area.</b>

The vulnerability faced range from physical vulnerability to social and economic vulnerability.

**Physical Vulnerability :** Physical vulnerability is the set of existing weaknesses which render to the sensitivity to get affected by the various hazards that can happen and hence lead to a disaster. Every year flood like situations are created in the district because of backwaters from dams, overflowing of rivers and also the rainwater collected from its catchment areas present in the district.

**Social Vulnerability:** Disasters deprive people of their jobs and hence their source of livelihood is lost which forces them to either migrate or switch their jobs. Social vulnerability is the vulnerability which is due to the social status of the people which adds to the proneness of the

people towards disaster. The eradication of this vulnerability is completely in the control of people but by choice.

**Economic Vulnerability:** As the district is laying face down to floods, earthquakes, fire, hail storms, epidemics, etc which directly affect the agricultural produce, thus it decreases the livelihood options for villagers whose major occupation is either agriculture or are agricultural labors. Economic vulnerability is caused because of the economic stratification of the society and this vulnerability is as complicated as the social vulnerability.

**Institutional Vulnerability:** There is strong need to create awareness among community regarding health and safety, Absence of relief Team at village level creates a disastrous situation for villagers. Gram Raksha Samiti should help in forming volunteered team from youth to help in the early hours of any disaster. Lack of advanced technology in the district control rooms and other established head quarters is a serious problem. All the blocks are institutionally vulnerable.

**Environmental/ Natural vulnerability:** The blocks of Kannod and Khategaon are more naturally vulnerable because of the presence of rivers and riverlets and the proximity of Narmada also contributes to the same.

Source: Department of relief

### B 3. Capacity Analysis

Table B 3.1 Resource inventory.

Resource Type	Details	Number	Govt, Private	Contact no. of nodal person/s
Emergency Search lights	Under nodal person R.K.Mishra	2	Govt	7828866611
Trained manpower, professionals available in specific domain like S&R ,First Aid, Response Warning, Swimming etc.	R.K.Mishra	1	Govt	7828866611
Availability of equipments like Bulldozers, Hydra,	R.K.Mishra	Bulldozers=1,hydra=0, List, Water	Govt	7828866611

Crane, for clearance, JCB		tanker=17,JCB=5		
Transportation(Fit Vehicles available with nodal agencies, in emergency)	Updated list in annexure	Refer Annexure	Govt and pvt	Refer Annexure
Total no. of boats (with info about capacity, size, contacts of Orgn./owner etc)	<p>Country boats=0</p> <p>Motor boats=4</p> <p>Fibre boats(for 12 people)=0</p> <p>Inflatable boats=0</p> <p>Motor launch=2</p> <p>Rescue bank boats=0</p> <p>Engine motor boats=4</p>		Govt and private	Refer Annexure
Availability of fire fighting equipments, Fire tenders	<p>Fire fighting equipments-</p> <p>Foam nozzle(4)</p> <p>fog nozzle(4)</p> <p>small cutters(3)</p> <p>Fire tenders are of type B</p>			
Veterinary Hospitals	Enclosed in hard copy	Hardcopy		
Telephone Exchange	<p>Total=88</p> <p>Rural=81</p> <p>Urban=7</p> <p>Total connections=13423</p> <p>Per 100=0.86</p>			

Source: Dept of Fire, Home commandant

## B 4. Risks Assessment

Table B.4.1 Potential impact of applicable hazards and existing vulnerabilities

Type hazard	of	Vulnerable areas *	Vulnerability	Potential Impact	Identified safer places *
Flood		The blocks of Kahtegaon, Kannod and Bagli which are close to the banks of river Narmada.	People who live there unalarmed about the flood, also the livestock of the people there, poorly constructed houses.	Loss in life and livestock, houses can be washed out.	Potla , Pipri, Kanad, Udaynagar
earthquake,		No block recognized yet	Lives of people and livestock, houses on the zone.	Deaths, serious injuries, loss of livestock and property.	
drought,		All the blocks can be affected	Loss of lives and crop.	Stark reduction in food supply and deaths due to lack of water.	
stampede,		At places with famous temples or tourist places.	Lives of people who come there and also injuries.	Loss of life and injuries.	
hailstorm,		No such record.	People who are exposed to it at that time, livestock as well.	Loss of life and livestock.	
fire,		Places more prone to the loo.	Lives of people who live in thatched houses, livestock and property.	Loss of lives, severe injuries, loss of livestock and property.	
industrial disaster,		No such record.	People who work in the factories, people who live around the factory,	Loss of lives, poisonous gases spread around the place leading to genetic	

<p><b>accidents,</b></p>	<p><b>On highways or for that matter anywhere.</b></p>	<p><b>water and air around.</b></p> <p><b>People travelling in the vehicles, people in the vicinity of the accident.</b></p>	<p><b>impairments for the future generations, water and other resource pollution.</b></p> <p><b>Loss of lives, severe injuries.</b></p>	
<p><b>epidemic,</b></p>	<p><b>No such record.</b></p>	<p><b>People who do not observe prevention.</b></p>	<p><b>Loss of lives or severe impact on health.</b></p>	
<p><b>landslide, and other applicable hazards</b></p>	<p><b>No such record.</b></p>	<p><b>People who live in that area.</b></p>	<p><b>Loss of lives and property.</b></p>	

Source: Home commandant

**Risk profiling of the district Dewas:**

With maximum occurrence of floods more than any other disaster, we can safely say that Dewas is majorly a flood prone district. With some of the major rivers like Narmada , Kalisindh flowing across the district, during heavy rains floods become inevitable. The low lying areas especially get affected by the upsurge of the river waters and they are more vulnerable than the other places.

Though there haven't been any earthquakes since 1984, people have a conception that Dewas isn't an earthquake prone district. But the scientific or rather the seismic studies say that Dewas is situated in zone 3 and some part of it is even situated in zone 4. Hence Dewas can be counted as one of the earthquake prone districts as well.

Dewas has sometimes been exposed to hailstorms and pest attacks called illiprakop ( affecting crops).

**FLOOD:**

The reasons behind the occurrence of floods in Dewas are excessive rainfall in short span of time, obstruction to natural drainage of rainfall water, poor maintenance of drains leading to their damage, construction of bhawans extremely near to drains, lack of standard technology in previously constructed drains, problem in drainage of water due to construction by the administrative construction agencies over the drains, lack of cleanliness lead to choking of drains by plastic and polythene. But the most important reason behind the floods are the presence of major rivers like Narmada, Kalisindh , etc. which overflow onto the banks and pose hazard for the people and property in there. The villages and blocks prone to floods have been attached in the annexure.the places closer to the Hoshangabad district and hence to river Narmada are more

prone to floods and hence Dewas can be safely labeled as flood prone. there are villages recognized as flood prone and low lying and hence village level teams are more active.

### **EARTHQUAKE:**

Dewas district comes under zone 3 and some part of it has been proposed for zone 4. Therefore preparedness planning for earthquake in the district is must. Moreover keeping in view the housing structures preparedness for earthquake is nil. Therefore PWD should be the nodal agency that will work towards making the houses earthquake prone in order to minimize the mishap.

Niran, Premgadh, Semali Narmada, nayapura, narsinghpura, devjhiri, kothmeer, guvadi, kanad, dhardi are the villages that may be affected by earthquake as they lie in the danger EQ zone.

Since zone 4 is said to be a dangerous zone, special plans should be made for the safety of the people residing in there. This zone requires special offsite and onsite preparedness plans.

### **FIRE:**

Dewas is vulnerable to fire hazards. Also there is need to develop techniques to overcome the fire hazard for multi-storied buildings. LPG, propane, motor spirit, high speed diesel and superior kerosene are major chemicals to create emergency situations in the district.

Udaynagar is more prone to fires.

The major reason behind the vulnerability to fire is the prevailing of heat waves or loo during the summers and this aggravates the fire that is caught in dry lands and forests.

### **Village wise risk profiling:**

Niran, Premgadh, Semali Narmada, nayapura, narsinghpura, devjhiri, kothmeer, guvadi, kanad, dhardi are the villages affected or have the potential to be affected by earthquake.

The district of Dewas and Udaynagar are prone to fires.

There have been villages recognized which are prone to floods and are provided in the annexure.

## **C . DISTRICT LEVEL DISASTER MANAGEMENT PLANNING**

### **C 1 District Action Plans**

## C 1.1 Mitigation Plan

### C 1.1.1 Scope of Integrating Risk Reduction in Development Schemes

Issues faced regarding constructions:

- Constructions taking place at individual level do not conform to the established construction norms.
- Norms aren't percolated to every level of construction.
- Infrastructure development should pass through all the stages in safety assurance.

Issues faced regarding infrastructure, repair & maintenance

- Regular monitoring and evaluation of buildings and other constructions should be ensured
- Repairs should be done according to the need.

Issues regarding transport

- Regular checking of vehicles and whether they are in proper working condition and repair of the vehicles when necessary and cancellation of license of bad conditioned vehicles.

**Sanitation:** Due to blocked drainage systems the water from the nearby rivers and lakes might have result in rebounding of the water hence resulting in flood. After disaster epidemics might break because of breakdown of sanitation system.

**Research & technology transfer:** Lack of dissemination of scientific and latest research to every level.

**Land use planning:** Lack of coordination between the revenue and land use department and the construction firms improper usage of land, changes in land use may not be in sync with the changing land use norms.

#### **Structural: Structural Mitigation Measures**

- a. Retrofitting of Buildings: In Dewas region maximum buildings are non-engineered or kuchcha, having lower seismic resistant capacity. There are mainly four major types of constructions:

Category A: Adobe, fieldstone Masonry Buildings

Category B: Brick Construction Masonry Buildings

Category C: R. C. C. Construction

Category X: Traditional & Conventional Construction

The buildings of Category A are very weak and may get damaged even due to a lower intensity earthquake. There is a need for detailed assessment of buildings, which are vulnerable and may cause losses to life. Assessment of these buildings will help to evolve a strategy for their retrofitting.

.After assessment of vulnerability of buildings the priority for structural mitigation has to be defined.

Generally public buildings are given first priority because they are lesser in number and at the time of disaster people can take shelter in these public buildings. Some examples of important buildings are hospitals, clinics, communication buildings, fire and police stations, water supply, cinema halls, meeting halls, schools and cultural buildings such as museums, monuments and temples. The second priority goes to other type of buildings like housing, hostels, offices, warehouses and factories.

- b. Construction control: The best protection against earthquake is a strong built environment. The quality of buildings, measured by their seismic resistance is of fundamental importance. Minimum design and construction standards for earthquake and flood resistant structures legislated nationally, are an important step in establishing future minimum levels of protection for important structures. India now has building codes and regulations for seismic and flood resistant design. These codes are in constant review by the experts. The below mentioned building codes are generally practiced in India:

- **IS: 1893, 1984** - Criteria for earthquake resistance design of structures



- **IS: 13828, 1993** - Guidelines for improving low strength earthquake resistant masonry buildings
- **IS: 13920, 1993** - Ductile detailing of reinforced concrete structures subjected to seismic forces- code of practice
- **IS: 13827, 1993** - Guidelines for improving earthquake resistance of earthen buildings
- **IS: 13935, 1993** - Guidelines for repairing & seismic strengthening of buildings  
(Source: Department of Land use )

In Dewas, building by-laws and the Seismic Code must be enforced by the municipal and panchayat bodies.

#### **NON STRUCTURAL:**

Land use planning: Damage to a building depends primarily upon the soil conditions and topology of the area. Dewas district comes under moderate risk zone in terms of earthquake( Zone 3) and flood disaster. A part of it is also under zone 4 of earthquake and the villages on the banks of Shipra nadi and Kaalisindh are more prone to floods especially in monsoons.. Referring the geological map of the region, it has been observed that the cluster of small faults is concentrated near.

Training and awareness programs: Mitigation also includes training of people for making the houses safe from earthquakes and floods. Training modules have to be prepared for different target groups viz. engineers and masons about safe building practices and general 'do's and don'ts' for general public.

#### Mitigation strategies

The mitigation strategy for Dewas district involves the following elements:

- Further growth of human settlements in the low lying areas of Shipra and Narmada basins should be checked through land-use planning. Such areas are vulnerable not only from flood hazards but are also vulnerable to earthquake liquefaction, which may increase the damage manifold. The department of Town and Country Planning will take care of seismic hazards while preparing the development plans for the district;
- Appropriate building codes will be made applicable for new engineered & non engineered constructions, and should be strictly enforced by local body. The Municipal Corporation of local area will ensure the construction as per Indian Standard Building Codes;
- Infrastructure department will do the retrofitting of public buildings under their maintenance charge. Generally PWD, Rural Engineering Services and Housing Board maintain the public buildings. The expenditure for such retrofitting will be taken care under maintenance head.
- Community awareness will be raised regarding seismic resistant building construction techniques and seismic retrofitting of existing buildings. Housing Board will be the nodal agency to provide training through workshops and demonstrations. PWD and RES will support MPHBS in these efforts;
- Community awareness will be raised regarding 'do's and don'ts' in the event of an earthquake with the involvement of Panchayati Raj institutions and CBOs. Revenue department will be the nodal agency for this activity.

#### **Priority List of public buildings to be retrofitted in the most vulnerable tehsils of Dewas District**

First Priority (within three years)

1. All Hospital buildings
  - District hospital, Dewas
  - Civil hospital, Dewas
  - Community Health Centre, Dewas
2. Office of the district collector
3. Office of the Superintendent of Police
4. Police Control Room, Dewas

5. Police Control Room, Dewas
  6. All Police Stations of the vulnerable blocks of Dewas
  7. Tehsil buildings
  8. School buildings at block headquarters
  9. Residences of District Collector and S.P. at Dewas
- Second Priority (within five years)
1. Primary Health Centres.
  2. Office buildings of PWD, PHE, WRD, Homeguards
  3. Residences of other key officials of the district
- Third Priority
1. Rest of the Government buildings (**Source:** Nagar Nigam Dewas)

### **Development schemes :**

#### **NREGS:**

##### **NREGA GOAL**

- a. Strong social safety net for the vulnerable groups by providing a fall-back employment source, when other employment alternatives are scarce or inadequate
- b. Growth engine for sustainable development of an agricultural economy. Through the process of providing employment on works that address causes of chronic poverty such as drought, deforestation and soil erosion, the Act seeks to strengthen the natural resource base of rural livelihood and create durable assets in rural areas. Effectively implemented, NREGA has the potential to transform the geography of poverty
- c. Empowerment of rural poor through the processes of a rights-based Law
- d. New ways of doing business, as a model of governance reform anchored on the principles of transparency and grass root democracy

Hence NREGA can function in the disaster based scenario in the following manner:

1. Tubewells
2. roads for places which are not connected
3. leveling of low lying areas during flood to a higher level
4. construction of check dams and embankments and drainage systems.

NREGS can take part in long term planning and preparedness as well. With the help of technical support from technical guidance from professionals like construction material experts and civil engineers, they can build roads which are not connected and embankments for places which are more prone to floods. Check dams can also be constructed by them as such large scale works can be done by such big schemes only.

#### **IAY :**

The objective of this scheme is to provide dwellings to the families living below poverty line in the rural areas. Beneficiaries are selected by the gram panchayat. Priority in this scheme is given to freed bonded labourers, members of scheduled castes and tribes, war widows, handicapped and mentally retarded persons, ex-servicemen, retired personnel of paramilitary forces, oustees of development projects and victims of natural calamities.

Lack of dwellings in the rural areas is a major problem, especially for the poor and weaker section people, who have to live in inhuman conditions. Now, such people are getting their own sweet homes and the feeling of insecurity among them has ended.

During the last five years, 3 lakh 94 thousand 226 people have been benefited under the scheme.

Hence IAY can work in the following manner:

1. Rehabilitation: It can start constructions in the villages which are affected.
2. It can work and rework on the adherence with the construction laws.

#### **Sarva sikshya abhiyan:**

Create awareness about mitigation and preparedness about accidents that are in control of man, in collaboration with educational institutions.

Awareness can be incorporated in the regular education to make it a compulsory subject for students.

**NRHM:**

Functions of NRHM:

**Create awareness**

Health, Nutrition, basic sanitation, hygienic practices, healthy living and working conditions, information on existing health services and need for timely utilization of health, nutrition and family welfare services

-Counseling

Birth preparedness, importance of safe and institutional delivery, breast-feeding, immunization, contraception, prevention of RTI/STI. Nutrition and other health issues.

- Mobilization

Facilitate to access and avail the health services available in the public health system at Anganwadi Centers, Sub Center, PHC , CHC and district hospitals.

- Village health plan

Work with the village Health and sanitation Committee to develop the village health plan

- Escorts/ Accompany

Escorts the needy patients to the institution for care and treatment. She will accompany the woman in labor to the institution and promote institutional delivery

-Provision of Primary Medical Health Care

Minor ailments such as fever, first aid for minor injuries, diarrhea. A drug kit will be provided to ASHA

- Provider for DOTS

- Depot Holder ORS, IFA, DDK, chloroquine, oral pills and condoms

- Care of new born and management of a range of common ailments

- Inform Births, deaths and unusual health problem or disease out break

- Promote Construction of household toilets

Therefore in case of Disaster, NRHM can facilitate for voluntary first aid during disaster. Training of nurses can be carried out as a preparatory plan.

**Mukhyamantri Awas yojana:**

The Mukhyamantri Awas Yojana has been started in Madhya Pradesh with a view to providing dwellings to a large number of houseless families. Financial assistance to 33 thousand 739 families has been made available for constructing their own houses under the scheme which was launched in 2007.

The scheme has benefited those houseless people who do not come under the ambit of Indira Awas Yojana. Had this scheme not been implemented, such people would not have been able to construct their own dwellings.

Hence, it can facilitate in rehabilitation programs in affected villages. They can come up with a collaboration with the construction norms.

**Jal Abhishekh Abhiyan:**

Provide for clean drinking water during response and relief period, can work in collaboration with sanitation systems during relief period. Jal Abhishekh Abhiyan can work in collaboration with WATSAN.

**Samagra Swachta Abhyan:**

Sanitation can be ensured by them during relief camps. Since relief camps are the places where lot of diseases and epidemics may break out, proper defecation and sanitation should be ensured by this scheme.

**C 1.1.2 Training & Capacity Building**

The capacity of a community to withstand disasters is a function of-

- Awareness of the risks associated with disasters
- Understanding of appropriate responses to disasters
- Possessing the capacity to respond (training, research, availability of resources, skilled cadres)
- Setting up emergency response mechanism that mobilize and deploy these trained resources in a quick, efficient and systematic manner.

The above can be achieved with the help of MPSDMA and the relevant government departments. They can ensure that personnel in specialized areas (medical care, relief, etc) are adequately trained and available for deployment in emergency situations. The basic concepts relating to disaster management and the role of the community therein shall be included in the curriculum of schools. All this shall have a special thrust on empowering women towards long term disaster mitigation. It should enhance the existing capacity to limit damage by improving surveillance and early warning system. MPSDMA should stimulate the active involvement of the community, local groups, women and disabled people in disaster management programs with a view to facilitating the capacity of the community to deal with disasters. Promote and support research, development and the use of local knowledge in measures that are aimed at supporting risk reduction and relate to disaster management activities.

**C 1.1.3 Community Initiatives**

Communities are always the first responders and hence the DDMA / Distt. Authority will ensure Community participation through initiatives like Community Based Disaster Management (CBDM) to promote local ownership, address local needs, and promote volunteerism.

Aim of CBDRM is to reduce vulnerabilities, and increase capacities of households and communities to withstand damaging effects of any disaster. It enhances people's participation and empowers them in achieving sustainable development and sharing its benefits. With the help of outsiders they can address issues of situational analysis, planning and implementation of risk reduction and preparedness measures. Through a thorough assessment of communities' hazard exposure and analysis of specifics of the vulnerabilities as well as capacities, CBDRM forms the basis for activities, project and programs required to reduce disaster risk. Since they are one of the primary actors and should be actively involved in the preparation of plan.

#### **C 1.1.4 Risk Management Funding**

Short term provisions are expected to cover the immediate loss, incurred due to disasters. Whereas long term provisions include the set up of fire stations, watershed management, planting trees along the river etc.

Insurance schemes are important source of funds for restoration of private business enterprises. The Collector will coordinate with Insurance Companies to speed up settlement of insurance claims. It will help in restoration of private business enterprises. He will also coordinate with commercial banks for ensuring smooth flow of financial assistance from commercial banks for restoration of private business enterprises.

Agriculture department shall provide seeds and the required finance as loans through local banks for the resumption of agriculture activities. The district administration shall elicit the support funding of agencies like Care, CRS etc. for the resumption of agriculture and livelihood activities.

Revenue/Book Circulars contains standing instructions of the Government for distribution of ex-gratia payments to poor families, who suffer from disasters to initiate their recovery process. This assistance will be provided very promptly to the poor families by the functionaries of the Revenue Department.

**Short term funding:** RBC documents.

**Long term:** Fire equipments should be purchased as required and as per new technology. For eg: multistoried buildings ( masks aren't available), equipments for fire extinguishing in slum areas where fire brigade cannot enter.

Eco friendly watershed interventions to deal with drought situations, check dams for mitigating soil erosion should be established.

Planting trees on banks of rivers to prevent soil erosion and act as shelter belts.

#### **C 1.2 Preparedness Plan**

An effective flood forecasting system provides some lead-time to warn the communities, which are likely to get affected. It will be the responsibility of the revenue department to communicate the emergency warning in the rural areas and police department will be responsible for communicating warning in urban areas.

The district is affected by the hazards viz. earthquake and flood. Since there is no scientific warning system for earthquakes, Emergency Warning System is confined to the case of flood only. An effective flood warning system provides some lead-time to the community likely to be affected to respond. The system should integrate flood prediction, dissemination of warning information, response of agencies and the public in the threatened community. The purpose of warning about impending flood is to enable and persuade people and organizations to take action to increase safety and reduce the adverse impact of flooding.

The Chief Engineer (CE) maintains wireless communication with the dam authorities of the dams about the release of upstream water. Therefore, CE will maintain a control room to obtain the information about the release of water from the dams upstream and provide flood forecast/warning to District Collector during the rainy season.

The district Collector, and in his absence, OIC, DECR will authorize the issue of warning to the community likely to be affected and to the concerned response agencies.

Warning messages should use plain language and avoid technical terms and jargon. It should be direct and personalized as much as possible by focusing on what it means to YOU and what YOU can do about it.

Along with the general dissemination modes of warning viz. Radio, Television, Scheduled News bulletins, Local/Regional newspapers, and public address system should be thoroughly adapted for better results. Once a warning is issued, it should be followed up by subsequent warnings in order to keep the people informed of the latest situations.

### **Evacuation stage**

Evacuation is a risk management strategy, which may be used as a means of mitigating the effects of an emergency or disaster on a community. It involves the movement of people to a safer location. However, to be effective, it must be correctly planned and executed. The process of evacuation is usually considered to include the return of the affected community.

Shelter provides for the temporary respite to evacuees. It may be limited in facilities, but must provide protection from the elements as well as accommodate the basic personal needs, which arise at an individual level in an emergency.

The plan must allocate responsibility for management of each of the elements of shelter. Considering the wide range of services, agencies and issues to be managed, it becomes essential for 'shelter' to be managed within a structure, which facilitates the coordination of agencies and services and support of emergency workers. The following factors may need consideration:

- Identification of appropriate shelter areas based on safety, availability of facilities, capacity and number of victims.
- Approaches to the shelter location in light of disruption due to hazard impact and traffic blockades.
- Temporary accommodation
- Provision of essential facilities like drinking water, food, clothing, communication, medical, electrical and feeding arrangements, etc.
- Security
- Financial and immediate assistance
- First-aid and counseling

### **Types of evacuation**

For the purpose of planning, all evacuations may be considered to be one of two generic types:

- (a) Immediate evacuation, which allows little or no warning and limited preparation time as in the case of earthquakes and air accident.
- (b) Pre-warned evacuation resulting from an event that provides adequate warning and does not unduly limit preparation time as in the case of flood and cyclones.

### **Principles of Evacuation Planning**

- Establishment of a management structure for organization, implementation, coordination and monitoring of the plan.

- Determination of legal or other authority to evacuate.
- Clear definition of rules and responsibilities.
- Development of appropriate and flexible plans.
- Effective warning and information system.
- Promoting awareness and encouraging self-evacuation.
- Assurance of movement capability.
- Building confidence measures and seeking cooperation of the affected community.
- Availability of space for establishment of relief camps having requisite capacity and facilities.
- Priority in evacuation to be accorded to special need groups like women, old and sick, handicapped and children.
- For effective evacuation, organization and running of relief centres, cooperation and involvement of all agencies viz. Community, volunteers, NGOs, NCC / NSS, Homeguards and civil defence, district and village bodies be ensured.
- Security arrangement and protection of lives and property.
- Preparation and updating of resource inventories.
- Appropriate welfare measures throughout all stages
- Test exercise of prepared plans and recording of lessons learnt
- Documentation.

### **Stages of Evacuation**

There are five stages of evacuation as under:

- Decision of authorities to evacuate victims
- Issue of warning and awareness
- Ensuring smooth movement of victims to designated relief camps
- Ensuring provision of all requisite facilities like security, safe-housing, feeding, drinking-water, sanitation, medical and allied facilities
- Safe return of personnel on return of normalcy

### **Decision to Evacuate**

Vulnerability analysis may indicate that for certain hazards and under certain conditions, sheltering in place could well be the best protection. Available lead-time may influence the decision to evacuate the public before the impact of emergency (e.g. floods) and reducing the risk to lives and property. Decision would also be dependent on factors like ready availability of suitable accommodation, climatic condition, severity of likely hazard and time of the day.

The Collector would be the authoritative body to issue directions for evacuation. The OIC of DECR would convey directions to Desk Officers of concerned agencies, which are responsible to execute evacuation.

### **Basic consideration for Evacuation**

The DCG will define area to be evacuated as also the probable duration of evacuation on the basis of meteorological observations and intimations by the concerned forecasting agencies. It should also identify number of people for evacuation, destination of evacuees, lead-time available, welfare requirements of evacuees as also identify resources to meet the needs of victims, viz. manpower, transport, supplies equipments, communications and security of the evacuated area.

The evacuating agency should set priorities for evacuation in terms of areas likely to be affected and methodology to execute evacuation:

- Delivery of warning
- Transport arrangement
- Control and timing of movement
- Fulfill welfare needs including medical treatment
- Registration of evacuees

All agencies involved in evacuation operation like Homeguards, Police, PWD, PHED, etc. will coordinate in field. They will remain in touch with the Desk officials in the DECR for issuing warning, information and advise the public.

### **Evacuation Warning**

An evacuation warning must be structured to provide timely and effective information. Factors, which may influence the quality and effectiveness of warning, include time, distance, visual evidence, threat characteristic and sense of urgency e.g. the more immediate the threat, the greater the resilience of people to accept and appropriately react to the warning.

The warning should be clear and target specific. The warning statement issued to the community should be conveyed in a simple language. The statement should mentioned:

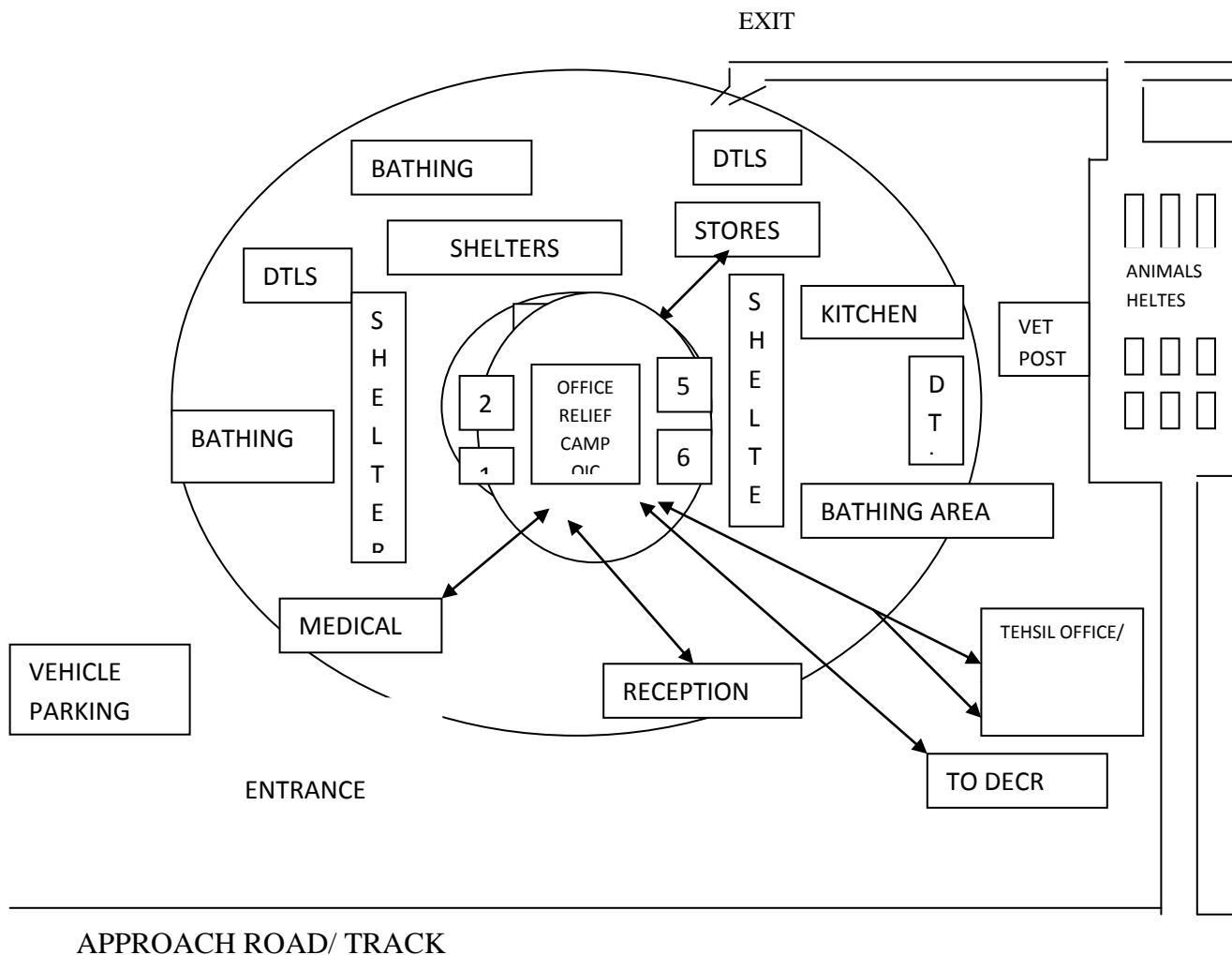
- The issuing authority, date and time of issue
- An accurate description of likely hazard and what is expected
- Possible impact on population, area to be in undated or affected due to earthquake
- Need to activate evacuation plan
- Do's and Don'ts to ensure appropriate response
- Advise to the people about further warnings to be issued, if any

### **Movement of Victims to Shelter / Relief Camp**

As a large number of people would be rendered homeless and most of their properties may get destroyed during the flood or earthquake, a number of relief camps would be established to look after the people. RTO will be responsible for mustering adequate transport for movement of victims to shelters / relief camps and also stores and equipments. In order to cater to the needs of the affected people housed in the relief camps, arrangements for food, clothing, drinking water and medicines would be made. The Revenue and the Food Supplies Departments would make provision of food and clothing. Community kitchen should be run with the help of NGOs to provide foods to the victims. Adequate clothing and blankets as per weather conditions should be provided to the victims free of cost. The voluntary agencies can play very important role in this regard and their services should be adequately utilized. All measures will be taken to control outbreak of epidemics. The cleanliness of bathing areas and deep-trenched latrines should be ensured.



**SUGGESTED LAYOUT OF A RELIEF CAMP**



### Evacuation procedure:

Earthquake cannot be predicted, hence warning for evacuation is not possible. In case of flood warning, the need to evacuate the population from low-lying areas should be decided keeping in view the lead-time before an area gets inundated. The District Collector in consultation with the DCG members would decide for evacuation on receipt of flood warning from the concerned forecasting agencies. The Collector would be the authoritative body to issue direction for evacuation. The OIC of DECR would convey the directions to Desk Officers of concerned agencies, which are responsible to execute evacuation.

Basic consideration for evacuation:

- The DCG will define area to be evacuated
- DCG will decide the probable duration of evacuation on the basis of meteorological observations and intimation by the concerned forecasting agencies.
- The evacuating agency should identify number of people for evacuation, destination of evacuees, lead time available, welfare requirements of evacuees.
- Identify resources to meet the needs for evacuation viz. manpower, transport, supplies, equipment, communications and security of the evacuated area.
- The evacuating agency should check availability, capability and durability of the required resources.
- The evacuating agency should set priorities for evacuation in terms of areas likely to be flooded.
- The evacuating agency should decide how to execute evacuation viz.
  - Delivery of warning
  - Transport arrangement
  - Control and timing of movement
  - Fulfill welfare needs
  - Registration of evacuees
- All agencies involved in evacuation operation will coordinate in field.
- Be in touch with the OIC to pass warnings, advice and information to the public. The OIC will convey the message through the District Information Officer / Public Relations Officer.
- Organize movement of evacuees
  - Identify evacuation routes
  - Traffic control
  - Identify officer to control evacuation in field
  - Allocation of responsibilities
  - Communication facility
- Post-evacuation operations will include organize return of evacuees.

#### C.1.2.3 Organizing mock drills

Mock drills are conducted at the state, district/ City, block, Gram Panchayat and Village/Resident Welfare Association/ Schools/ Market Trade Association, etc levels to test the plans prepared for different hazards. It also helps to identify the gaps in the plans prepared, test the skills acquired by various task forces and the response time of the different service providers - both government and non government. the importance of mock drills to prepare the local community to best respond during an emergency, we must put serious thoughts on the potential panic it can cause as everyone involved may not realize the simulation nature of the exercise. these drills ensure better and coordinated response during a disaster by making everyone aware of their role and responsibilities.

In the Indian context, these drills help reinforce the Incident Command System coming up under each State and District Disaster Management Authority and clarify their roles and responsibilities. Mock drills also help in preparing responding agencies determine what resources would be required and help them carry out a capacity assessment. Organizing a mock drill requires detailed planning about the event and role of each stakeholder participating. A "building block approach" to mock drills can be adopted, where drills are planned in a cycle, i.e. each building on the experience of the earlier one preceded by extensive sensitization and preparedness of all stakeholders in partnership with various organizations and community. Mock drills held using this technique help increase the acceptance level and understanding of the community towards such initiatives. Mock drills not only help in testing and building capacities of disaster management teams, but also provide ample scope for identifying areas of improvement.

Some specific recommendations for 'before' and 'during' the drills to ensure "no panic," go as follows:

#### Before the Drill

- Conducting different drills for different emergencies based on the vulnerability so the community can find out gaps in their preparation and response and take the necessary steps
- Making available "do's and don'ts" lists for various emergencies to stakeholders before planning a drill
- Involving the community and using local resources and knowledge, so they are able to relate to the drill process
- Keeping the District Administration, local hospital, fire brigade and police station informed of any planned drill
- Preparing a detailed event chart with time and activities (i.e. information of the event, warning dissemination, place of occurrence, effect/impact of disaster, de-warning and de-briefing)
- Preparing a safety plan before the drill (Route Chart, First Aid box at the site, proper search and rescue equipment/information for any emergency contact number, police, fire, health system, revenue control room, and the skilled manpower immediately available in case of a real emergency)
- Ensuring "manageable" community participation, to prevent a real time disaster

#### During the Drill

- Bringing in the media as part of the mock drill team to disseminate messages on the purpose of the drill
- Monitoring response time, to enable the community to learn how to minimize loss
- Ensuring proper coordination among various stakeholders during the drill
- Having a skilled safety team on standby for any emergency support
- Ensuring proper security arrangements are in place at the mock drill location.

The ownership of the mock drills can be of the home commandant team as they are the people who are well versed with the practicalities of the disasters and the actions that can be taken during such disasters.

## **C 1.3 Response Plan**

### **C 1.3.1 Disaster Emergency Response Force**

The Disaster Management Act, 2005 has made the statutory provisions for the constitution of the National Disaster Response Force (NDRF) for the purpose of specialized response to natural and man-made disasters. According to Section 45 of the Act, the Force has to function under the general superintendence, direction and control of the National Disaster Management Authority (NDMA) and under command and supervision of Director General, NDRF. Though the units of this Force were nominated in 2003, it is only after the establishment of NDMA that their training and equipping were vigorously pursued. In lieu with the Section 44 (i) of the Act that states NDRF a specialist force, the force is gradually emerging as the most visible and vibrant multi-disciplinary, multi-skilled, high-tech force of the NDMA capable of dealing with all types of natural and man-made disasters. At present, National Disaster Response Force (NDRF) is about constituted of eight battalions, two each from the BSF, CRPF, CISF and ITBP. Each battalion will provide 18 self-contained specialist search and rescue teams of 45 personnel each including engineers, technicians, electricians, dog squads and medical/paramedics. The total strength of each battalion is approximately 1,149.

All the eight battalions are being equipped and trained to combat all natural disasters including four battalions in combating nuclear, biological and chemical disasters.

The vision of the National Disaster Management Authority is to build a safer and disaster resilient India by developing a holistic, proactive, multi-disaster and technology driven strategy for Disaster Management. This has to be achieved through a culture of prevention, mitigation and preparedness to generate a prompt and efficient response at the time of disasters. This national vision inter alia, aims at inculcating a culture of preparedness among all stakeholders.[3]

NDRF has been proved its importance in achieving this vision by highly skilled rescue and relief operations, regular and intensive training and re-training, familiarization exercises within the area of responsibility of respective NDRF Bns, carrying out mock drills and joint exercises with the various stakeholders. NDRF has proved its efficacy with its commendable performance during various disasters including the drowning cases, building collapses, landslides, devastating floods and Cyclones.

Training:

In future, the key to efficient disaster response will depend primarily on effectiveness of training and re-training of Specialised Disaster Response Forces. With this vision, a detailed "Training Regime for Disaster Response" has been prepared by NDMA/NDRF identifying the specific disaster response training courses and devising a unified, structured and uniform course module as well as syllabus for these training courses. The proposition behind a unified, structured, uniform course module and syllabus is that first the entire NDRF battalions will successfully attain these courses and subsequently the State Disaster Response Forces (SDRF) and other stakeholders will be trained on the same lines. The need of uniformly structured course module emerged out of the fact that if all the NDRF battalions and other 'first responders' undergo the same training exercise, the coordination between different stakeholders would be expedient and well planned at the time of any major disaster where different NDRF battalions, SDRF battalions and other stakeholders will be working together in close coordination with each other. NDRF personnel are invariably trained in courses like Flood Rescue, Collapsed Structure Search and Rescue, Medical First Responders, Rope Rescue, Nuclear, Biological and Chemical Emergencies; Dignified Disposal of Dead Bodies etc.

## Training of SDRF

While the NDRF is being trained, re-trained and equipped as a specialist force for level three disasters, it is equally important to ensure capacity building of state police personnel who are invariably the first responders in any natural or man-made disasters. To ensure this, a two-pronged strategy is being suggested to the states: firstly, to train state police personnel in the basics of disaster management and secondly, to train at least one battalion equivalent out of their state armed police units as State Disaster Response Force (SDRF) on lines of the NDRF. In addition to police personnel, the SDRFs may be constituted from existing resources of the Fire Services, Home Guards and Civil Defence. NDRF Bns and their training institutions will assist the States/UTs in this effort. The State/ UTs will also be encouraged to set up DM training facilities in their respective Police Training Colleges and include this subject in their basic and in-service courses.

Awareness and preparedness campaigns are key components of proactive approach on Disaster Management. In case of any disaster, the local population is the actual first responder. It may take some time for the district/ state administration to mobilize rescue teams, including police, fire personnel etc. If the local people is properly sensitized about the precautions and preventive actions to be taken in case of any calamity, the loss of life and damage to property can be drastically reduced. Thus, one of the most important tasks of NDRF is to continuously engage themselves in the Community Capacity Building and Public Awareness programmes in a big way which includes training of people (the first responders) and concerned government officials at different levels in the areas with high vulnerability. Along with Community Capacity Building and Public Awareness exercises NDRF is also actively engaged in area familiarization exercises. Such exercises provide first-hand knowledge about the topography, access route to various disaster prone areas, availability of local infrastructure/ logistics which can be used in disaster response operations.

The number of beneficiaries in the state wise training of the community volunteers by NDRF in Madhya Pradesh is 9550. NDRF also conducts regular mock exercises on various disasters like cyclone, flood, earthquake, NBC emergencies, mass causality management etc. Participation in such exercises on the one hand improve the professionalism of NDRF personnel to tackle the real emergency situations and on the other provides an opportunity to interact with various State Government officials and to develop cordial relations with them that can be of great help during response to actual disasters.

### **C 1.3.2 Crisis management direction & coordination**

### **C 1.3.3 Incident Command System (ICS)**

A traditional command structure exists in the administrative hierarchy which manages disasters in India. It has been planned to strengthen and professionalize the same by drawing upon the principles of the ICS with suitable modifications. The ICS is essentially a management system to organize various emergency functions in a standardized manner while responding to any disaster. It will provide for specialist incident management teams with an incident commander and officers trained in different aspects of incident management, such as logistics, operations, etc.

All 5 major command functions in Incident command system are to be followed:

- a) Incident command
- b) Planning section
- c) Operations section

- d) Logistics section
- e) Finance/ Admin section.

**Composition of ICP (Incident Command Post)**

- ICP commander – Appointed by DEOC
- Information officer
- Safety Officer
- Intra-agency coordinator
- Operations officer
- Planning Officer
- Logistics Officer
- Finance Officer
- Operation Teams
- Damage assessment
- Search and Rescue
- Medical Assistance
- Donation mgt
- Relief Camps Team

**C 1.3.4 Rapid damage assessment & reporting**

Rapid Damage Assessment Team to be set up immediately after disaster. It should include Z.P. members, agricultural officer to assess the crop damage, executive engineer of PWD to assess the damaged houses, S.P to maintain the law and order situation, NGOs and volunteer organizations, Tahsildar, etc.

This team may immediately assess the damage undergone due to disaster and report it to the concerned department to get the immediate relief material from the government and also the foreign aid. Damage assessment procedures are required to avoid litigations and delays in gratuitous relief and compensation, including insurance.

Table C 1.3.4 **Initial Assessment Report**

INITIAL ASSESSMENT REPORT										
1	NATURE OF DISASTER:									
2	DATE OF OCCURRENCE:					TIME:				
3	DAMAGE AND LOSS ESTIMATES									
	Name of the Site (Village, Block, Tehsil)	Total Population Affected	People missing	People injured	Severity		Immediate needs	Houses Damaged		Action taken
					H	L		L	M	
4	INFRASTRUCTURE DAMAGE									
	Name of the Site (Village, Block, Tehsil)	Housing	Agriculture	Animals	Water source	Road and bridge	Power	Communication	Govt. Building	Others
5	NEED ESTIMATES									
	Name of the Site (Village, Block Tehsil)	Medical Needs	Population requiring shelter		Clothes	Food	Water	Sanitation	Any Other	
6	ANY OTHER VITAL INFORMATION									
7	SPECIFY IMMEDIATE NEEDS: (With quantity)									
	Food									
	First aid									
	Machinery									
8	Possible Secondary Affects:									
9	NAME THE CONTACT PERSON:									
10	AGENCY/ADDRESS: TELEPHONE NUMBER									
	DATE:					SIGNATURE:				
	FOR OFFICE PURPOSE:					REPORT NO.:				
	ACTION TAKEN:									

### **C 1.3.5 Distt. Search & rescue Team**

Prompt assistance at the disaster site often requires arrangement of power supply at the disaster site for lighting arrangements to facilitate search and rescue often in the night. It will be the responsibility of MPEB to make this arrangement at the disaster site. Search and rescue is the key response function required for limiting casualties in most disasters, Homeguards will provide the trained organized force for search and rescue functions which will be augmented by utilizing the services of local volunteers trained by the district administration in search & rescue operations. PWD will facilitate the search operations of Homeguards by performing debris removal operations. Homeguards will also be trained in motor boat driving which will be required during flood situations.

Provided in the annexure.

### **C 1.3.6 Medical response( Under the process of making)**

The specialized medical care shall be required to help the affected population. The preventive medication may have to be taken to prevent the outbreak of diseases.

Further, at the district level, dedicated medical teams will be activated at the time of emergency, which will consist of the doctors, nurses, pathologists, etc. Mobile Medical Vans, equipped with emergency requirements, also to be identified.

Members of the medical emergency team to be well trained, retrained on triage, advance life support, well versed with golden hour-platinum minutes concept, quick steps of first aid response etc.

Medical relief:

Victims of many disasters require medical care on priority. Similarly, special efforts are required to prevent outbreak of epidemics in many emergency situations. The health and medical services include emergency medical service, hospital services, public health, environmental health, and mortuary services. The activities associated with these services include treatment, transport, and evacuation of the injured, disposition of the dead, and disease control activities related to sanitation, preventing contamination of water and food supplies, etc.. During response operations and in the aftermath of a disaster, public health & family welfare (PHFWD) Department will be the responsible agency for providing public health and medical service.

### **C 1.3.7 Logistic arrangements (RTO info about fit vehicles in annexure)**

For an effective response from the relief team proper arrangements of the logistics are must. During the response phase, lots of resources are mobilized in terms of manpower, equipments and material. The relief workers and officials from outside the disaster area require transport, accommodation, food, etc. so that they can effectively perform the relief operations. Lot of equipment and materials have to be transported to the disaster site. All this requires logistic arrangements and coordination with different agencies.

In situation like Earthquake or Super Cyclone, the local transport infrastructure get crippled and immobilized. In such a situation, the local administration will try to mobilize the transport from outside. The drivers, cleaners and loaders etc. are required to work overtime and need proper care from the administration in terms of food, a place to park the vehicle and take rest. The team



responsible for transport arrangement will try to take care of these basic requirements of the transport fleet. For running the transport fleet, petrol and diesel will be required and for this, appropriate arrangements will have to be made with the assistance of local oil companies, and dealers.

In a situation like Earthquake or Super Cyclone, the local infrastructure, which can be depended for arranging food, gets damaged. In such situation one needs to look for NGOs and caterers, who can organize emergency food on a really big scale. Such agencies needs to be identified in advance and requested during the emergency to organize the emergency food for relief teams and disaster victims. The relief officials and the disaster victims require food, even during the response phase. It will be the responsibility of the Food and Civil Supplies Department to arrange the food for the relief teams and disaster victims. The food can be provided to the relief teams and disaster victims, using the assistance of the local volunteers or the relief agencies themselves.

### **C 1.3.8      Communications**

#### Communication Mechanism

On the basis of reports from the possible disaster site, or on the warning from the agencies competent to issue such a warning, or on the receipt of warning or alert from Emergency Operations Center, the Collector will exercise the powers and responsibilities of the District Disaster Manager.

The list of the agencies competent for issuing warning or alert is given below:

The warning or occurrence of disaster will be communicated to

- ◆ Chief Secretary, Relief Commissioner, Emergency Operation Center
- ◆ Office of Divisional Commissioner
- ◆ All district level officials, Municipal Councils
- ◆ The Officials of central government located within the district
- ◆ Non-officials viz; Guardian Minister of the district, Mayor, ZP President, MPs, Local units of the Defense Services.

#### **Communications and Information Technology (IT) Support**

The basic communications and IT support requirements for disaster management correspond to the following three levels:

- Decision makers and disaster managers at all levels.
- Real time dissemination of advance warnings and information to the concerned authorities at various levels and threatened community. For dissemination of advance warning and information through broadcasting mediums such as television and radio shall be used significantly as it has higher geographical reach.

- Last mile connectivity at the disaster site for control and conduct of rescue and relief operations.

Communication and sharing of upto-date information using state-of the art IT infrastructure remain at the heart of effective implementation of the disaster management strategy. Reliable, up-to-date and faster sharing of geo-spatial information acquired from the field or the affected areas is a pre-requisite for effective implementation of disaster management strategies. Efforts should be made for setting up IT infrastructures consisting of required IT processes, architecture and skills for quick up-gradation and updation of data sets from the Panchayati Raj Institutions or the Urban Local Bodies. A National Emergency Communication Network, involving the contemporary space and terrestrial-based technologies in a highly synergistic configuration and with considerable redundancy, will be developed. This Network will ensure real time dissemination of warnings and information up to the affected community and local authorities.

### **C 1.3.9 Temporary shelter management**

A serious earthquake results in substantial damage to buildings and other structures. Thus, there can be sudden shrinkage of housing stock after the earthquake. Therefore, large number of people may require temporary shelters for a few weeks before they can reconstruct their houses. Accordingly, this plan has identified requirement of temporary shelter facility for large number of people for a few weeks.

Floods in Dewas district have resulted in temporary submergence of houses. It is estimated that the flood prone villages of the district are not likely to experience sudden shrinkage of housing stock requiring temporary shelter facilities on a substantial scale. The families, which may lose their houses due to flood, can manage temporary shelter facility with their relatives and friends.

**Table C 1.3.9**  
**( list of temporary shelters provided in the annexure).**

### **C 1.3.10 Water and Sanitation (WATSAN)**

#### **Preparedness and mitigation:**

- Identify flood affected areas, evacuation centre
- Awareness raising of the community
- Capacity building of government officials, NGO staff, health volunteers
- Link with development program

#### **Response : Assessment**

- Get information from waterworks and sewerage authority about what support is needed to supply safe water.
- Conduct water test for chlorine and faecal coliform sample out from the tap.
- Interview different stakeholders and affected women, men and children what they know

#### **Response**

- Support waterworks as need and appropriate, such as providing tanks to perform sedimentation, chlorination, storage and distribution.
- Install organisation or local tanks in different strategic location for treatment and distribution operating by trained local or govt. staffs.
- Tanks and pumps for water trucking from a an unaffected water source.

- Trained volunteers/technicians to conduct necessary centralized or household treatment followed up by surveillance.
- Provide means of water collection, uses and if necessary for household treatment. i.e bucket, cup, etc

#### **Response**

- Quick survey to identify priority water sources that can provide fairly coverage to the affected people.
- Rapid cleaning and disinfecting program for affected water sources like well and handpumps using community volunteers by phase.
- Dewatering water from community ponds or essential water bodies that use for washing and cleaning utensils.
- Distribution of household water treatment materials and instruction. – could include household water filter and information for safe use
- Distribute safe water among the stranded community and means to store and use.
- Dissemination of messages of what is safe water and where and how to obtain it.

#### **Excreta disposal in urban and displaced centers**

- Support municipal or camp authority to empty existing septic tanks and dig additional pit to accommodate additional excreta.
- Provide additional temporary latrine if water is receded and feasible.

#### **Management of latrine**

- If ground floor flooded, provide excreta containment latrine so shit will not drift around.
- Provide adequate privacy for women with plastic sheet or local materials such as mat, shacks, etc so.
- Maintain latrines by paid worker if community unable to keep it clean and useable

#### **Solid waste disposal and drainage in urban and displaced centers.**

- Technical support to the local authority, municipal, etc and integrate works with govt efforts if there are any.
- Provide rubbish container or garbage hole to the displaced centers and ensure people using them properly.
- If the floodwater remains, provide rubbish containment made of local or readymade materials.
- Provision of hiring rubbish truck, or fuel for municipal truck to collect and dispose solid waste in a designated dumping area.
- Special programme to dispose corpses and carcasses

#### **Village waste disposal and drainage**

- Organise community and provide tools to conduct a mass cleansing campaign. Use cash or food for work (relief materials) if necessary.
- Encourage people for safe defecation and household waste disposal.

### **C 1.3.11 Law & order**

Recent experiences of disaster management in Dewas show that law and order in the affected area is a must to be maintained properly and should be given priority in the scheme of things. It shall be the responsibility of the police to maintain the same. In case of the disaster being one of a high magnitude, the district administration shall seek the help of the army for maintaining the law and order.

### **C 1.3.12 Public grievances/missing persons search/media management**

Media is an important source of information for the general public, especially in a disaster situation. Even the Government officials get a lot of useful information about the field situation from the media reports. Since the disaster management involves fast communication of information to the community relating to warning of a likely event and the arrangements for emergency response. The administration must utilize the local media resources for communicating with the local community. In a disaster situation, not only the people directly affected but their relatives and friends are also anxious to know about the welfare of their acquaintances. In such a situation, the media is able to inform the people about the welfare of the people. This plan has recognized the power of the media in keeping the people and the administration informed and seeks to utilize the media for the following purposes:

- The nature of the likely hazards, which may affect the lives of the people of the district and the ways to protect their lives and properties from the hazard;
- Increasing community awareness about the mitigation measures that can protect the lives and properties from the hazards;
- Communicating an advance warning of impending disaster to the people in order to give them time to take any protective action required;
- Identity of the people affected by the disaster and the nature of the effect;
- Arrangements made by the administration for the relief to disaster victims;
- Raising the awareness of the community to include mitigating measures for the recovery process;
- Keeping a watch over the relief operations and to keep the Government and the people informed about the same.

Thus, this plan provides for using the reach of the media with the people through all the four phases of disaster management. In Madhya Pradesh, District Collector interacts with the media through Public Relations Officer. The same arrangement will work even in relation to disaster management. In the absence of the Collector, Officer-in-charge of DECR will issue the press release through PRO.

There are certain cares and measures that must be taken while dealing with the media:

#### **Principles of media**

- The media should be managed rather than controlled
- Cooperation with the media is preferable to confrontation.
- Avoid public disputes within your organization / agency and with others.
- The media is a communication medium to, and between, parts of the community.
- They can help to control convergence and rumor.
- They can list victim entitlements and promote self-help principles

#### **How can media help :**

- Provide information to disaster affected people about the nature of common reactions and the services / assistance available
- Educate the wider community about the experiences and needs of the affected people
- Provide feedback to the affected community about the support available from the remainder of the community.
- Provide opportunities for reflection, evaluation, comparison etc through talkback and anecdotes.

### Media management:

- Talk to the interviewer (not to camera)
- Talk in short, simple chunks of information. One thought per sentence.
- Keep to the facts - avoid grey areas.
- If you are unclear then say so.
- Relate to your audience.
- Be prepared - have a statement ready.
- Stick to the facts - do not be led into “hypotheticals”
- If you promise to come back with more information then do so
- Never push the media away or lose your composure
- Never say something “off the record”.
- Avoid “NO COMMENT”.
- Material will be edited. Avoid dependent sentences.
- Avoid YES or NO answers.
- Change negatives into positives.
- Adjectives aren’t really necessary.
- In a media release get the key points in first.
- Approximate large numbers.

#### C 1.3.13 Animal care

During an earthquake and flood, not only the human beings but also the domestic cattle / animals are also affected and need to be taken care of simultaneously. The Animal Husbandry Department will organize special animal relief camps in coordination with Revenue Department, Nagar Nigam and allied support work services. The following services will be provided in the camps:

- To provide shelter to the affected animals by erecting temporary sheds
- To provide feed, fodder and potable drinking water
- Treatment of injured and sick animals by establishing a Veterinary Treatment Post to ensure effective treatment of animals
- List of animals would be prepared with details of their owners and distinguished marking will be made
- Arrangement for proper disposal of animals excreta
- Disposal of carcasses from the affected area shall be done immediately
- To prepare a list of dead animals
- Arrangements for grazing and milking of cows will be undertaken as per existing regulations
- To provide adequate veterinary cover, mobile and static hospitals will be established
- Pre monsoon vaccinations can be administered to prevent diseases and hence outbreak of epidemics.

#### C 1.3.14 Management of deceased

When the toll on animal life takes place at a small scale, the localites themselves carry the carcasses and dump them in a common place and sprinkle salt to disinfect it and ensure that infection is not spread. The place of dumping is usually at a site which is a bit far from the habitation so that even the bad odor doesn’t get strong for the people when the decomposition takes place.

But when the animals die in a larger scale, the carcass disposal team comes into picture. They with the help of JCBs remove the carcasses and dump them in a common dug trench or pit and sprinkle salt to disinfect them. It is recommended that carcass disposal teams should be made and maintained so as to ensure a professional way of clearing up of animal dead bodies.

### **C 1.3.15 Civil Defense and Home Guards**

The Civil Defense and the Home Guards will be deployed for emergency response, community preparedness and public awareness. At district level, a culture of voluntary reporting to duty stations in the event of any disasters will be promoted.

### **C 1.3.16 Role of Private Security**

During a natural (or manmade) disaster, surely the sheer number of private security personnel would provide significant improvements to resource availability and resource management. They don't actually need to play a role within the most important tasks which are clearly appropriate for police, and other emergency services personnel.

A theoretical use for this would be a major disaster, perhaps even riots where Police are not capable of handling the demand for public safety and security in the short term. Local security firms could be mobilized on short notice, placed under the command of police in the chain, and handle less important tasks that none the less demand manpower, while police can apply their skills to more crucial areas.

The value of the training and experience of private security personnel is quite high in this situation, and the command chain being clearly in favor of the police provides less reason for confusion. In the long term the theoretical examples' private security personnel would be able to be phased out as manpower increases.

The only real barrier to this is communication infrastructure and training from both government and private security staff in mobilizing in such a situation. Having an extra hundred or so, or possibly thousand or so, personnel on hand in the crucial moments as a massive disaster unfolds could surely help save lives and provide a basis for a long term partnership.

### **C 1.3.17 NGOs & Voluntary organizations**

The contribution of NGOs and voluntary agencies during the response phase is generally invaluable. It has been the experience that many NGOs and voluntary agencies tend to provide relief on their own, without having any coordination or contact with the District Collector, who coordinates the response of Government agencies. It has also been observed that the relief provided by so many agencies tends to get targeted on the habitations on the main highways and roads or the main administrative towns. Consequently the victims living in interior villages and localities have to wait to get relief, while victims of habitations located on the main roads get far in excess of what they actually need. Therefore, there is a need of coordinating the relief efforts of NGOs and voluntary agencies also so that the relief reaches all the victims as per their needs. This coordination will be achieved through a working group, having representatives of important NGOs and some representatives from the local administration. This working group will try to coordinate the relief efforts of NGOs and voluntary agencies so that the NGOs and the voluntary agencies know the locations where their services are most required. Since most of relief through NGOs comes from outside the districts, it will be desirable to have a similar arrangement at the State level to advise the NGOs and voluntary agencies about the type of relief and the place where the relief is urgently required.

NGOs and CBOs have responded promptly and effectively in most of the emergencies both during the immediate response and in the recovery phases. Even the NGOs located far away from the disaster affected area have rushed their relief teams in. There is a need to coordinate the activities of a large number of NGOs and CBOs. This will be achieved by designating one of the local NGOs as the coordinator for activities and relief materials being arranged by other NGOs. The designated local NGO will provide the interface between the large number of NGOs and the district administration.

**(list of NGOs) ( provided in annexure)**

### **C 1.3.18 Relief management planning**

#### **Responsibilities and functions of Infrastructure desk**

- Organize and coordinate clearance of debris
- Temporary Repairs to damaged infrastructure

This would be the responsibility of the vital services desks viz. PWD, Public Health & Engineering Department (PHED), Water Resource Department, Narmada Valley Development Department (NVDD) and works department of Municipal Corporation. The Desk Officers would be the nodal officer incharge to coordinate and monitor the restoration activities done by their respective departments.

- Power
- Water
- Transport
- Telecommunication
- Roads
- Bridges
- Canals
- Public buildings

#### **Construction of facilities**

- Shelters with sanitation and recreation facilities as per the standards
- Provision of hand-pumps and borewells
- Temporary structures for storage
- Educational facilities
- Medical facilities
- Postal facility
- Helipads

#### **Responsibilities and functions of health desk**

A. Organize and maintain records on

Coordination and monitoring of these activities would be the responsibility of health desk headed by Chief Medical Officer (CMO).

- Treatment of the injured and sick
- Disposal of dead bodies
- Disposal of carcasses

- Preventive medicine and anti-epidemic actions
- Reports on food, water supplies, sanitation and disposal of waste

B. Assess, supply and supervise

- Medical relief for the injured
- Number of ambulances required and hospitals where they could be sent, (public and private);
- Medical equipment and medicines required
- Special information required regarding treatment as for epidemics etc.

C. Supervision of maintenance of standards

- Identification of source for supply of drinking water through tankers and other means of transport
- Transit and relief camps for cooking arrangements, sanitation, water supply, disposal of waste, water stagnation and health services.
- Communities for storage of rations, sanitation, water supply, disposal of waste, water stagnation and health services.
- Standards in cattle camps with arrangements for water, fodder disposal of solid waste, veterinary services.

**Responsibilities and functions of logistics desk**

A. General

The Additional District Magistrate (ADM) would be the incharge of logistics desk. However, the activities mentioned below would also require assistance of police desk. It is proposed that the logistics and police desks work in close coordination for efficient execution of activities in the field.

- Assessment of reinforcement needs including manpower and deployment of resources as per information
- Requirement, availability and location of depots, and transportation of wood to the locations for mass cremation
- Identification of location where mass cremation/burial can be carried out and Manpower and transport that would be required for this work;
- Identification of location where carcasses can be disposed of and Manpower and transport that would be required for this work;
- Requesting for additional resources from other district / divisional headquarters / EOC. Arrangements with petrol pumps for supply of fuel for authorized relief vehicles against credit coupons
- Coordinating and supervising issuing of Village relief tickets to affected families
- Ensuring safe storage, and transport of relief Supplies
- Coordinate supplies distributed directly by NGOs and other organisations including private donors
- Ensure proper maintenance of vehicles and equipment

B. Coordination of Transport - with

- Railways
- MSRTC
- Private transporters



- Boat Operators
- State Government Aircraft
- State Government Helicopters

#### C. Organizing Transport for

- Rescue parties
- Relief Personnel
- Marooned persons
- Water, medicines, first aid and cooked food for marooned persons and Volunteers
- Relief Materials
- Seriously injured and Sick.

#### **C 1.3.19 Media Management**

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Communication with media will require skilled liaison and a system for the authorized release of current information. Planning should include identification of any agency media responsibilities in accordance with the District / State arrangements. A media strategy should be developed and be in place, prior to activation of evacuation plans. An officer-in-charge, Public Relations functioning in the DECR will be made responsible for briefing the media everyday once in the morning and evening. The media can play a very responsible role in respect of the following:

- Information and awareness
- Dissemination of warning
- Preparing community to compact disasters
- Do's and Don'ts and action to be taken by the community in case of evacuation
- Emergency measures in case of floods and earthquake including landuse planning
- Rescue and relief plan of the Government
- Location of relief camps, modes of transportation provided by the State, approach routes, arrangements for live stocks, provision of facilities in the relief camps and security arrangements.

### **C 1.3.20 Fire Services**

The fire services are called as the fourth line of National defense. The Govt. of India has nomenclature the fire services as “Fire & Emergency Services” and designated as the first responders in case of any emergency. As per the National Disaster Management Act 2005, which is adopted by various states, the strengthening of fire services is under taken by many states so that they can respond to any Manmade or Natural Disaster. The main role of fire service is divided into two parts one is Fire Prevention and another is Fire Protection. The Fire Prevention is achieved by implementing fire prevention engineering at the planning stage of any building. This includes the selection of plot or location of building, approach roads for the plot, surrounding activities of the plot to limit the exposure hazards. Then building planning such as type of occupancy, fire rating of construction, travel distance, occupant load, number of exits, refuge area, width of passages and staircases, pressurization of lifts, Lift lobbies and staircases, use of material for carrying out interiors of the building, fire doors, fire dampers in artificial ventilation, natural cut out for ventilation etc. The Fire Protection comprise alerting the management and occupant of the building also it will helps to fight the fire before arrival of fire service. This includes smoke detection, fire alarm system, fire extinguishers, hose reel hoses, fire hydrant system, sprinkler systems, flooding System, dedicated underground water storage tanks for fire service and terrace level fire tanks with pumping arrangements. The mock drill or fire drill is also important exercise which plays vital role in safe evacuation of occupants in case of emergency. These methods will help to minimize loss of precious human life and salvaging National Property.

### **C 1.4 Recovery and Reconstruction Plan**

Recovery is the final phase of the emergency management cycle. Recovery continues until all systems return to normal, or near normal. Short-term recovery returns vital life support systems to minimum operating standards. Long-term recovery from a disaster may go on for years until the entire disaster area is completely redeveloped, either as it was in the past or for entirely new purposes that are less disaster-prone.

Recovery Phase may involve one or more of the following components:

- Restoration of the basic infrastructure
- Reconstruction / repairs of community facilities/social infrastructure
- Reconstruction / repairs of the private residential buildings
- Restoration of private business enterprises including farming activities
- Medical rehabilitation of the people physically affected by the disaster
- Psychological rehabilitation of the families who have lost near and dear ones

The operational direction and coordination of recovery efforts is much simpler in comparison with the problem of operational direction and coordination of response functions. Therefore, it is presumed that the normal arrangements for coordination in the district will take care of requirements of operational direction and coordination of recovery efforts. However, it is proposed that a Committee chaired by the District Collector be set up for the coordination of all the restoration and rehabilitation related activities. The Committee should have members like the Deputy Director, Panchayat and Social Welfare, Lead Bank Officer, District Women and Child Development Officer, GM, Industries, District Manager, NABARD, Deputy Director, Agriculture, the General Manager, Industries, one or more than one identified NGOs, the CEO, Zila Panchayat, the Public Works Department, E.E. industry and business organization's representatives and other interested eminent persons in the area of disaster management.

The basic infrastructure departments will do a quick damage assessment exercise in respect of the infrastructure facilities under their charge immediately after the disaster and submit a report to the Government and the Collector. These departments will initiate action for restoration of the damaged infrastructure facilities using departmental funds.

They can submit demands to Government for additional funds or relaxation of departmental regulations for speeding up restoration efforts.

Funds are generally available from the Rural Development Department for the construction and maintenance of community facilities in the rural areas. These funds will be utilized by the Panchayats for reconstruction or repairs of the damaged community facilities. They can also submit demands to the Government for additional funds or relaxation of departmental regulations for speeding up reconstruction and repair efforts.

They will also try to mobilize additional funds for this purpose through donations from the local community or donor agencies. The Collector will coordinate the mobilization of funds from the agencies.

Insurance schemes are an important source of funds for reconstruction and repairs of private residential buildings damaged from the disaster. The community needs to be motivated through community awareness programmes to insure their properties. HUDCO and commercial banks also provide financial assistance for reconstruction and major repairs of private residential buildings damaged from disasters. The house owners will be motivated to obtain financial assistance from commercial banks for this purpose.

NGOs and donor agencies also provide financial assistance for reconstruction / repair of private houses, particularly to the poor families, who cannot afford to avail financial assistance from commercial banks at normal terms. The Collector will coordinate with NGOs and donor agencies to ensure that the concessional assistance gets targeted to the really poor and needy families.

Housing Board in collaboration with PWD, RES will organize technology demonstration camps in the affected areas to inform the people about seismically appropriate building techniques so that new constructions are not vulnerable to the identified hazards.

Insurance schemes are important source of funds for restoration of private business enterprises. The Collector will coordinate with Insurance Companies to speed up settlement of insurance claims. It will help in restoration of private business enterprises. He will also coordinate with commercial banks for ensuring smooth flow of financial assistance from commercial banks for restoration of private business enterprises.

Revenue, Book Circulars contains standing instructions of the Government for distribution of ex-gratia payments to poor families, who suffer from disasters to initiate their recovery process. This assistance will be provided very promptly to the poor families by the functionaries of the Revenue Department.

#### **C 1.4.1 Restoration of basic infrastructure**

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Housing Board in collaboration with PWD, RES will organize technology demonstration camps in the affected areas to inform the people about seismically appropriate building techniques so that new constructions are not vulnerable to the identified hazards.

#### **C 1.4.2 Reconstruction of damaged buildings/social infrastructure**

Funds are generally available from the Rural Development Department for the construction and maintenance of community facilities in the rural areas. These funds will be utilized by the Panchayats for reconstruction or repairs of the damaged community facilities. They can also submit demands to the Government for additional funds or relaxation of departmental regulations for speeding up reconstruction and repair efforts.

It shall be the responsibility of the local-self-government to reconstruct the community facilities. They will also try to mobilize additional funds for this purpose through donations from the local community or donor agencies. The Collector will coordinate the mobilization of funds from the agencies.

#### **C 1.4.3 Restoration of livelihoods( Refer RBC )**

#### **Medical Rehabilitation**

In case of earthquake, the injury may be reported in terms of amputation of organs and bone fractures, which requires months to be normal. In that case, it is the responsibility of Health Department to take care of injured. For the handicapped, the State Government's Social Welfare and Women and Child Welfare Department provide funds for getting them functional.

#### **C 1.4.4 Psycho-social interventions**

The need of psychological Rehabilitation is important aspect of recovery management. The women who are widowed and children, who get orphaned, require psychological treatment to restart their normal life. This process is very gradual and requires patience. The local volunteers and non-government organizations will organize camps on regular basis for such rehabilitation. Apart from this, Social Welfare Department will conduct psychotherapy sessions on regular basis. The Social Welfare department with the help of the NGOs and other professional bodies shall establish counselling centres for the psychological rehabilitation of the persons affected by the disasters. These centres shall work on similar lines of family counselling centres, which are being run under the Central Social Welfare Board.

The district administration shall accord priority for the recovery and rehabilitation of the weaker sections of the society like the Scheduled Castes and Scheduled Tribes as they normally take more time and efforts to recover from the disasters because of the economic and sociological reasons.

#### **C 1.5 Cross cutting elements**

##### **C 1.5.1 Community Based Disaster Management**

Communities are always the first responders and hence the initiatives pertaining to Community participation, promote local ownership, address local needs, and promote volunteerism, will be captured. The district level plan will be prepared, by incorporating the information, needs and local vulnerability, keeping in view the community participation at the sub district level.

Communities are always the first responders and hence the initiatives pertaining to Community participation, promote local ownership, address local needs, and promote volunteerism, will be captured. The district level plan will be prepared, by incorporating the information, needs and local vulnerability, keeping in view the community participation at the sub district level.

The role and importance of community, under the leadership of the local authorities, Panchayati Raj Institutions (PRIs) and Urban Local Bodies (ULBs), being the bedrock of the process of disaster response, is well recognised. For their immediate support, there are other important first responders like the police, State Disaster Response Force (SDRFs), Fire and Medical Services. The NDRF will provide specialist response training whenever required. In serious situations, the resources of all NDRF battalions (18 teams per battalion), on an as required basis, will be concentrated in the shortest possible time in the disaster affected areas. Other important responders will be the Civil Defence, Home Guards and youth organizations such as NCC, NSS and NYKS. The deployment of the armed forces will also be organized on as required basis. Establishment/raising of NDRF should progressively reduce deployment of the Armed Forces. However, Armed Forces would be deployed only when the situation is beyond the coping capacity of State Government and NDRF.

##### **C 1.5.2 Needs of the Special vulnerability Groups**

In preparedness plan, vaccinations for children and pregnant women should be given so that they are immune to any kind of epidemics that might break out after the disaster.

Special workforce should be trained to help old people evacuate their homes after the disaster. Awareness and sensitization among the men of the community should be done to evacuate the old

people, disabled and women and children first and then evacuate themselves. First aid must be catered to the vulnerable groups and then to the others. Special Medical equipments required by the disabled people should be kept at disposal when and where required.

. In rural areas, where Community Based Rehabilitation (CBR) committees and other local based community organizations may be in place, disaster preparedness should be conceptualized and implemented with the involvement of all community members. Their participation is crucial to ensure equal access to disaster evacuation and relief. As a result, vulnerable groups and their specific needs are clearly identified while measures and facilities are adjusted to incorporate such needs. Basic needs of vulnerable populations should be seen as the equivalent of the general population's; however, there may be different requirements in fulfilling their needs. evaluation and monitoring of the inclusion of vulnerable groups in preparedness should be also part of planning. Since all disasters are local, starting locally is always the best plan. Developing a bottom up approach to planning was the most accepted suggestion.

Key points for disaster planning for vulnerable population, especially people with disabilities include:

1. equal access to shelter facilities
2. equal access to evacuation/ transportation
3. equal access to disaster clean up

Restrictive policies should be reviewed and provisions made that would enable patients to more easily access medicine in cases of emergencies. For relatively isolated communities, private sector involvement in response planning is critical. For example, fuel, food, and transportation are often supplied by the private sector. Consequently, there is a need to raise awareness of the local community and in particular the private sector on the specialized needs of people with disabilities and other vulnerable groups in situation of natural disasters.

Regarding the cost of including vulnerable groups into planning this process does not have to be costly for either national or local stakeholders, but instead requires planners to redistribute existing funds. people with disabilities and other vulnerable populations must develop their own emergency plans as well as establish support groups at the community level.

With regard to specific training on the inclusion of people with disabilities and other vulnerable population in emergency planning, a twin track approach can be adopted i.e training vulnerable populations is as important as training emergency planners and responders from governmental and other agencies. providing training in accessible format for people with disabilities and other populations. This consideration includes materials in Braille, audio versions, large print, use of sign language interpreters, plain language, etc. The need of delivering trainings in facilities that are physically accessible was also mentioned. In addition, people with auditory disabilities should be trained and, at the same time, encouraged to become volunteers, so they can help their deaf communities when interpretation is not available.

Emergency-preparedness drills should include real participation of people with disabilities and other vulnerable groups. Simulations or role play exercises where persons without disabilities take the role of disabled people should be avoided persons with disabilities and other vulnerable groups need to be accommodated first not last.

. There is a need to raise awareness of the general population of the trauma of people with disabilities caused by the lack of inclusion in initial planning.

The development of an end-to-end early warning system is fundamental to save lives when disasters occur. Developing and maintaining all feasible channels of open communication within and across vulnerable groups. The inclusion of satellite and ordinary mobile phones was necessary. The warning system should be accessible for people with disabilities and other groups, especially people who are deaf and blind.

cell phones help inform relevant authorities, groups, neighbors, friends and relatives of the status people with disabilities in emergency situations. It was recognized that due to power outages the life of batteries are often short and therefore limit the usefulness of cell phones to the initial stages of the disaster.

We can establish a 24-hour hotline for disabled people to call the local government councils. Dissemination of information on locations of potential assistance and bringing awareness to the procedures that one should follow in the case of emergency since many people with disabilities are not aware of the available resources or plans can be done.

### **C 1.5.3 Addressing climate induced anthropogenic issues**

Climate change has resulted in the increase in frequency and intensity of many natural disasters and induced anthropogenic effects and hence priority will be given to promote understanding of climate change adaptation strategies, energy efficiency and natural conservation for the mitigation.

Because of the change in climatic dynamics due to Global warming, etc the demarcation of seasons is not proper and rainy season which should have started from 15th of June, is starting from June 1st itself. Because of this the flood preparedness should change with respect to the change of this climatic change.

The changing monsoon pattern and intensity of rains should bring in resistant varieties of crops which can withstand these changes. Awareness regarding these crops should be brought in farmer community.

Since some disasters like hailstorms cannot be predicted, crop insurance should be ensured for all the farmers.

## C 2 Standard Operating Procedures (and Checklists)

Standard Operating Procedures will be prepared with objective of making the concerned agencies / persons understand their duties and responsibilities regarding disaster management at all levels. All concerned departments, divisions and agencies shall prepare their own action plans in respect of their responsibilities. Emergency response teams will be kept ready by each department so that they can move to disaster site/affected area on short notice.

Standard Operating Procedures will be modified and improved upon in light of changing circumstances. The District Magistrate will encourage all the departments to suggest changes in these procedures with a view to enhance the effectiveness of the District Emergency Management Plan

The Standard operating procedure shall be followed during normal times (Non Disaster Stage), warning stage (Before Disaster Stage), disaster stage (During Disaster Stage) and post disaster stage (After Disaster Stage).

- **Non Disaster Stage– Mitigation:** To identify the existing and potential risks and to reduce potential casualties and damage from disasters.
- **Before Disaster Stage– Preparedness:** To build the capacities of local communities in order to safeguard their lives and assets by taking appropriate action in the face of any disaster and to ensure response agencies are able to reach out to potential damage zones in a prompt and coordinated manner.
- **During Disaster Stage-Response:** To attend the immediate need of the affected population in the minimum time possible.
- **After Disaster Stage- Recovery and Rehabilitation:** To build back better.



## Department of Revenue and Relief

<b>Non Disaster Time</b>
<ul style="list-style-type: none"><li>• To appoint a nodal officer in the DEOC.</li><li>• Establish infrastructure for DEOC and maintain in state of readiness with all equipment in working order and all inventories updated.</li><li>• Train personnel on operations of DEOC.</li><li>• Ensure basic facilities for personnel who will work at district level for disaster response.</li><li>• To coordinate the preparedness functions of all line departments.</li><li>• Establish disaster management funding mechanisms to ensure adequate resources for preparedness work, and quick availability of resources for relief and rehabilitation when required.</li><li>• Ensure that all the Gram Panchayats, urban bodies and blocks prepare their disaster management plan.</li><li>• Coordinate with other state departments of state and centre for their disaster management plan at the district level and synchronise the same with the district disaster management plan.</li><li>• Help District Administrators with additional resources for disaster preparedness, if necessary.</li><li>• On annual basis report to the SEC of the preparedness activities.</li><li>• To ensure that funds are being allocated under the District Disaster Mitigation Fund.</li><li>• To ensure that structural and non-structural mitigation measures are taken by all its department offices.</li></ul>
<b>Warning Time</b>
<ul style="list-style-type: none"><li>• Maintain contact with forecasting agencies and gather all possible information regarding the alert.</li><li>• Ensure activation of District EOC in standby mode.</li><li>• Instruct all ESFs remain in readiness for responding to the emergency.</li><li>• Advise concerned District collectors to carry out evacuations where required, and to keep transport, relief and medical teams ready to move to the affected areas at a short notice.</li><li>• Dispatch field assessment teams, if required.</li><li>• Provide assessment report to the DDMA.</li></ul>
<b>During Disaster</b>
<ul style="list-style-type: none"><li>• Activate DEOC in full form.</li><li>• To coordinate and plan all activities with the ESFs.</li><li>• Conduct Rapid Assessment and launch Quick Response.</li><li>• Conduct survey in affected areas and assess requirements of relief.</li><li>• Distribute emergency relief material to affected population.</li><li>• Coordinate all activities involved with emergency provisions of temporary shelters, emergency mass feeding, and bulk distribution of coordinated relief supplies for victims of disasters.</li><li>• Coordinate NGO, INGO and international agencies interventions/support.</li></ul>
<b>After Disaster</b>

- Organise initial and subsequent technical assessments of disaster affected areas and determine the extent of loss and damage and volume and nature of relief required.
- Keep the DDMA informed of the situation.
- Ensure supply of food, drinking water, medical supplies and other emergency items to the affected population.
- Visit and coordinate the implement of various rehabilitation programmes.
- Coordinate the activities of NGOs in relief and rehabilitation programmes.
- Allocate funds for the repair, reconstruction of damaged infrastructure after considering their overall loss and damage

**Department of Home**

<b>Non Disaster Time</b>
<ul style="list-style-type: none"> <li>• Vulnerability map of the block / Tehsil</li> <li>• Resource Inventory, Capacity analysis.</li> <li>• List of cut off areas with safe route map for communication.</li> <li>• Formulation/ Updation of Disaster Plan for the District.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Warning Time</b></li> </ul>
<ul style="list-style-type: none"> <li>• List of storage facilities, dealers of food.</li> <li>• Control room setup/assignment of control room duty.</li> <li>• Pre-positioning of staff for site operation centres.</li> <li>• Pre-arrangements to be made as per the demand of various departments.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>During Disaster</b></li> </ul>
<ul style="list-style-type: none"> <li>• Arrangement of alternative communication/generator sets etc.</li> <li>• Arrangement of vehicles/boats of for evacuation.</li> <li>• Dissemination of warning/coordination with District Control room.</li> <li>• Monitor the working of various departments and make frequent visits to disaster struck areas to cross-check.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>After Disaster</b></li> </ul>
<ul style="list-style-type: none"> <li>• Estimating the loss and damage and keep a record.</li> <li>• Share experiences with all the departments.</li> <li>• Continuous aid &amp; proper arrangements till situation is under control.</li> <li>• Monitor that the Repair &amp; Restoration work is in progress as planned.</li> <li>• Examine the performance reports of various departments.</li> <li>• Examine the reports in order to make amendments and prepare a better strategy by taking inputs from all departments.</li> </ul>

### Department of Health

<ul style="list-style-type: none"> <li>● <b>Non Disaster Time</b></li> <li>● Check on the tasks done at Zila, Tehsil &amp; Block level</li> <li>● Demarcate areas prone to epidemics and other similar disasters.</li> <li>● Coordination with private health organisations</li> <li>● Demarcate areas where medical camps can be set.</li> <li>● Take regular inputs from Swastha Kendras about any unwanted/hostile conditions in terms of endemic/epidemic diseases.</li> <li>● Awareness among people about diseases &amp; how can they be prevented from spreading.</li> <li>● Generators to be made available in all major hospitals.</li> <li>● Prepare a list of inventories required in case of disaster(vehicles/equipments/medicines)</li> </ul>
<p><b>Warning Time</b></p> <ul style="list-style-type: none"> <li>● Construction &amp; repair of IEC inventory.</li> <li>● ORS &amp; other important medicines to be procured as requirement.</li> <li>● Training of employees and people regarding the basic treatment in case of flood/loo/minor bruises etc.</li> <li>● Procure necessary medicines for cases that are otherwise rare like snake bite, chlorine for cleaning water etc.</li> <li>● Prepare mobile units for sensitive &amp; prone to be hit areas.</li> <li>● Identification of sites in probable disaster areas for site operation areas</li> </ul>
<p><b>During Disaster</b></p> <ul style="list-style-type: none"> <li>● Send task force with necessary medicines to affected areas.</li> <li>● Procure required medical equipments &amp; medicines in case they fall short of it.</li> <li>● Strong emphasis to be given to sensitive areas.</li> <li>● Ensure that appropriate no of Staff/Doctors are present at the affected areas.</li> <li>● Ensure cleanliness at the medical camps.</li> <li>● Frequent checks on the Staff/Doctors on duty.</li> <li>● Postmortem of dead bodies.</li> </ul>
<p><b>After Disaster</b></p> <ul style="list-style-type: none"> <li>● Monitoring against spreading of diseases</li> <li>● Continuous medical aid &amp; proper arrangements till situation is under control</li> <li>● Dead/Injured counselling</li> <li>● Injured/handicapped to be treated and arrangement for healthy living facilities</li> <li>● Provide healthy rehabilitation to disaster affected people.</li> </ul>

**Department of Transport**

<b>Non Disaster Time</b>
<ul style="list-style-type: none"> <li>• Designate one Liaison Officer of the department as the Focal Point and inform all concerned.</li> <li>• Develop and implement disaster management plan for the department.</li> <li>• Carry out survey of condition of all highway systems at state and district level.</li> <li>• Identify and inventories transport vehicles available with the department and ensure that they are all in good working condition.</li> <li>• Identify and inventories transport vehicles available with the private operators in the district.</li> <li>• Allocate additional force to possible Disaster prone roads/routes identified</li> <li>• Ensure that the force so allocated are aware of the possible disaster prone spots on these routes along with the possible type of disaster which may happen, as in the case of Petrol and Diesel transport vehicles leading to and from the IOC depot.</li> <li>• Make departmental mitigation plan and ensure its implementation.</li> <li>• Enforce the speed limits in the government vehicles regulated by the department and organize departmental awareness programs for the same</li> </ul>
<b>Warning Time</b>
<ul style="list-style-type: none"> <li>• Depute an officer at the DEOC.</li> <li>• Ensure availability of fuel, recovery vehicles and equipment.</li> <li>• Take steps for arrangement of vehicles for possible evacuation of people</li> </ul>
<b>During Disaster</b>
<ul style="list-style-type: none"> <li>• Establish contact with the DEOC.</li> <li>• Take steps for transportation of relief personnel and material to affected areas.</li> <li>• Take steps for movement of affected population to safer areas.</li> <li>• Collate and disseminate information regarding operational and safe routes and alternate routes, fuel availability etc. to personnel operating in the field.</li> <li>• Launch recovery missions for stranded vehicles.</li> </ul>
<b>After Disaster</b>
<ul style="list-style-type: none"> <li>• Assess damage to transportation infrastructure.</li> <li>• Take steps to ensure speedy repair and restoration of transport links.</li> </ul>

**Department of Public Works**

<b>Non Disaster Time</b>
<ul style="list-style-type: none"> <li>• Designate one Liaison Officer in the department as the Disaster Preparedness Focal Point. The Chief Executive Engineer</li> </ul>

will be the liaison.

- Take precautionary steps for the protection of government property against possible loss and damage during disaster.
- Formulate guidelines for safe construction of public works.
- Prepare list, with specifications and position, of heavy construction equipment within the district.
- Organize periodic training of engineers and other construction personnel on disaster resistant construction technologies.
- Inspect all roads, road bridges by a bridge engineer, including underwater inspection of foundations and piers. A full check should be made on all concrete and steel works.
- Inspect all buildings and structures of the state government (including hospital buildings) by a senior engineer and identify structures which are endangered by the impending disaster.
- Emergency tool kits should be assembled for each division, and should include:
- The designation of routes strategic to evacuation and relief should be identified and marked, in close coordination with police and district control room.
- Prepare mitigation plan for the department and enforce the same.
- Advise the district disaster management authority on structural mitigation measures for the district.
- Repair, Maintenance and retrofitting of public infrastructure.
- Identify / prioritize mitigation activities of lifeline buildings and critical infrastructure and coordinate with the DDMA for its implementation.
- Place danger sign boards in the areas highly prone to specific type of disasters, such as road accidents etc.

**Warning Time**

- Establish radio communications with DEOC.
- Depute one representative at the DEOC as per the directions from DDMA.
- Instruct all officials at construction sites to keep manpower and materials prepared for protection and repair of public works.
- Direct construction authorities and companies to preposition necessary workers and materials in or near areas likely to be affected by disaster.
- Vehicles should be inspected, fuel tanks filled and batteries and electrical wiring covered as necessary.
- Extra transport vehicles should be dispatched from district headquarters and stationed at safe strategic spots along routes likely to be affected.
- Heavy equipments, such as front-end loaders, should be moved to areas likely to be damaged and secured in a safe place.
- Establish a priority listing of roads which will be opened first. Among the most important are the roads to hospitals and main trunk routes.
- Give priority attention to urgent repair works that need to be undertaken in disaster affected areas.

<ul style="list-style-type: none"> <li>• Work under construction should be secured with ropes, sandbags, and covered with tarpaulins if necessary.</li> <li>• Emergency inspection by mechanical engineer of all plant and equipment in the district workshops.</li> </ul>
<p><b>During Disaster</b></p> <ul style="list-style-type: none"> <li>• Provide assistance to the damage assessment teams for survey of damage to buildings and infrastructure.</li> <li>• Adequate road signs should be installed to guide and assist the drivers.</li> <li>• Begin clearing roads. Assemble casual laborers to work with experienced staff and divide into work-gangs.</li> <li>• Mobilize community assistance for road clearing by contacting community organizations and village disaster management committees.</li> <li>• Undertake cleaning of ditches, grass cutting, burning or removal of debris, and the cutting of dangerous trees along the roadside in the affected area.</li> <li>• Undertake construction of temporary roads to serve as access to temporary transit and relief camps, and medical facilities for disaster victims.</li> <li>• As per the decisions of the District Emergency Operations Center undertake construction of temporary structures required, for organizing relief work and construction of relief camps, feeding centers, medical facilities, cattle camps and Incident Command Posts.</li> <li>• If possible, a review of the extent of damage (by helicopter) should be arranged for the field Officer-in-Charge, in order to dispatch most efficiently road clearing crews, and determine the equipments needed.</li> <li>• If people are evacuating an area, the evacuation routes should be checked and people assisted.</li> <li>• Identify locations for setting up transit and relief camps, feeding centers and quantity of construction materials and inform DEOC accordingly.</li> <li>• Take steps to clear debris and assist search and rescue teams.</li> <li>• Provide sites for rehabilitation of affected population</li> </ul>
<p><b>After Disaster</b></p> <ul style="list-style-type: none"> <li>• Carry out detailed technical assessment of damage to public works.</li> <li>• Assist in construction of temporary shelters.</li> <li>• Organize repairs of buildings damaged in the disaster</li> <li>• Prepare detailed programs for rehabilitation of damaged public works.</li> <li>• Arrange technical assistance and supervision for reconstruction works as per request.</li> </ul>

**Department of Irrigation and Water Resources**

<p><b>Non Disaster Time</b></p> <ul style="list-style-type: none"> <li>• Communication establishment with District and Block/ Tehsil Control Rooms and departmental offices within the district.</li> </ul>
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<ul style="list-style-type: none"> <li>• An officer to be appointed as nodal officer.</li> <li>• Activation of flood monitoring mechanism</li> <li>• Methods/communication arrangement of alerting officers on various sites established</li> <li>• Check the preparation level of the department.</li> <li>• Identify the areas that face the maximum flow of the major rivers and also make the locals aware about it.</li> <li>• Identify the flood prone areas and demarcate them and also send a flood surveillance team to such areas.</li> <li>• Mark the maximum safe level of water at all the embankments of rivers, reservoirs and dams.</li> </ul>
<p><b>Warning Time</b></p> <ul style="list-style-type: none"> <li>• Mechanism evolved for forewarning settlements in the down stream/evacuation/coordination with other dam authority.</li> <li>• Identification of materials required for response operations</li> <li>• Repairs/ under construction activity are well secured</li> <li>• Water level gauges marked</li> <li>• Inlet and outlet to tanks are cleared</li> <li>• Watch and ward of weak embankments &amp; stock piling of repair materials at vulnerable points</li> <li>• Guarding of weak embankments</li> <li>• All staff informed about the disasters, likely damages and effects.</li> <li>• Procure necessary inventory for flood situations and keep it properly maintained.</li> <li>• Inventories for the case of breakage of dam/embankments like sand sacks, rocks, etc need to be brought and checked well in advance.</li> </ul>
<p><b>During Disaster</b></p> <ul style="list-style-type: none"> <li>• Surveillance of flood hit/susceptible areas.</li> <li>• Make announcements about the coming flood.</li> <li>• Usage of advanced technology like GPS to calculate damage and the areas where maximum damage would occur.</li> <li>• Safety of equipments of the Irrigation department to be maintained.</li> <li>• Survey of major dams, embankments, bridges, channels etc is done.</li> <li>• Emergency help services to areas where bank got broken.</li> </ul>
<p><b>After Disaster</b></p> <ul style="list-style-type: none"> <li>• Estimating the loss and damage and keep a record.</li> <li>• Surveillance for protection of people.</li> <li>• Share experiences with the department.</li> <li>• Formulate a checklist and re-prepare an emergency plan.</li> <li>• Training of staff to minimize the loss of life/property.</li> </ul>

**Department of Agriculture**

<p><b>Non Disaster Time</b></p> <ul style="list-style-type: none"> <li>• Designate a focal point for disaster management within the department.</li> <li>• Identify areas likely to be affected.</li> <li>• Arrange for keeping stock of seeds, fertilizers and pesticides.</li> <li>• A pests and disease monitoring system should be developed to ensure that a full picture of risks is maintained.</li> <li>• Historical data to be gathered on the drought prone areas.</li> </ul>
<p><b>Warning Time</b></p> <ul style="list-style-type: none"> <li>• Provide timely warning to DEOC/DDMA about droughts.</li> <li>• Check available stocks of equipments and materials which are likely to be most needed after the disaster.</li> <li>• Stock agricultural equipments which may be required after a disaster</li> <li>• Determine what damage, pests or diseases may be expected, and what drugs and other insecticide items will be required, in addition to requirements of setting up extension teams for crop protection, and accordingly ensure that extra supplies and materials, be obtained quickly.</li> <li>• Provide information to all concerned, about disasters, likely damages to crops and plantations, and information about ways to protect the same.</li> <li>• All valuable equipments and instruments should be packed in protective coverings and stored in room the most damage-proof</li> </ul>
<p><b>During Disaster</b></p> <ul style="list-style-type: none"> <li>• Depute one liaison officer to the DEOC.</li> <li>• Monitor damage to crops and identify steps for early recovery.</li> <li>• Estimate the requirement of  Seeds  Fertilizers  Pesticides, and Labour.</li> <li>• Organize transport, storage and distribution of the above with adequate record keeping procedures.</li> <li>• Ensure that adequate conditions through cleaning operations are maintained to avoid water-logging in flooded areas.</li> </ul>
<p><b>After Disaster</b></p> <ul style="list-style-type: none"> <li>• Quantify the loss and damage within the quickest possible time and finalize planning of agriculture rehabilitation.</li> <li>• Ensure availability of adequate supply of seeds, seedlings, fertilizers, pesticides and agricultural implements.</li> <li>• Assist farmers to re-establish their contacts with agriculture produce market and ensure that appropriate prices be offered to them.</li> </ul>



**Department of Rural Water Supply & Sanitation**

<b>Non Disaster Time</b>
<ul style="list-style-type: none"> <li>• Provide clean drinking water in all areas rural/urban.</li> <li>• Regular cleaning of nalas and prevent them from choking.</li> <li>• Facilitate proper drainage in all areas to prevent diseases.</li> </ul>
<b>Warning Time</b>
<ul style="list-style-type: none"> <li>• Proper arrangement of water tankers in good condition.</li> <li>• Arrange for generators in advance.</li> <li>• Make necessary arrangements of chlorine tablets for disaster prone/expected areas.</li> <li>• Repair the platforms of tube wells if required and any other necessary repairs if required to avoid damage.</li> </ul>
<b>During Disaster</b>
<ul style="list-style-type: none"> <li>• Cleaning water sources and continuous monitoring.</li> <li>• Supply of clean water at hospitals and medical camps.</li> <li>• Provide water through water tankers wherever required.</li> <li>• Provide emergency help to clean and start tube wells &amp; other water sources.</li> <li>• Repair of damaged water sources to be carried out.</li> <li>• Aware people about how to keep the hand pumps free of microbial infections.</li> </ul>
<b>After Disaster</b>
<ul style="list-style-type: none"> <li>• Reinforcement &amp; reconstruction of damaged sources and to keep records.</li> <li>• Share experiences with the department.</li> <li>• Training of employees.</li> <li>• Formulate a checklist and re-prepare an emergency plan.</li> </ul>

**Department of Veterinary**

<b>Non Disaster Time</b>
<ul style="list-style-type: none"> <li>• Communication establishment with district and Block / Tehsil control rooms and departmental offices within the division.</li> <li>• Listing of club houses, schools, community centers that can be used as shelter for animals.</li> </ul>
<b>Warning Time</b>
<ul style="list-style-type: none"> <li>• Collect information from different areas and to act accordingly (Assignment of duties).</li> <li>• Preparation of shelters in clubs, Schools, Halls etc, for animals and shifting them if necessary.</li> <li>• Tagging the animals to avoid mix up and chaos.</li> <li>• Getting proper stock of fodder for cattle.</li> </ul>
<b>During Disaster</b>
<ul style="list-style-type: none"> <li>• Veterinary Hospital &amp; Veterinary Dispensary at every important place (thickly cattle populated areas) headed by the Veterinary Assistant/ Surgeon.</li> <li>• Regular collection of situation report of the risk and vulnerable areas from the officers assign for the purpose.</li> <li>• Replacement of affected cattle in the shelters/camps, collection of fecal waste and cleaning etc.</li> <li>• Feeding the animals.</li> </ul>
<b>After Disaster</b>
<ul style="list-style-type: none"> <li>• Veterinary First Aid centre/stockman sub-centre at most of the areas to me made and all the wings should be ready to combat the situation.</li> <li>• Getting the animals back to their owners and returning the stray ones to Nagar Maha Palika.</li> <li>• Cleaning of temporary shelters.</li> </ul>

**Department of Fire Service**

<p><b>Non Disaster Time</b></p> <ul style="list-style-type: none"> <li>• Strict enforcement of laws made for the security of Fire squad and proper proceedings to be done in case the law is violated.</li> <li>• Regular check of equipments and procuring new ones as and when necessary.</li> <li>• Demarcating Industries and areas susceptible to fire, events that are susceptible to fire etc.</li> <li>• Aware people about their safety how to mitigate fire &amp; its effects.</li> <li>• Training of employees keeping their safety in mind.</li> <li>• The blueprint of any building/house should not be accepted without proper Fire Safety measures.</li> </ul>
<p><b>Warning Time</b></p> <ul style="list-style-type: none"> <li>• Train people how to mitigate fire in early stages and foremost how to avoid it.</li> <li>• Training of people on how to react in an emergency situation.</li> <li>• Train staff and Raj Mistri’s about latest Fire Fighting techniques</li> </ul>
<p><b>During Disaster</b></p> <ul style="list-style-type: none"> <li>• Find a safe way to save people trapped in fire in a house/ building/ aero plane/ train/ industry/ boiler etc.</li> <li>• Get control over fire and minimize damage in case of an explosion.</li> <li>• Control the situation in case of gas leak or leakage of some dangerous chemical.</li> </ul>
<p><b>After Disaster</b></p> <ul style="list-style-type: none"> <li>• Help other departments in search &amp; rescue and estimation of damage.</li> <li>• Share experiences with the department.</li> <li>• Training of employees about new disasters (related to fire) that can occur.</li> <li>• Formulate a checklist and re-prepare an emergency plan.</li> </ul>

### Department of Telecommunications

<b>Non Disaster Time</b>
<ul style="list-style-type: none"><li>• Communication establishment with District and Block /Tehsil Control Rooms and departmental offices within the division.</li><li>• An officer to be appointed as nodal officer.</li><li>• Continuous training of staff on the usage of new equipments that are procured.</li></ul>
<b>Warning Time</b>
<ul style="list-style-type: none"><li>• Prepare an inventory of resources that would be required and procure the material based on estimation.</li><li>• Train staff on quick response to restore the Tele-connectivity of the district.</li></ul>
<b>During Disaster</b>
<ul style="list-style-type: none"><li>• Standby arrangements for temporary electric supply or generators.</li><li>• Inspection and repair of poles etc.</li><li>• Identification of materials required for response operations.</li></ul>
<b>After Disaster</b>
<ul style="list-style-type: none"><li>• Repair of damaged poles &amp; lines etc as soon as possible to restore Tele-connectivity in the district.</li><li>• Share experiences with the department.</li><li>• Training of employees for better performance.</li></ul>

### Home Guards

<b>Non Disaster Time</b>	<ul style="list-style-type: none"> <li>• Get details of the staff with their address and phone numbers</li> <li>• Arrange for details of fuel arrangement for ships-mechanized launches at the time of emergency.</li> <li>• Do's and Don'ts to be observed during emergencies and details of priorities should be given to the staff.</li> <li>• Set up for evacuation of people from affected area of the river side area.</li> <li>• Details of buildings, vehicles and equipments and list of contractors with vehicles and equipments should be procured.</li> <li>• Prepare map showing rivers and the important routes</li> <li>• Maintain communication equipments, telephone line, telex lines, megaphone and amplifiers with statistical data.</li> <li>• Make a list of details of important telephone numbers of water supplies, control room, hospitals, drainage system, railway stations, bus depots, strategically important places, Army Air force Navy camps and other sensitive places, major industrial units, and other communication channels which can be used during emergency.</li> <li>• Ensure the arrangement for transportation &amp; evacuation of people from the affected areas.</li> <li>• Prepare the action plan regarding repairs and alternative ways in case of disruption of transportation.</li> <li>• Prepare plan showing the alternative routes and arrangement for transportation of goods etc; during emergencies.</li> <li>• Inspect the garages and control point etc; which are damage prone.</li> <li>• Make due arrangement for materials to restore the facilities in case the movement of the materials and goods on the ports are damaged.</li> <li>• Prepare an action plan to avail on temporary bases, the technical personnel from the nearby district which is not affected.</li> <li>• Collect the details of swimmers in the district.</li> <li>• Make arrangement for sufficient fuel during emergency.</li> </ul>
<b>Warning Time</b>	<ul style="list-style-type: none"> <li>• Maintain the equipments available such as cranes, diesel generator, earth mover machines, de-dusting pumps, cutters, tree cutters, ladders, ropes, flood lights, shovels, axes, hammers, RCC cutters, etc. which can be used during emergency and will ensure that those are in the working conditions.</li> <li>• Take due care to see that the transportation at shelters and emergency hospital is not disrupted during calamities.</li> <li>• Prepare a list of public properties related to transport department, which are in the damage prone area and will arrange in advance to minimize the damage.</li> <li>• Specifically take action to ensure that the fishermen do not move out for fishing as well as sailing during the final warnings of flood, etc.</li> <li>• Evacuate the fishermen to a safe place and if they deny, to get it done forcefully.</li> <li>• Ensure that the warning signals are received in time and shown immediately to the people.</li> </ul>

<p><b>During Disaster</b></p> <ul style="list-style-type: none"> <li>• Undertake the work of search and rescue and also the relief work</li> <li>• Set up a temporary special control room and information centre at the main bus station.</li> <li>• Immediately contact the district control room and will assist in the work</li> <li>• Ensure that the staff is on duty at the headquarters.</li> <li>• Assign the work to be done by the subordinate officers and staff regarding transportation under DDMP and to send them to their sites.</li> <li>• Ensure the availability of resources included in the DDMP and will make due arrangements to get those during emergency.</li> <li>• Consult the liaison officer to close the ports and sailing in the rivers, which is damage prone or dangerous for the safety of the people as well as the property.</li> <li>• Assist the administration to send the messages regarding warning to the remote area</li> </ul>
<p><b>After Disaster</b></p> <ul style="list-style-type: none"> <li>• Follow the instructions of District Liaison Officer.</li> <li>• Carry out the duty assigned for search and rescue work.</li> <li>• Engage the resources and manpower available to manage the disaster.</li> <li>• Review the matters regarding closing of movement at the port for safety measures and will ensure that it is restarted very soon.</li> <li>• To contact the district control room if additional equipments, vehicles, manpower, technical personnel are necessary to restore the port related activities.</li> <li>• Prepare a primary survey report of damage and send it to the District Control Room and to the administrative head.</li> <li>• Collect the details of approach roads connecting the damaged area and get them repaired in co-ordination with the competent authority</li> </ul>

**Rural Development Department**

<p><b>Non Disaster Time</b></p> <ul style="list-style-type: none"> <li>• Designate one Liaison Officer in the department and the district as the Disaster Management Focal Point.</li> <li>• Develop a district disaster management plan for the department.</li> <li>• Prepare maps showing population concentration and distribution of resources.</li> <li>• Encourage disaster resistant technological practices in buildings and infrastructure.</li> <li>• Encourage the people in earthquake prone areas to adopt earthquake resistant technologies.</li> </ul>
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<ul style="list-style-type: none"> <li>• Report activities in periodic meetings of the district disaster management advisory committee and to DDMA.</li> <li>• In coordination with PWD conduct regular training to the engineers of the department.</li> <li>• Appoint one officer as focal point for mitigation activities</li> <li>• On the basis of its developmental responsibility, liaise with other line departments and agencies for a coordinated mitigation approach.</li> <li>• In coordination with the DDMA, conduct building assessments, identification of structural and non structural mitigation activities.</li> <li>• Organize awareness programmes for BDO's, Panchayat secretaries and Gram Pradhans on structural and no-structural mitigation activities.</li> </ul>
<b>Warning Time</b>
<ul style="list-style-type: none"> <li>• Focal Point in department to keep in touch with the DEOC.</li> <li>• Alert all concerned about impending disaster.</li> <li>• Ensure safety of establishments, structures and equipment in the field</li> <li>• Ensure formation of committee for rescue, relief and rehabilitation work and local volunteer teams.</li> </ul>
<b>During Disaster</b>
<ul style="list-style-type: none"> <li>• Ensure information flow from affected Gram Panchayats and maintain regular contact with DEOC (24 hrs).</li> <li>• Support revenue department in establishing ICP's in the affected areas</li> <li>• Ensure availability of drinking water at times of need.</li> <li>• Provide necessary infrastructure to carry out relief works</li> <li>• Assess initial damage</li> </ul>
<b>After Disaster</b>
<ul style="list-style-type: none"> <li>• Quantify the loss/damage</li> <li>• Organize reconstruction of damaged houses on self help basis with local assets and materials received from the government.</li> <li>• Take up repair/reconstruction work of infrastructure damaged by disaster</li> </ul>

### Panchayat Raj

<b>Non Disaster Time</b>
<ul style="list-style-type: none"> <li>• Develop a disaster management plan for the department at district level &amp; update it annually.</li> <li>• Analyze the training needs of the department's personnel, which include its officials and elected representatives of Gram Panchayat, Panchayat samiti's and Zila Panchayat and organize trainings with the help of HIDM or other agencies.</li> <li>• Conduct gram Panchayat level mock drills as part of preparedness.</li> </ul>

<b>Warning Time</b>
<ul style="list-style-type: none"> <li>• Prepare &amp; implement department's mitigation plan</li> <li>• Ensure that all the development schemes of the department have a mitigation component as an integral part</li> </ul>
<b>During Disaster</b>
<ul style="list-style-type: none"> <li>• Coordinate with local authorities and support the response efforts.</li> <li>• Coordinate the support from unaffected gram Panchayats.</li> </ul>
<b>After Disaster</b>
<ul style="list-style-type: none"> <li>• Ensure proper distribution of reconstruction schemes and monitoring of the same during Block development committee and Zila Parishad meetings</li> </ul>

**Forest Department**

<b>Non Disaster Time</b>
<ul style="list-style-type: none"> <li>• Prepare a department disaster management plan for the district.</li> <li>• Depute one liaison officer for disaster management.</li> <li>• Forest Fire prone areas should be identified and extra vigilance be ensured in such cases.</li> <li>• Depute one liaison officer within the department, who will be in contact with the SEOC during disasters.</li> <li>• Every year pre-fire season meetings should be organized to take the stock of the preparedness at Range level</li> <li>• Prepare &amp; maintain forest lines</li> <li>• Organize community awareness programs</li> <li>• Train the Gram Panchayat disaster management committees in forest fire prevention, protection and control, especially in those gram Panchayat which are located at the fringes of forest areas.</li> <li>• Prepare mitigation plan for the department buildings and infrastructure.</li> </ul>
<b>Warning Time</b>
<ul style="list-style-type: none"> <li>• A rapid response team will be established at division/sub-division/range level, which will have all tools and equipments readily available.</li> <li>• Information regarding issue alerts to nearby population</li> </ul>
<b>During Disaster</b>
<ul style="list-style-type: none"> <li>• Respond within the department as per the department disaster management plan</li> <li>• The liaison officer will coordinate with DEOC for information exchange &amp; also for requirements of resources to &amp; from DEOC</li> </ul>
<b>After Disaster</b>
<ul style="list-style-type: none"> <li>• Damage assessment and sharing of reports with DEOC</li> </ul>



### Department of Food & Civil Supplies

<b>Non Disaster Time</b>
<ul style="list-style-type: none"> <li>• Make go downs in disaster prone areas in advance.</li> <li>• Collect necessary resources keeping the type and intensity of disasters that have previously occurred or are expected to occur.</li> <li>• Make proper arrangements so that the stock in the go downs does not rot/spoil.</li> </ul>
<b>Warning Time</b>
<ul style="list-style-type: none"> <li>• Make necessary arrangements according to the expected requirements and procure the material which the department is short off.</li> <li>• Form teams and train them on how to ration resources.</li> </ul>
<b>During Disaster</b>
<ul style="list-style-type: none"> <li>• Proper keeping of resources.</li> <li>• Arrangements made for the distribution like vehicles through help from DDMA or other departments.</li> <li>• Make an inventory according to the prevailing needs and the estimated time and hence procure the needful.</li> </ul>
<b>After Disaster</b>
<ul style="list-style-type: none"> <li>• Use the equipments/resources from time to time so that they remain in working condition.</li> <li>• Strict monitoring to keep a check on unauthorized using of resources and legal proceedings to be carried out if required.</li> </ul>

### Electricity Department

<b>Non Disaster Time</b>
<ul style="list-style-type: none"> <li>• Prepare and manage inventory for emergency operations.</li> <li>• Training of electricity department workers and make sure that proper norms are being followed at the time of installation of various electric units/instruments.</li> <li>• Make various applicable and implementable schemes regarding the setup and examination of electrical units/instruments.</li> <li>• Make people aware so as to minimize the damage to life/limb caused due to electricity.</li> </ul>
<b>Warning Time</b>
<ul style="list-style-type: none"> <li>• Make provisions for providing electricity to rehabilitation centers in disaster hit areas &amp; to cut off electric supply from risky areas in case of emergency.</li> <li>• Follow proper regulations monitor continuously so that in case of wire breakage the current does not spread.</li> <li>• Make proper arrangements and follow stringent norms such that in case of a natural calamity, (like earthquake, flood, cyclone etc) the high tension line does not get damaged.</li> </ul>
<b>During Disaster – Response</b>



<ul style="list-style-type: none"> <li>• Cut off electricity immediately after receiving information about any disaster so as to minimize the damage caused.</li> <li>• Survey the spot and estimate (also help in estimation) the damage caused.</li> <li>• Be ready to provide electricity in areas where it is needed and can be provided safely.</li> <li>• Make a plan about how to re supply electricity to important areas, site operation centers, Industries, etc.</li> <li>• Examine and repair major poles, transformers &amp; wires necessary for getting electricity supply back to areas needed.</li> <li>• Minimize the damage caused to life by demarcating dangerous areas and cutting electricity in time.</li> <li>• Restore the electricity facility in affected areas.</li> </ul>
<b>After Disaster – Recovery and Rehabilitation</b>
<ul style="list-style-type: none"> <li>• Repair of damaged poles, transformers and conductors etc as soon as possible to restore electricity in the district.</li> <li>• Surveillance for protection of people.</li> <li>• Share experiences with the department.</li> <li>• Formulate a checklist and re-prepare an emergency plan.</li> </ul>

**Department of Education**

<b>Non Disaster Time – Preparedness</b>
<ul style="list-style-type: none"> <li>• Identify one Liaison Officer in the department at district level as Disaster Management Focal Point.</li> <li>• Develop district level disaster management plan for the department</li> <li>• In consultation with DDMA, state education directorate and state education board include disaster related subjects in the curricula in schools, and colleges.</li> <li>• Arrange for training of teachers and students on Dm and school safety activities.</li> <li>• Ensure that all schools and colleges develop their disaster management plans.</li> <li>• Ensure that construction of all educational institutions in earthquake zones is earthquake resistant.</li> <li>• Conduct regular mock drills in the educational institutes</li> </ul>
<b>Non Disaster Time –Mitigation</b>
<ul style="list-style-type: none"> <li>• Identify structural and non structural mitigation measures and get them implemented.</li> <li>• In coordination with the SSA &amp;/or Public works department assess schools and colleges buildings conditions and place the proposal of retrofitting of the structurally unsafe buildings with the state education department and/or DDMA.</li> <li>• Make departmental mitigation plan and ensure its implementation.</li> <li>• Ensure that earthquake resistant features are included in new school buildings.</li> </ul>
<b>During Disaster – Response</b>
<ul style="list-style-type: none"> <li>• In the event of disaster, place required number of education institutions and their buildings, under the DEOC for use as</li> </ul>

<p>emergency shelter and relief centre, if necessary.</p> <ul style="list-style-type: none"> <li>• Students and staff trained as task forces as part of the school disaster management planning’s can provide local voluntary assistance for distribution of relief material and assistance to special needy people in the locality.</li> </ul>
<b>After Disaster – Recovery and Rehabilitation</b>
<ul style="list-style-type: none"> <li>• Determine the extent of loss in educational institutions and submit the report to DDMA and state education department.</li> </ul>

### Department of Industrial Health and Safety

<b>Non Disaster Time –</b>
<ul style="list-style-type: none"> <li>• Designate one Liaison Officer in the Department as the Disaster Management Focal Point at district level.</li> <li>• Ensure all possible steps for the security of manpower, implements, stock, installations/factories etc.</li> <li>• Prepare listing and locations of industries and establishments for possible sourcing of relief material during disasters in the district.</li> <li>• Ensure training on preparedness programmes to be adopted at different levels for all manpower employed in factories and establishments in disaster vulnerable areas.</li> <li>• Issue disaster management guidelines to all the industries and ensure on-site and off-site plans for all industries.</li> <li>• Prepare and disseminate guidelines for the labor security and safety.</li> <li>• Prepare and implement rules and regulations for industrial safety and hazardous waste management.</li> <li>• Support the State Pollution Control Board to enforce the law for preventing environmental disaster in chemical industry or industries emitting toxic gases and effluents.</li> <li>• Issue detailed instructions to the employees about their duties and responsibilities in precautionary, disaster and post-disaster stages of normal disaster.</li> <li>• Prepare and disseminate public awareness material related to chemical accidents.</li> <li>• Prepare &amp; implement department’s mitigation plan for the district</li> </ul>
<b>During Disaster</b>
<ul style="list-style-type: none"> <li>• Evacuation o the workers from the Industrial are vicinity</li> <li>• Request industries to provide emergency relief material such as food products, temporary shelter, medicines and medical equipment and search &amp; rescue equipment.</li> <li>• During any industrial disaster, respond as per the disaster management plan of the respective industry or as per the guidelines for the specific hazard involved in the event.</li> </ul>
<b>After Disaster</b>
<ul style="list-style-type: none"> <li>• Take steps to plan for rehabilitation of industries adversely affected by disasters.</li> </ul>

## Department of Urban Development

<p><b>Non Disaster Time</b></p> <ul style="list-style-type: none"> <li>• Designate one Liaison Officer in the department at district level as the Disaster management Focal Point.</li> <li>• Develop a disaster management plan for the department, including the identification of location of camps for different type of disasters, existing locations that can be used as shelters, inventories of agencies that can be used for tent establishment.</li> <li>• To conduct regular training the staff on minimum standards for shelter, relief camps and tent structures.</li> <li>• Prepare department’s disaster management plan.</li> <li>• Develop alternative arrangements for population living in structures that might be affected after the disaster.</li> </ul>
<p><b>Mitigation</b></p> <ul style="list-style-type: none"> <li>• Designate one Liaison Officer in the department as focal point for the mitigation activities.</li> <li>• Coordinate with the DDMA for implementation of mitigation activities in the urban areas.</li> <li>• Prepare &amp; implement department’s mitigation plan</li> </ul>
<p><b>Alert and Warning Stage</b></p> <ul style="list-style-type: none"> <li>• In case of damage to offices, assist local authorities to establish and house important telecom equipment and officials at the earliest</li> <li>• Setting up water point in key locations and in relief camps</li> </ul>
<p><b>Response</b></p> <ul style="list-style-type: none"> <li>• Quick assessment of damaged areas and areas that can be used for relief camps for the displaced population</li> <li>• Locate adequate relief camps based on survey of damage</li> <li>• Clear areas for setting up relief camps</li> <li>• Locate relief camps close to open traffic and transport links</li> <li>• Set up relief camps and tents using innovative methods that save time</li> <li>• Provide adequate and appropriate shelter to the entire population</li> <li>• Coordinate with other ESFs in equipping shelter and relief sites with basic needs of communication and sanitation.</li> <li>• Maintaining and providing clean water</li> <li>• Procurement of clean drinking water.</li> <li>• Coordinate with DEOC &amp; ICP’s for proper disposal of dead bodies in the urban areas.</li> </ul>
<p><b>Recovery and rehabilitation</b></p> <ul style="list-style-type: none"> <li>• Implement recovery &amp; rehabilitation schemes through municipalities for urban areas.</li> </ul>

### Indian Red Cross and NGOs

<p><b>Non Disaster Time</b></p> <ul style="list-style-type: none"> <li>• Take steps for preparing community based disaster management plans with facilitation from DDMA.</li> <li>• Identify volunteers in disaster prone areas and arrange for their training.</li> <li>• Awareness raising programs, seminars and meetings with the people for improving their capacity to face disasters.</li> <li>• Maintain contacts with District Administrators on its activities.</li> <li>• Ensure road communication and pre-positioning of relief material as close as possible to disaster prone communities.</li> </ul>
<p><b>Alert and Warning Stage</b></p> <ul style="list-style-type: none"> <li>• Issue warning notice to all concerned including the preparedness programs Designate a liaison officer for maintaining link with the DEOC of the District.</li> <li>• Keep the survey and relief team of head quarters on stand-by in readiness with required transport and equipment.</li> <li>• Mobilise volunteers and issue instructions for sending them to potential disaster affected areas.</li> <li>• Take part in evacuation programme of population with close cooperation of volunteers</li> <li>• Coordinate with pre identified NGOs for possible joint operations.</li> </ul>
<p><b>During Disaster :</b></p> <ul style="list-style-type: none"> <li>• Ensure survey of loss and damage in affected areas and dispatch of relief teams from concerned Red Crescent Society Units.</li> <li>• Assist the Province Government to determine loss, damage and needs related information.</li> <li>• Give emergency assistance to disaster affected people especially in the following cases:</li> <li>• Help in rescue and evacuation work, temporary shelter, first aid, food and clothing,</li> <li>• Arrange for distribution of relief material received from Red Crescent Unit of areas not affected by disaster and from headquarters.</li> <li>• Send request for requirement of relief and rehabilitation to the International Federation of Red Cross and Crescent Societies (IFRC) after informing about loss and damage due to disaster.</li> </ul>
<p><b>After Disaster</b></p> <ul style="list-style-type: none"> <li>• Participate in reconstruction and rehabilitation programmes in special circumstances.</li> <li>• Take steps for correct and effective evaluation of preparedness work and for correcting errors/weakness in such work.</li> <li>• Extend Cooperation to the district EOC for disaster documentation.</li> </ul>

## **C 2.2 Hazard specific SOPs for designated Departments and Teams**

Provided in the annexure.

## **C 3 Financial Provisions for Disaster Management**

### **Funds generation:**

Reconstruction and rehabilitation projects are resource intensive. These projects have been financed in the past primarily through the state exchequer. In the recent past funds have also been raised from international agencies. Government of MP shall finalise the fund generation mechanism, including the covenants and measures that govern fund inflow and disbursement and usage. This includes:

1. Estimation of funds required based on detailed damage assessment report and consolidation of the same and the sectoral and regional heads.
2. Contracting with funding agencies and evolving detailed operating procedures for fund flow and corresponding covenants.

### **FUND DISBURSEMENT AND AUDIT:**

The funds raised from funding agencies are usually accompanied by stringent disbursement and usage restrictions. It is therefore important to monitor the disbursement of such funds to ensure that none of the covenants are breached. MPSDMA in conjunction with relevant agencies shall monitor disbursement of funds to avoid duplication the funds and relief/ rehabilitation activities to be routed through the SDMA executive committee / DDMA.

## **C 4 Coordination mechanisms with other stakeholders**

### **C 4.1 Mapping of stakeholders in the District**

#### **C 4.1.1 Private and Public Sectors:**

Many private and public sector units have equipments and skilled human resource, which could be used during response and recovery phase. A list of the major public and private sector units with facilities available with them is very useful during emergencies, which will be provided here in this section. Further, there are many private vendors within district, who can readily supply different relief materials within short notice.

Historically, corporate sectors have been supporting the disaster relief and rehabilitation activities. However, the involvement of corporate entities in disaster risk reduction activities is not significant. Corporate entities should redefine their business community plan to factor in hazards, risks and vulnerabilities. They should also create value in innovative social investments in the community. Public Private Partnership between the Government and private sector would also be encouraged to leverage the strengths of the latter in disaster management. The NDMA and SDMA need to network with the corporate entities to strengthen and formalize their role in the DM process for ensuring safety of the communities.

#### **C 4.1.2 Non Governmental Organizations and Community Based Organisations:**

Local NGOs and CBOs, due to their proximity to community, can act as a vital link between government and community particularly during emergencies.

**NGOs :** The contribution of NGOs and voluntary agencies during the response phase is generally invaluable. It has been the experience that many NGOs and voluntary agencies tend to provide relief on their own, without having any coordination or contact with the District Collector, who coordinates the response of Government agencies. It has also been observed that the relief provided by so many agencies tends to get targeted on the habitations on the main highways and roads or the main administrative towns. Consequently the victims living in interior villages and localities have to wait to get relief, while victims of habitations located on the main roads get far in excess of what they actually need. Therefore, there is a need of coordinating the relief efforts of NGOs and voluntary agencies also so that the relief reaches all the victims as per their needs. This coordination will be achieved through a working group, having representatives of important NGOs and some representatives from the local administration. This working group will try to coordinate the relief efforts of NGOs and voluntary agencies so that the NGOs and the voluntary agencies know the locations where their services are most required. Since most of relief through NGOs comes from outside the districts, it will be desirable to have a similar arrangement at the State level to advise the NGOs and voluntary agencies about the type of relief and the place where the relief is urgently required.

NGOs and CBOs have responded promptly and effectively in most of the emergencies both during the immediate response and in the recovery phases. Even the NGOs located far away from the disaster affected area have rushed their relief teams in. There is a need to coordinate the activities of a large number of NGOs and CBOs. This will be achieved by designating one of the local NGOs as the coordinator for activities and relief materials being arranged by other NGOs. The designated local NGO will provide the interface between the large number of NGOs and the district administration.

#### **C 4.1.3 Religious Institutions:**

There are number of religious institutions with infrastructural facilities and committed work force. These facilities can be used as shelters during disasters and the work force could be used as volunteers during response and recovery activities.

- Indore diocese
- Gurudwara near A.B road bus stand.
- Grace church, Dewas.

#### **C 4.1.4 Academic Institutions:**

The only institution which would act as reference for any disaster analysis is DMI Bhopal.

#### **C 4.1.5 International Humanitarian Organizations:**

No such organizations working in Dewas.

#### **C 4.2 Responsibilities of the stakeholders**

Community members: Community based initiatives for preparedness, mitigation, response and relief should be taken by the community members in a participative approach.

NGOs : The contribution of NGOs and voluntary agencies during the response phase is generally invaluable. It has been the experience that many NGOs and voluntary agencies tend to provide relief on their own, without having any coordination or contact with the District Collector, who coordinates the response of Government agencies. It has also been observed that the relief provided by so many agencies tends to get targeted on the habitations on the main highways and roads or the main administrative towns. Consequently the victims living in interior villages and localities have to wait to get relief, while victims of habitations located on the main roads get far in excess of what they actually need. Therefore, there is a need of coordinating the relief efforts of NGOs and voluntary agencies also so that the relief reaches all the victims as per their needs. This coordination will be achieved through a working group, having representatives of important NGOs and some representatives from the local administration. This working group will try to coordinate the relief efforts of NGOs and voluntary agencies so that the NGOs and the voluntary agencies know the locations where their services are most required. Since most of relief through NGOs comes from outside the districts, it will be desirable to have a similar arrangement at the State level to advise the NGOs and voluntary agencies about the type of relief and the place where the relief is urgently required.

#### **DDMA / DDMC team members:**

#### **DDMA roles:**

- Ensuring that prevention, mitigation and preparedness activities are carried out in accordance with the appropriate guidelines.
- Providing inputs to MPSDMA relating to various aspect of disaster management including early warnings, status of preparedness etc
- Ensuring that relevant officials in the district possess the knowledge to deal with disaster management issues
- Developing an appropriate relief implementation strategy for the district taking into account the unique circumstances of the district and prevailing gaps in institutional capacity and resources of the district
- Facilitating and coordinating with local govt bodies to ensure that pre disaster DM activities in the district are carried out optimally
- Facilitating community training, awareness programs and the installation of emergency facilities with the support of local administration, NGOs and the private sector
- Establishing adequate interdepartmental coordination on issues related to disaster management
- Reviewing emergency plans and guidelines
- Involving the community in the planning and development process
- Ensuring that local authorities including municipal corporation, gram panchayatss etc in the district are involved in developing their own mitigation strategies
- Ensuring appropriate linkage between DM activities and planning activities
- Revisiting or re assessing contingency plans related to disaster management
- Ensuring that proper communication systems are in place and contingency plans maximize the involvement of local agencies

#### **District Disaster Management Committee (DDMC)**

Besides this, the Disaster Risk Management Programme also traced much to form committees at the three levels with plans and task forces. A Disaster Management Committee exists to assist the Collector in:

- Reviewing the threat of disasters
- Vulnerability of the district to such disasters
- Evaluating the preparedness



- Considering the suggestions for improvement of the response document DDMP

The Committee meets once a year under the chairmanship of the Collector

### Responsibilities of District collector:

During the time of emergency the District Collector would act as the focal point for control and coordination of all activities. His responsibilities would be:

- Get in touch with the local Army/Navy/Airforce units for assistance in rescue, evacuation and relief;
- He will have the authority to requisition resources, materials and equipment from all Departments/Organizations of the government and also from the private sector;
- He will have the power to direct the industry to activate their on-site and off-site disaster management plan;
- He will set up Site Operations Centre in the affected area with desk arrangements;
- He will authorize establishment of transit and/or relief camps, feeding centers and cattle camps;
- He will send Preliminary Information Report and Action Taken Report to the State Relief Commissioner and Divisional Commissioner;
- He will authorize immediate evacuation whenever necessary.
- The Collector can co-opt any officer of the State Government posted district if he feels that the services of that officer are required for emergency planning or response operations.

Traditionally Tehsil office and local police station are the main government agencies below the district level, which initiate trigger mechanism for emergency operations in the event of a major accident/disaster. In view of limitations of resource availability for emergency management below the district level, DEMP has not proposed any administrative structure for emergency operation and coordination at lower levels. In the event of not too serious disaster/accident, the local tehsil office or police station would continue to initiate trigger mechanism and provide an emergency response with the help of locally available resources.

DCG on receipt of information from any of the two agencies would take appropriate decision to augment local resources and give appropriate instructions to the concerned response agencies.

## C 5 Inter- District Coordination Mechanisms – [Standard Operating Procedures / Protocols]

- If a district has dams, the neighboring districts should be warned when the dams are opened as the water flow from them might cause flood in the adjoining rivers. This requires proper coordination among the districts by the help of officials of reservoirs by informing district authorities about when and how much water is being released so that these authorities can share this information with the CWC who can then help in predicting or forecasting which all areas are likely to be affected. For Dewas district it is Hoshangabad with which it has to coordinate for the water release from the dams there. The waters of Narmada are being controlled by the dams of Hoshangabad.
- During the time of disaster if the district is unable to cater to the requirements of the situation, it can seek help from the nearby districts in terms of resources or man power like health department, home guard department, RTO, fire department, food and police. Sometimes inventory is taken from Jabalpur district when Dewas cannot meet the necessity during disaster. **The list is provided in the Annexure.**
- Every key department can do with a POC who can be equipped with powers to order forces to the districts in need immediately so that further losses can be minimized.
- The emergency team should have the updated checklists, contact numbers and information about all the districts.

- In case of earthquake affected districts, the neighboring districts should provide and help in coordinating for temporary shelters along with the line departments.

## **C 6 Intra- District Coordination Mechanisms – [with Block Headquarters]**

### **District level**

At district level, Collector acts as the focal point for all types of disaster response and recovery activities. At the district level, as there is no formal committee for ensuring a coordinated response, the Collector is responsible to ensure smooth functioning of a non-formal team of officials from different State government agencies. The power of sanction of relief is vested with officials of Revenue Department at different levels, depending upon the operational needs. The Collector is able to ensure participation of different State Government agencies in the response and recovery activities and provides the necessary financial support and sanctions from the funds available with him for relief and for rural development works. He also manages to get the support, both managerial and material, from the NGOs.

### **Structure for Flood Management in the District**

#### ➤ **Sub-Divisional Committee for Flood Management**

At sub-division level a committee has been constituted, which has the responsibility to do necessary arrangements for rescue, relief, safe drinking water and primary health care facilities in a flood situation. The members of the committee comprise of:

- i. Sub-divisional Magistrate
- ii. DFO
- iii. City Superintendent of Police
- iv. Executive Engineer.
- v. Executive Engineer, Water Resource Department
- vi. Commissioner, Municipal Corporation
- vii. District Food Officer/Assistant DFO/Food Inspector (City & Rural Area)
- viii. SDO, PWD, Building and Roads.
- ix. SDO, Telecommunication.
- x. SDO
- xi. Assistant Surgeon, Vet. Department.
- xii. CEO, Janpad panchayat
- xiii. Depot Manager, MP State Road Transport Corporation
- xiv. CMO
- xv. Assistant Engineer, MPEB (Concerned Sub-division)

➤ **District Emergency Management Structure provided Under the Plan**

The proposed organizational structure in this District Plan is based on the following three related concepts:

Plans work best within existing organizational structures, if they are currently responsive to non-emergency duties.

- Crisis should be met at the lowest and most immediate level of government. Plans call for local response supplemented, if necessary, by the next higher jurisdiction.
- Voluntary response and involvement of the private sector (business, industry and the public) should be sought and emphasized. The emergency management partnership is important to all phases of natural and technological disasters.

➤ **District Planning Committee (DPC)**

District Planning Committee (DPC) created under the Madhya Pradesh Zila Yojana Samiti Adhiniyam, 1999 would be overall in-charge of emergency management planning. It will help ensuring partnership of the local community, NGOs and government agencies in the planning process.

**Responsibilities of the Committee**

- Evaluation, approval and updating of District Emergency Management Plan
- The committee will meet to review the overall mitigation and preparedness activities in the district.

The committee would review, at least once every year, the emergency planning in the district.

➤ **District Crisis Group (DCG)**

An effective Emergency Management strategy requires quick decision-making relating to issues of warning, conducting evacuation and rescue & relief operations in the event of a disaster. This requires a core team of senior decision-makers having administrative control over the key resource organizations. Therefore, this plan provides for constitution of a DCG (District Crisis Group) with District Collector as its leader.

The responsibility for dissemination of District Emergency Management Plan would be of DCG. In order to make emergency management process more effective in the district, it is important that District Emergency Management Plan should be disseminated at all levels: the district authority, government departments, non-government/private organizations and general public. Effective implementation of the DEMP would be done through training programmes and awareness activities organized for different levels of functionaries.

**Composition of DCG**

District Crisis Group will include:

- i. District Collector (Team leader)
- ii. Superintendent of Police
- iii. District Commandant , Homeguards
- iv. Executive Engineer, PWD.
- v. Divisional Engineer, MPEB

- vi. Chief Medical Officer , CMO
- vii. Municipal Commissioner
- viii. Chief Executive Officer , Zila Panchayat
- ix. Chief Engineer

District Crisis Group members may be required to reach the affected area for monitoring and coordination of the response functions at the site. District Emergency Control Room (DECR) will facilitate functioning of DCG even when its members may be in the affected area. The members of DCG will be provided with wireless facility for interaction with DECR.

### **Responsibilities of the DCG**

- a. On the spot decision making
- b. Control and coordination of response and recovery activities in the district
- c. Resource mobilization and replenishment
- d. Monitoring of overall Mitigation, Preparedness Response & Recovery activities.
- e. Preparation of reports for submission to State Government through Relief Commissioner

#### **➤ District Emergency Control Room (DECR)**

A single District Emergency Control Room (DECR) will function with desk arrangements for specific activities during an emergency. DECR will have senior representatives from the key resource organizations to facilitate a coordinated response. The DECR would be linked to Emergency Operation Centre (EOC) constituted at state level.

#### **➤ Site Operation Center (SOC)**

A Site Operation Center (SOC) as a proposed complimentary unit to DECR, would operate close to the emergency site and would be directly, linked with the district level control room (DECR). The District Collector would appoint an Administrative officer to monitor & coordinate the activities of SOC and thus act as incident controller. All information would be conveyed to the Collector through the Administrative Officer appointed for SOC.

The Collector will appoint a senior administrative assistant as officer in-charge (OIC) of DECR. Desk Officers from key response organizations will support the officer in-charge of DECR. In the event of an emergency, additional staff will be deployed to assist in the functioning of DECR.

## **C 7 Dissemination of DM Plan**

After the approval of plan by SDMA, the concerned DDMA will be responsible for dissemination of the plan.

The district disaster management plan must be disseminated at three levels;

- National disaster Management Authority (NDMA), multilateral agencies (aid agencies), SDMA/SEC, state line departments and defense services.
- To the district authorities, government departments, NGOs and other agencies and institutions within the district
- Through mass media to the general public.

This section will explain in detail, about the means of dissemination of district disaster management plan at the different levels.

### **C 7.1 Plan Evaluation**

The purpose of monitoring & evaluation of DDMP is to determine the adequacy of resources, co-ordination between various agencies, community participation, partnership with NGOs and other entities, Post-disaster evaluation mechanism, Periodic uploading of plans at India Disaster Knowledge Network (IDKN) and resources on India Disaster Resource Network (IDRN), Conducting periodic mock drills, Checking whether all the personnel involved in execution of DDMP are trained and updated on the latest skills necessary in line with updated plans.

### **C 7.2 Plan Update**

The frequency of updating the plan (DDMP) will be mentioned (it should be every year, as per DM Act). Apart from it, the plan will be updated when shortcomings are observed in Organizational structures; Technological changes, Response mechanism following reports on drills or periodic exercises, and specific assignments of state agencies.

*Kindly verify the facts with DDMA about the DM Plan evaluation and update of the same.*

## **C 8 Annexure**

*Linkage of Annexure with chapters to be mentioned in the respective chapters / sections as well.*

The following Annexure must be included along with the plan. Additional Annexure can also be attached according to the specific Need.

### **C 8.1 District profile**

Latest data on the geography, demography, agriculture, climate and weather, roads, railways etc that describes the district will be provided. However, adequate care will be taken to summarize the data so as to not make the plan document bulky.

## **C 8.2 Resources**

- Hazard specific infrastructure and manpower will be covered here
- Usage of IDRN, IDKN, etc (updating them, latest update available etc)

## **C 8.3 Media and information management**

A List of location based key news channels, journalists, cable network operators will be available along with contact details.

## **C 8.4 Important Contact numbers( provided in the annexure)**

Latest important contact numbers of District and Block level key officials AND agencies including EOC, DMTs, DDMOs (District Disaster Management Officers), DDMC members, DC Office, Revenue & Relief deptt, fire, irrigation and flood control, police, and other nodal authorities/ persons will be provided.

## **C 8.5 Do's and don'ts of all possible hazards**

### **Do's and Don'ts**

### **EARTHQUAKES**

#### ***What to Do Before an Earthquake***

- Repair deep plaster cracks in ceilings and foundations. Get expert advice if there are signs of structural defects.
- Anchor overhead lighting fixtures to the ceiling.
- Follow BIS codes relevant to your area for building standards
- Fasten shelves securely to walls.
- Place large or heavy objects on lower shelves.
- Store breakable items such as bottled foods, glass, and china in low, closed cabinets with latches.
- Hang heavy items such as pictures and mirrors away from beds, settees, and anywhere people sit.
- Brace overhead light and fan fixtures.
- Repair defective electrical wiring and leaky gas connections. These are potential fire risks.
- Secure a water heater, LPG cylinder etc., by strapping it to the wall studs and bolting it to the floor.
- Store weed killers, pesticides, and flammable products securely in closed cabinets with latches and on bottom shelves.
- Identify safe places indoors and outdoors.
  1. Under strong dining table, bed
  2. Against an inside wall
  3. Away from where glass could shatter around windows, mirrors, pictures, or where heavy bookcases or other heavy furniture could fall over

4. In the open, away from buildings, trees, telephone and electrical lines, flyovers, bridges
- Educate yourself and family members
  - Know emergency telephone numbers (doctor, hospital, police, etc)

***Have a disaster emergency kit ready***

- Battery operated torch
- Extra batteries
- Battery operated radio
- First aid kit and manual
- Emergency food (dry items) and water (packed and sealed)
- Candles and matches in a waterproof container
- Knife
- Chlorine tablets or powdered water purifiers
- Can opener.
- Essential medicines
- Cash and credit cards
- Thick ropes and cords
- Sturdy shoes

**Develop an emergency communication plan**

1. In case family members are separated from one another during an earthquake (a real possibility during the day when adults are at work and children are at school), develop a plan for reuniting after the disaster.
2. Ask an out-of-state relative or friend to serve as the 'family contact' After a disaster, it's often easier to call long distance. Make sure everyone in the family knows the name, address, and phone number of the contact person.

**Help your community get ready**

1. Publish a special section in your local newspaper with emergency information on earthquakes. Localize the information by printing the phone numbers of local emergency services offices and hospitals.
2. Conduct a week-long series on locating hazards in the home.
3. Work with local emergency services and officials to prepare special reports for people with mobility impairments on what to do during an earthquake.
4. Provide tips on conducting earthquake drills in the home.
5. Interview representatives of the gas, electric, and water companies about shutting off utilities.

Work together in your community to apply your knowledge to building codes, retrofitting programmes, hazard hunts, and neighborhood and family emergency plans.

**What to Do during an Earthquake**

- Stay as safe as possible during an earthquake. Be aware that some earthquakes are actually foreshocks and a larger earthquake might occur. Minimize your movements to a few steps to a nearby safe place and stay indoors until the shaking has stopped and you are sure exiting is safe.

**If indoors**

- DROP to the ground; take COVER by getting under a sturdy table or other piece of furniture; and HOLD ON until the shaking stops. If there isn't a table or desk near you, cover your face and head with your arms and crouch in an inside corner of the building.
- Protect yourself by staying under the lintel of an inner door, in the corner of a room, under a table or even under a bed.

- Stay away from glass, windows, outside doors and walls, and anything that could fall, such as lighting fixtures or furniture.
- Stay in bed if you are there when the earthquake strikes. Hold on and protect your head with a pillow, unless you are under a heavy light fixture that could fall. In that case, move to the nearest safe place.
- Use a doorway for shelter only if it is in close proximity to you and if you know it is a strongly supported, loadbearing doorway.
- Stay inside until the shaking stops and it is safe to go outside. Research has shown that most injuries occur when people inside buildings attempt to move to a different location inside the building or try to leave.
- Be aware that the electricity may go out or the sprinkler systems or fire alarms may turn on.
- DO NOT use the elevators.

#### **If outdoors**

- Stay there.
- Move away from buildings, trees, streetlights, and utility wires.
- Once in the open, stay there until the shaking stops. The greatest danger exists directly outside buildings, at exits, and alongside exterior walls. Most earthquake-related casualties result from collapsing walls, flying glass, and falling objects.

#### **If in a moving vehicle**

- Stop as quickly as safety permits and stay in the vehicle. Avoid stopping near or under buildings, trees, overpasses, and utility wires.
- Proceed cautiously once the earthquake has stopped. Avoid roads, bridges, or ramps that might have been damaged by the earthquake.

#### **If trapped under debris**

- Do not light a match.
- Do not move about or kick up dust.
- Cover your mouth with a handkerchief or clothing.
- Tap on a pipe or wall so rescuers can locate you. Use a whistle if one is available. Shout only as a last resort. Shouting can cause you to inhale dangerous amounts of dust.

#### **After an earthquake**

- Keep calm, switch on the radio/TV and obey any instructions you hear on it.
- Keep away from beaches and low banks of rivers. Huge waves may sweep in.
- Expect aftershocks. Be prepared.
- Turn off the water, gas and electricity.
- Do not smoke and do not light matches or use a cigarette lighter. Do not turn on switches. There may be gas leaks or short-circuits.
- Use a torch.
- If there is a fire, try to put it out. If you cannot, call the fire brigade.
- If people are seriously injured, do not move them unless they are in danger.
- Immediately clean up any inflammable products that may have spilled (alcohol, paint, etc).
- If you know that people have been buried, tell the rescue teams. Do not rush and do not worsen the situation of injured persons or your own situation.
- Avoid places where there are loose electric wires and do not touch any metal object in contact with them.
- Do not drink water from open containers without having examined it and filtered it through a sieve, a filter or an ordinary clean cloth.
- If your home is badly damaged, you will have to leave it. Collect water containers, food, and ordinary and special medicines (for persons with heart complaints, diabetes, etc.)



- Do not re-enter badly damaged buildings and do not go near damaged structures.

## **Flood**

**Before a Flood to prepare for a flood**, you should:

- Avoid building in a flood prone area unless you elevate and reinforce your home.
- Elevate the furnace, water heater, and electric panel if susceptible to flooding.
- Install "check valves" in sewer traps to prevent floodwater from backing up into the drains of your home.
- Contact community officials to find out if they are planning to construct barriers (levees, beams, floodwalls) to stop floodwater from entering the homes in your area.
- Seal the walls in your basement with waterproofing compounds to avoid seepage.

**During a Flood If a flood is likely in your area**, you should:

- Listen to the radio or television for information.
- Be aware that flash flooding can occur. If there is any possibility of a flash flood, move immediately to higher ground. Do not wait for instructions to move.
- Be aware of streams, drainage channels, canyons, and other areas known to flood suddenly. Flash floods can occur in these areas with or without such typical warnings as rain clouds or heavy rain.

If you must prepare to evacuate, you should do the following:

- Secure your home. If you have time, bring in outdoor furniture. Move essential items to an upper floor.
- Turn off utilities at the main switches or valves if instructed to do so. Disconnect electrical appliances. Do not touch electrical equipment if you are wet or standing in water.

If you have to leave your home, remember these evacuation tips:

- Do not walk through moving water. Six inches of moving water can make you fall. If you have to walk in water, walk where the water is not moving. Use a stick to check the firmness of the ground in front of you.
- Do not drive into flooded areas. If floodwaters rise around your car, abandon the car and move to higher ground if you can do so safely. You and the vehicle can be quickly swept away.

### **Driving Flood Facts**

The following are important points to remember when driving in flood conditions:

- Six inches of water will reach the bottom of most passenger cars causing loss of control and possible stalling.
- A foot of water will float many vehicles.
- Two feet of rushing water can carry away most vehicles including sport utility vehicles (SUV's) and pick-ups.

### **After a Flood**

The following are guidelines for the period following a flood:

- Listen for news reports to learn whether the community's water supply is safe to drink.
- Avoid floodwaters; water may be contaminated by oil, gasoline, or raw sewage. Water may also be electrically charged from underground or downed power lines.
- Avoid moving water.
- Be aware of areas where floodwaters have receded. Roads may have weakened and could collapse under the weight of a vehicle.
- Stay away from downed power lines, and report them to the power company.
- Return home only when authorities indicate it is safe.
- Stay out of any building if it is surrounded by floodwaters.
- Use extreme caution when entering buildings; there may be hidden damage, particularly in foundations.

- Service damaged septic tanks, cesspools, pits, and leaching systems as soon as possible. Damaged sewage systems are serious health hazards.
- Clean and disinfect everything that got wet. Mud left from floodwater can contain sewage and chemicals.

### **Flood: Know Your Terms**

Familiarize yourself with these terms to help identify a flood hazard:

- **Flood Watch:** Flooding is possible. Tune in to Local Radio for Weather Services, commercial radio, or television for information.
- **Flash Flood Watch:** Flash flooding is possible. Be prepared to move to higher ground; listen to Local Radio for Weather Services, commercial radio, or television for information.
- **Flood Warning:** Flooding is occurring or will occur soon; if advised to evacuate, do so immediately.
- **Flash Flood Warning:** A flash flood is occurring; seek higher ground on foot immediately.

### **You and Your Family**

#### **Dos**

- Educate your children wife and other family member in respect of natural and manmade disasters and other crises. In case of your being unaware, take help of Civil Defense and Home Guard organization and other NGOs. Develop habit in you and your children to spare 1% of you busy time to think about Individual security and security interests.
- Keep the phone numbers of the local police station, police control rooms, fire stations, and schools, colleges, TV station, All India Radio, ambulance services and Chemists for emergency use.
- Guide children to remain at schools in emergency.
- Prepare an emergency kit of items and essentials in the house including essential documents and valuables.
- Store food and water for survival in case you had a pre-warning.
- Any suspicious incidents observed be reported to police on 100. Callers do not have to give their identity on the phone. Information of immediate use be conveyed to control rooms to help early relief.
- Carry your identity card, residential telephone number or address or personal card with you. Have your blood group and any medical allergies recorded with you.
- Check information in case of disasters and crises from Ward, Civil Defense / Home Guard, and BMC, TV and All India Radio Control room.
- Learn to fight such emergencies untidily.
- Support authorities and NGOs.
- Identify scooters, cars, vehicles parked in society and identify vehicles which are unknown and parked for long.
- Organize societies and muhalla committees to educate people.

#### **Don'ts**

- Do not encourage rumors.
- Do not blame any community for any crises.
- Do not encourage communal hatred in such situations.

### **Your Place of Work**

#### **Dos**

- Your mode of travel by car, bus, train and taxi be known to your people.
- High rises buildings must check their electric and water supplies and organize periodic mockup drills for fire fighting and escape routes.
- Drills for bomb blast, threats be organized and practiced.
- Air/Helicopter evacuation be examined and organized from selected rooftops of high rises.
- Firefighting equipment be kept serviceable and periodic check is effected.
- Office societies be organized and prepared to coordinate such emergencies of fire brigade, medical help and other assistance. Such people be nominated and they should guide relief.
- Everyone must know use of fire extinguisher in emergency.
- Security guards are trained to coordinate in such crises.

#### **Dos**

### **During Transit**

- Be concerned and develop habit of surveillance when out of our house. Check your seat in cinema hall, train, bus and air. Have you observed a bird, she jumped around and looks in all directions before selecting a spot on a tree for her security. Do we learn anything from this bird instinct?
- Look for the objects, baggage, at bus stand, railway stations, compartments, airport, which is unclaimed.
- Unknown vehicles parked at airports, Railway Stations and bus stands have to be kept under surveillance by common citizens, and this alertness may help authorities.
- Bus, trains and airlines passengers who notice any suspicious behavior of co-passengers, be brought to the notice of officials,
- Every passenger should identify a friend or relations residence in case of requirement of staying away in emergency. The family should know about such a plan.

#### **Don'ts**

- Do not touch any suspicious object. Report to concerned people.

- Do not crowd the object.
- Passengers should not accept parcels from unknown persons in hurry while boarding train or bus.

### **C 8.6 Detailed Maps**

Detailed maps will be prepared in line with the applicable hazards, existing vulnerabilities, and available resources / potential capacities.