

# District Disaster Management Plan -Damoh

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

Prepared by  
Utkarsh Tripathi

Technical Support By:  
*SEEDS Technical Services,  
15a, Institutional Area,  
Sector 4, R.K.Puram,  
New Delhi*

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## Structure of District Disaster Management Plan (DDMP)

### A . GENERAL

#### A 1 District Disaster Management Plan

**A 1.1 District Profile :** Damoh is a town in the Sagar Division in north-eastern Madhya Pradesh in India. The town is located 260 kilometres (162 mi) east of state capital Bhopal and is situated north of Tikamgarh. It is the administrative headquarters of Damoh District.

##### A 1.1.1 Location and administrative divisions

**Table A 1.1.1**

<b>Location (in degrees) -</b>	<b>Latitude – 23.09 degree North</b> <b>Longitude - 79.03 degree East</b>
<b>District Area (in sq. kms.) – 7306 km<sup>2</sup></b>	
<p>The town has a significant cattle-market and a number of small industries such as weaving, dyeing and pottery-making. The district of Damoh has an area of 7,306 km<sup>2</sup>. Except on the south and east, where the offshoots from the surrounding hills and patches of jungle break up the countryside, the district consists of open planes of varying degrees of fertility, interspersed with low ranges and isolated heights with the richest tracts lie in the centre.</p>	
<b>Administrative information-</b>	
<b>No. of Tehsils: 7</b> (Damoh, Hattaa, Batiagarh, Patharia, Patera, Tendukhera & Jabera)	
<b>No. of Municipal Boards : 5</b>	
<b>No. of Blocks: 7</b> (Damoh, Batiagarh, Patharia, Patera, Tendukhera, Hattaa & Jabera)	
<b>No. of Gram Panchayats: 461</b>	
<b>No. of Villages: 1384</b>	
<b>No. of Police Stations, Police Chowkees (Block wise): 20 , 14</b>	

**No. of Post Offices(Block wise):** 1GPO , 13 Sub-PO , 144 Shakhaas

**Year of district formation:** 1956

**Name of adjacent districts:** 7 (Chattarpur, Sagar, Katni, Tikamgarh, Jabalpur, Panna & Narsinghpur)



Map Showing surrounding Districts of Damoh

**A 1.1.2 Geography and Topography :** Damoh is located at [21.88°N 80.78°E](#). It has an average elevation of 595 metres (1952 feet). The rivers Byarma, , Sunar, Kopra and Gouraiya flow through the district. These rivers are the main source of drinking and irrigational water facility. The river Kopra is the serving anicut which supplies water to Damoh city. There is a confluence of river Kopra and Sunar at Madkoleswar while the other confluence is at Nohta the meeting place of Byarma and Gouraiya

**Table A 1.1.2**

**Name of Rivers:** Sonar , Kopra, Byarma & Gourayia are the 4 Rivers in the District.

**Lakes:** There are a total of 69 lakes {Any size, for Irrigation purpose}

**No. of dams:** 28 ; **No. of Wells:** 16459

**Highest elevation (in meters):** Damoh is at 370m from sea level. The district is not dominated by hills but by plains only the series of Kymore hill range stretches from Gubra in the east to kymore in the North

**Forest cover in the district:** Open Forest = 1742 km<sup>2</sup>

**A 1.1.3 Demographic and socio economics :** Damoh is largely inhabited by tribal groups like the Gonds, Lodhis, Karpatis and other communities like the Dalits, Rajputs, Kurmis, Thakurs and Marwaris. Dalits of this region do not possess much land therefore they earn their living as labour on the fields. Usually, Dalits are mainly involved in the tanning of leather and in manual scavenging. But with time opportunities are slowly opening up which will help them to achieve a level of occupational mobility.

The economy of Damoh mainly depends on agriculture. On the south and east of the city there are hills and patches of jungles. The city also consists of open planes of varying degrees of fertility, interspersed with low ranges and isolated heights. The high fertility tracts lie in the centre. A number of betel leaf gardens are located around Damoh, and these betel leaves are exported. The city also has a considerable Cattle market.

**Table A 1.1.3**

**Total household:** 2,18,777 (2001 census)

**Total population:** 12,63,703 (2011 census)

**Male:** 6,60,478

**Female:** 6,03,225

**Population density:** 173 per sq km

**Total APL, BPL families:**

**APL = 86639 ; BPL=150498 ; AAY=36459**

Data as per number of ration cards issued



**Occupation -**

**Main occupation of people:** Farming/Agriculture is the main occupation of the people of the district.

**Secondary occupation of people:** Service / Labour is taken up by most of the people as their secondary occupation.

**A 1.1.4 Climate and weather:** The area is mainly dry all throughout the year. Warm winds during summers is a common affair. In winters seldom the temperature goes very low. Detailed information on climate is as follows.

**Table A 1.1.4**

**Rainfall :** Minimum = 632mm      Maximum = 1573mm

**Total annual rainfall of last year:** 1123mm (June – Sep)

**Average rainfall ( last 5 years):**

HYDROMET DIVISION  
INDIA METEOROLOGICAL DEPARTMENT  
DISTRICT RAINFALL (MM.) FOR LAST FIVE YEARS

District : DAMOH

Note : (1) The District Rainfall(mm.) (R/F) shown below are the arithmetic averages of Rainfall of Stations under the District.  
(2) % Dep. are the Departures of rainfall from the long period averages of rainfall for the District.  
(3) Blank Spaces show non-availability of Data.

YEAR	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	R/F	%DEP.	R/F	%DEP.	R/F	%DEP.	R/F	%DEP.	R/F	%DEP.	R/F	%DEP.	R/F	%DEP.	R/F	%DEP.	R/F	%DEP.	R/F	%DEP.	R/F	%DEP.	R/F	%DEP.
2007	0.0	-100	22.6	74	4.6	-62	0.0	-100	22.4	339	109.0	-17	229.2	-38	356.6	-4	139.7	-28	0.0	-100	0.0	-100	9.8	-11
2008	0.0	-100	0.0	-100	0.0	-100	4.0	-9	0.5	-90	579.0	341	256.3	-30	315.5	-15	99.6	-49	4.5	-85	0.0	-100	0.0	-100
2009	25.1	12	0.0	-100	0.0	-100	11.0	150	5.6	10	19.0	-86	230.0	-37	153.1	-59	192.6	0	46.9	56	101.1	709	8.7	61
2010	0.0	-100	2.0	-85	0.0	-100	0.0	-100	0.0	-100	10.3	-92	498.8	36	316.3	-15	199.3	3	0.0	-100	0.0	-100	0.9	-83
2011	0.0	-100	1.8	-89	0.0	-100	8.6	54	1.8	-66	469.0	286	336.0	-7	246.5	-38	285.6	50	0.0	-100	0.0	-100	0.0	-100

**Temperature:**

**Average Maximum Temperature:** 41 Degree

**Average Minimum Temperature:** 12 Degree

**Demarcation of crucial seasons:**

Months of access rainfall, leading to flood situation: June, July

Months of water scarcity, leading to drought situation: April , May

**A 1.1.5 Health (Medical)****Table A 1.1.5**

Sn	Name of District	Block Name	DH/CH	CHC	PHC	SHC	MO	Total No. of Beds	Total No. of Ambulance	No. of medical Stores
1	Damoh	Damoh	1	1	1	30	17	211	3	133
2		Batiagarh	0	0	1	20	7	22	1	-
3		Hattaa	1	2	1	21	5	40	2	-
4		Jabera	0	1	1	27	1	36	1	9
5		Patharia	0	1	1	23	2	36	2	-
6		Patera	0	1	1	18	4	36	1	-
7		Tendukhera	0	1	1	23	2	36	1	17
<b>Total</b>			<b>2</b>	<b>7</b>	<b>7</b>	<b>162</b>	<b>38</b>	<b>417</b>	<b>11</b>	<b>159</b>

**A 1.1.6 Education****Table A 1.1.6**

<b>Literacy rate: (2011 data)</b>	<b>Block wise info not available currently.</b>
<b>Total Male:</b>	<b>80.96%</b>
<b>Total Female:</b>	<b>59.90%</b>
<b>No. of Secondary schools: 51</b>	

<p><b>No. of High/Middle schools: 75 / 541</b></p> <p><b>No. of Primary schools: 1461</b></p> <p><b>No. of Anganwaris: 1309</b></p> <p><b>No. of Degree Colleges: 17</b></p>
<p><b>Total (Aprox.) Students Strength in all the educational institutions:</b>  <b>1<sup>st</sup>-8<sup>th</sup> = 21330 ;      9<sup>th</sup>-10<sup>th</sup> = 35268 ;      11<sup>th</sup>-12<sup>th</sup> = 1478;      College = 5971</b></p> <p><b>Total (Aprox.) Staff Strength in all the educational institutions:</b>  <b>1<sup>st</sup>-8<sup>th</sup>=5208 ;      Degree College= 119</b></p>

**A 1.1.7 Agriculture and Land use:** Due to its rich and fertile central land, Damoh is primarily agricultural.

**Table A 1.1.7**

<p><b><u>Cropping pattern :</u></b></p> <p><b>Type of major crops:</b> Dhaan , Chana , Wheat, Moong, Urad, Soyabean, Mansoor.</p> <p><b>Cropping seasons:</b> Kharif, Rabi &amp; Zaid</p>	
<p><b><u>Land classifications:</u></b></p> <p><b>Forest land:</b> 2,02,072 Hctr</p> <p><b>Barren &amp; Uncultivated land + Pasture land:</b> 190204 Hctr</p> <p><b>Cultivated land:</b> 3,15,180 Hctr</p>	
<p><b>Soil classifications</b></p>	<p>Medium , Deep Black Cotton Soil</p>

**A 1.1.8 Housing Pattern:**

**Table A 1.8**

Distribution of Houses by Predominant Materials of Roof and Wall and Level of Damage Risk

Table No. : MP 12                      State : MADHYA PRADESH                      DAMOH

Wall / Roof	Census Houses		Level of Risk under								Flood Prone Area in %	
	No. of Houses	%	EQ Zone				Wind Velocity m/s					
			V	IV	III	II	55 & 50	47	44 & 39	33		
			Area in %				Area in %					
<b>WALL</b>												
A1 - Mud	Rural	86,838	30.0									
Unburnt Brick Wall	Urban	12,971	4.5									
	<b>Total</b>	<b>99,806</b>	<b>34.5</b>			M	L				M	
A2 - Stone Wall	Rural	98,765	34.2									
	Urban	1,908	0.7									
	<b>Total</b>	<b>100,673</b>	<b>34.9</b>			M	L				L	
<b>Total - Category - A</b>		<b>200,479</b>	<b>69.4</b>									
B - Burnt Bricks Wall	Rural	47,382	16.4									
	Urban	32,447	11.2									
	<b>Total</b>	<b>79,829</b>	<b>27.6</b>			L	VL				L	
<b>Total - Category - B</b>		<b>79,829</b>	<b>27.6</b>									
C1 - Concrete Wall	Rural	516	0.2									
	Urban	140	-									
	<b>Total</b>	<b>656</b>	<b>0.2</b>			VL	VL				VL	
C2 - Wood wall	Rural	3,659	1.3									
	Urban	354	0.1									
	<b>Total</b>	<b>4,013</b>	<b>1.4</b>			VL	VL				M	
<b>Total - Category - C</b>		<b>4,669</b>	<b>1.6</b>									
X - Other Materials	Rural	2,938	1.0									
	Urban	1,123	0.4									
	<b>Total</b>	<b>4,061</b>	<b>1.4</b>			VL	VL				M	
<b>Total - Category - X</b>		<b>4,061</b>	<b>1.4</b>									
<b>TOTAL BUILDINGS</b>		<b>289,038</b>										
<b>ROOF</b>												
R1 - Light Weight Sloping Roof	Rural	3,748	1.3									
	Urban	2,677	0.9									
	<b>Total</b>	<b>6,420</b>	<b>2.2</b>			L	VL				H	
R2 - Heavy Weight Sloping Roof	Rural	215,451	74.5									
	Urban	22,936	7.9									
	<b>Total</b>	<b>238,387</b>	<b>82.4</b>			L	VL				L	
R3 - Flat Roof	Rural	20,901	7.2									
	Urban	23,330	8.1									
	<b>Total</b>	<b>44,231</b>	<b>15.3</b>									
<b>TOTAL BUILDINGS</b>		<b>289,038</b>										

Probable Maximum Precipitation at a Station of the district in 24 hrs is 520 mm

**A 1.1.9 Industrial set ups**

**Table A 1.1.9**

**Total no. of industries (Govt., Semi Govt. and Pvt),**

**a) No. of Major Industries: 2**

- i) Sobha Soyabean, Patharia;
- ii) Diamond Cement Industry in Narsingharh

**b) No. of Medium and small scale industries : Small Scale = 9207**

Small => investment <25 lakhs

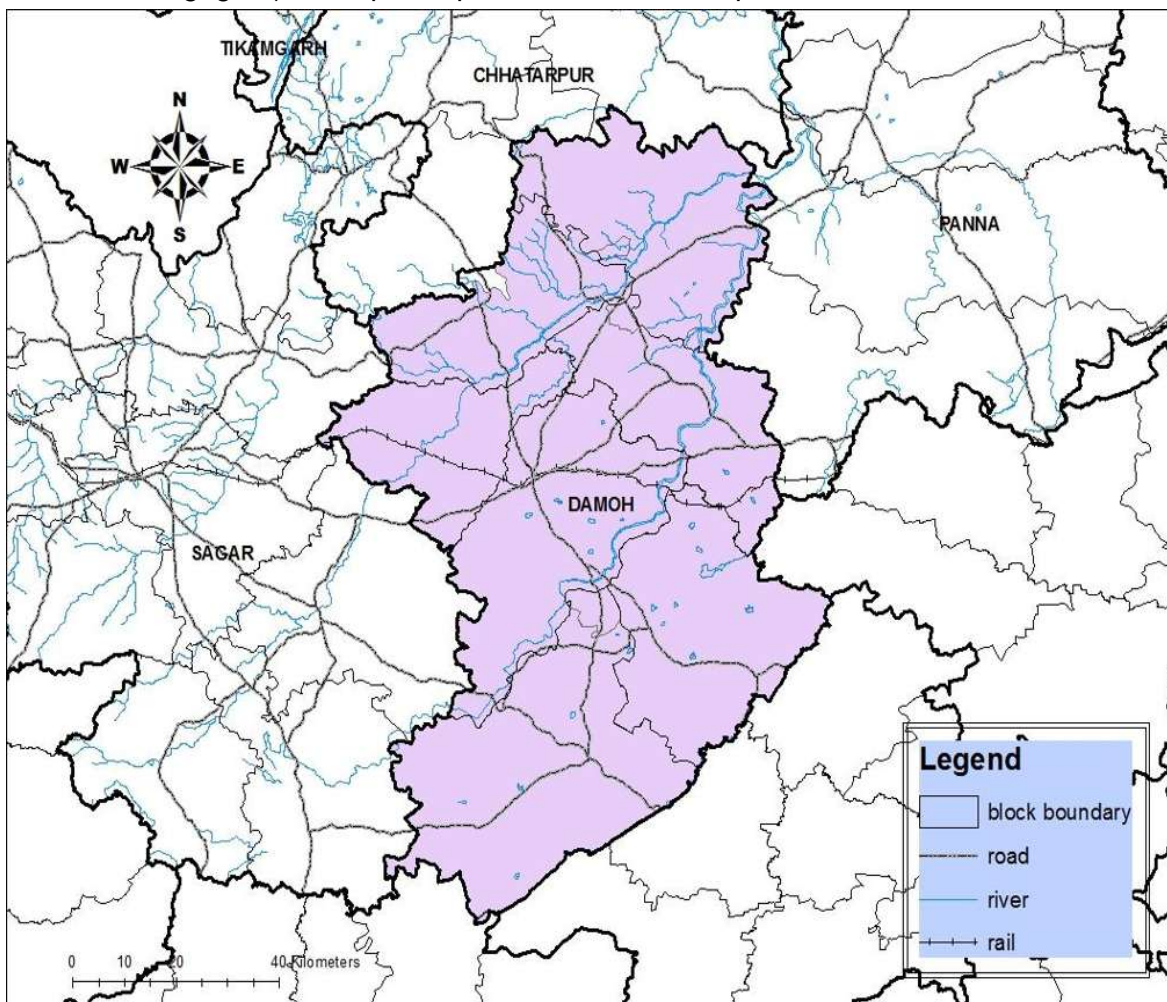
Total manpower involved in these units: 18528

### A 1.1.10 Transport and communication network

Table A 1.1.10 Table 2.10

**1) Transport Connectivity of each block w.r.t. following networks:**

- a) **By Road** : NH34 passes through the District. It connects Jabalpur to Chattarpur via Damoh.
- b) **By Rail** : Around 27 trains pass through Damoh. It has connectivity to major cities like Vizag, Howrah, Nizamuddin, etc.
- c) **By Air** = 2 helipads (Homeguard Office, Damoh ; Diamond Cement Factory, Narsinggarh). Jabalpur Airport is the nearest Airport.



## 2) Communication network

- i) **No. of wireless stations in the respective blocks:**  
Hatta=9; Batiagarh=3; Patera=4; Jabera=4;  
Tendukheda=5; Pathariya=3; Damoh=10
- ii) **Telephone, mobile services are available in each block**
- iii) **Internet facility is available in all the blocks**

**Available in all the Blocks. 3G only in Damoh.**

### A 1.1.11 Power stations and electricity installations

**Table A 1.1.11**

**List of power stations in the district:** 56  
**Electricity outreach in the district:** All areas except 27 Villages (list in annexures)  
**Ratio of electricity generation to consumption:**  
 Generation = Nil  
 Consumption=16 Lac units/day

**A 1.1.12 Major historical, religious places, tourist spots:** The district has many places of historical importance. Chief of these is Jatashankar, a temple that is found in the periphery of Damoh City. Another is the Shiv temple, Nohleshwar Temple, that is found about 1 kilometer away from the village of Nohta. Finally, the Sad-Bhawna Shikhar is the highest point of the Vidhyachal mountain ranges. It can be reached through a forest road that cuts through the Bhainsa-Kalumar road

**Table A 1.1.12**

**List of historical places in the district:** Singaugarh Fort, Giri Darshan. (Footfall of 1000-1500 / day)  
**List of religious centers in the district:** Jatashankar, Kundalpur, Bandhakpur, Madkoleswar. (Footfall from a maximum of 10000 to minimum of 1000 /day)  
**List of the tourist spots in the district:** Bhainsaghat(Jabera), Jatashankar Nohleshwar Temple (Nohta), Giri Darshan, The Fort of Singaugarh ,Nidan Kund , Nazara, Sad-Bhawna Shikhar  
 Average presence of visitors per day is maximum of 1000-1200

### 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**

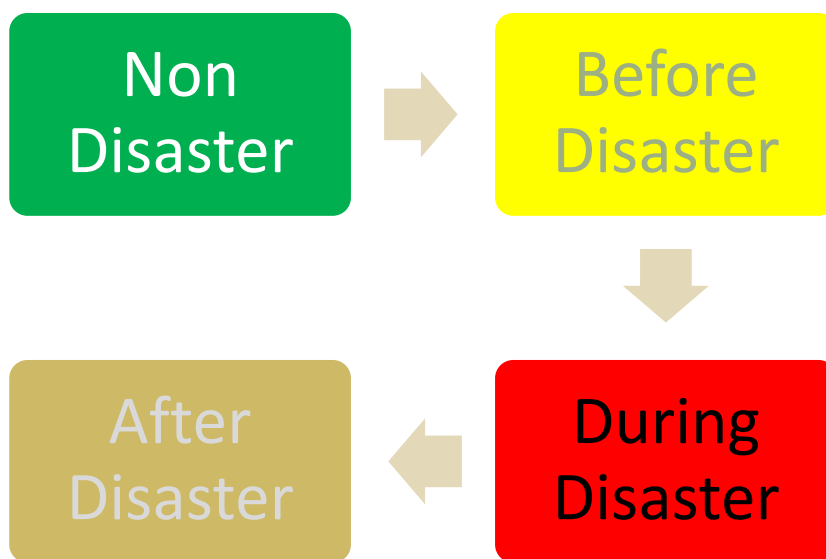
The aim of the plan is to establish necessary systems, structures, programs, resources, capabilities and guiding principles for reducing disaster risks and preparing for and responding to disasters and threats of disasters in respective district, in order to save lives and



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):** District Disaster Management Authority must be in place to be prepared and deal with any possible disaster. Below given is the structure that needs to be in place for the authority to work effectively. The authority will be headed by the District Collector who would be the chairman of DDMA. Under him would be the secretary and other members of the authority. Structure if the same is as follows:

**Table A 2.1**

<b>Date of inception of DDMA</b>	<b>2003.</b>
<b>DDMA Structure</b>	
<p><b>Chairman:</b> District Collector</p> <p><b>Secretary:</b> Chairman, Zilla Panchayat Mayor, Nagar Palika</p> <p><b>Members:</b></p> <p>S. P. , Damoh. Chief Medical Officer , Damoh Chief Executive Engineer, PWD Chief Executive Officer, Zila Panchayat A.D.M. , Damoh</p>	
<b><u>Roles and responsibilities of DDMA</u></b>	
<ul style="list-style-type: none"> <li>• <b>Ensuring proper execution of preparedness, mitigation and prevention plans.</b></li> <li>• <b>Providing inputs to MPSDMA relating to various aspect of disaster management including early warnings, status of preparedness etc.</b></li> <li>• <b>Ensuring that relevant officials in the district possess the knowledge to deal with disaster management issues.</b></li> <li>• <b>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.</b></li> <li>• <b>Facilitating and coordinating with local govt bodies to ensure that pre disaster DM activities in the district are carried out optimally.</b></li> <li>• <b>Facilitating community training, awareness programs and the installation of</b></li> </ul>	

**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 panchayats 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.**

## A 2.2 District Disaster Management Committee/ Advisory Committee (DDMC/ DDMAC)

Table A 2.2 (DDMA to be formed)

<b>Functionaries</b>	<b>Designation</b>	<b>Address</b>
DM / DC	President, DDMC	Office of Deputy Commissioner ...
S.P.	Vice President, DDMA	Damoh
Chief Executive Engineer, PWD	Member	Damoh
Forest Divisional Officer	Member	Damoh
ADM	Member	Damoh
ADM	Member	Hattaa
ADM	Member	Tendukheda
Zila Abhiyanta, Telephony	Member	Damoh
CMO	Member	Damoh
Executive Engineer,	Member	Damoh

<b>Grameen Yantriki Seva</b>		
<b>Executive Engineer, PWD</b>	<b>Member</b>	<b>Damoh</b>
<b>Executive Engineer, Lok Swasth Yantriki Vibhaag</b>	<b>Member</b>	<b>Damoh</b>
<b>Executive Engineer,</b>	<b>Member</b>	<b>Jal Sansadhan Vibhaag</b>
<b>Asst. Director</b>	<b>Member</b>	<b>Agriculture Deptt.</b>
<b>Asst. Director</b>	<b>Member</b>	<b>Veterinary Deptt.</b>
<b>Shram Padaadhikaari</b>	<b>Member</b>	<b>Damoh</b>
<b>District Program Officer</b>	<b>Member</b>	<b>Mahila &amp; Baal Vikas</b>
<b>Mukhya Nagar Palika Officer</b>	<b>Member</b>	<b>Nagar Palika, Damoh</b>
<b>Maha Prabandhak</b>	<b>Member</b>	<b>Zila Udyog Kendra</b>
<b>Pariyojna Adhikari</b>	<b>Member</b>	<b>Urban Development Dept.</b>
<b>Sahayak Sanchalak</b>	<b>Mamber</b>	<b>Industrial Security, Jabalpur</b>

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

Table A 2.3

<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>PWD, Education Department, Health Dept. , Veterinary Dept., Electricity Department, Transport Department, etc.</b>
<b>Equipments installed (software and hardware):</b>	<b>Radio, Wireless sets.</b>

### A 2.6 Block Level Disaster Management Committee

Table A 2.6

**Block Level Disaster Management Committee :** For preparedness, mitigation and quick action at time of disaster Block level committee formation is a must. This would be Headed by Anivibhagiya Adhikari. Other details of the committee is as follows.

## vuqHkkx Lrjh; vkink izcU/ku lfevr%&

Dzekad	Inuke	
1&	vuqfoHkkxh; vf/kdkjh]¼jktLo½vuqHkkx	v/;{k
2&	eq[; dk;Zikyu vf/kdkjh] tuin iapk;r	mik/;{k
3&	rglhynkj]	Lfpo
4&	uxj iqfyl v/kh{k	InL;
5&	uk;c rglhynkj	InL;
6&	vuqfoHkkxh; vf/kdkjh] ih-MCY;w-Mh-	InL;

### A 2.7 Gram Panchayat / Village Disaster Management Committee

Table A 2.7

Date of inception of Gram Panchayat level DMC, Location	To be Incepted
Gram Sarpanch	President
Secretary, Panchayat	Secretary
Patvaari	Member
Aanganwadi Worker / MPW / ANM	Member
Headmaster, Primary/Upper Primary	Member
2 Gram Panchayat Members from Most Vulnerable Wards (nominated by sarpanch)	Member
Gram Kotvar	Member

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

### B 1. Hazard Assessment

**Table B.1.1 Major applicable hazards**

**Flood:** Mainly due to heavy rainfall during monsoon. Sonar river flowing in Hattaa Block is mainly responsible for the flood in the district. The main rivers flowing in the district and the blocks that they flow through are as follows:

**Sonar River**–Hatta,Batiagarh,Patharia,Patera

**Kopra River**- Patharia,Patera,Damoh,Jabera

**Vyarma**-Hatta, Batiagarh

**Earthquake:** Damoh Lies in Seismic Zone 3. Although there is no history of earthquake in the area but still possibilities of the disaster cannot be overlooked.

**Drought:** Last noted drought was 10years ago and had its effect throughout the district.

**Fire:** All the forest area is highly prone to catching fire during summers.

**Industrial & chemical disasters:** Narsingh-garh (Diamond Cement Factory) is one of the big industries of the state. Although no major accident has been reported but it can be categorized as a hazard prone industry.

**Epidemic:** Possibility of Dehydration and Measles in most of the areas in district.

**Rail/ road accidents:** Road accidents mainly on NH34 & State Highways. No rail accident as such, but possibility is at Damoh, Bandhakpur and Patharia

**Violence:** Hindoria is one of the areas in the district that has been reported as quite sensitive in terms of communal riots.

**Stampede:** Fairs are organized in various areas on the festivals like Shivratri, Basant Panchmi, Dussehra, etc. At these times care needs to be taken to keep the crowd under control and make well planned arrangements. Mainly at fairs in Bandakpur, Damoh & Kundalpur.

**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	<b>2004-05 (July)</b>	All Blocks except Tendukheda	<b>5 Deaths</b>	25133 households effected	9373 livestock died.	<b>Hattaa.</b>

**Table B.1.3 Seasonality of hazards**

Hazard	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Stampede	Yes		Yes							Yes		
Flood						Yes	Yes	Yes				
Accidents	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Earthquake	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Drought				Yes	Yes					Yes	Yes	
Industrial	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

## B 2 Vulnerability Analysis

Vulnerability means inability to resist a hazard or respond when a disaster has occurred. It depends on several factors such as people's age and state of health, local environmental and sanitary conditions, as well as on the quality and state of local buildings and their location with respect to any hazards. There are various types of vulnerabilities:

- 1) Physical vulnerability (Ex: roads, bridges, hospitals, houses embankments)
- 2) Social Vulnerability (Ex: population, inclusion)
- 3) Economic vulnerability (Ex: poverty, agriculture, and livelihood)
- 4) Environmental vulnerability (Ex: rivers, canals, animals, minerals)
- 5) Institutional vulnerability (Ex; lack of institutional support, absence of DDMCs etc)

**Table B.2**

Name of Hazard	Affected vulnerabilities (Physical, social, economic, natural and institutional)	Hazard prone Block, GPs
Flood	<b>Population, Roads, Bridges, Poverty, Agriculture, River, Animal</b>	Shahpur,Aslana,Kisankunj,kerbana,Bamhauri,Jareth, Sitanagar,Maguwa,Bargao,Jortala,Hinota,Parseria, Kuthri,Kanti,Marach,Daadpur,Khamargaur,Gaisabad, Dijwar,Kota,Muari,Ramgadha,Palajurji,Sagauni,Barrath, Hinauti,Piparia,Kumhari,Chatera,Banvar,Nohta,Ramgarh, Tendukhera, Jabera.
Earthquake	<b>Food security, Drinking water. Population, Roads, Bridges, Poverty, Agriculture, River, Animal</b> <b>Food security, Drinking water.</b>	<b>Entire District is hazard prone.</b>
Stampede	<b>Population</b>	<b>Damoh, Patera</b>
Violence	<b>Population, Agriculture, Animals, Drinking Water</b>	<b>Narsingh-garh</b>
Drought	<b>Population, Agriculture, Water</b>	<b>Patharia</b>

**B 3. Capacity Analysis****Table B 3.1 Resource inventory, Block wise**

Resource Type	Details	Govt, Private	Contact no. of nodal person/s
Equipments used for cutting, Search & Rescue (S&R), grinding m/c etc.	<b>Annexure</b>	<b>Homeguard</b>	<b>Mr. R. Sharma (C. C. , Homeguard) 9826265955</b>



Temporary shelters, camps	Mostly in schools	Homeguard	-----Do-----
Emergency Search lights	Annexure	Homeguard	-----Do-----
Trained manpower, professionals available in specific domain like S&R ,First Aid, Response Warning, Swimming etc.	Annexure	Homeguard	-----Do-----
First Aid / Medical emergency requirements, equipments to be used	Annexure	Health Department	Mr. Manish Sen , Data Entry Operator. 9826341383
Location of key hospitals, blood banks, Doctors, medical stores	Annexure		
Availability of equipments like Bulldozers, Hydra, Crane, for clearance, JCB	Annexure		Chief Executive Engineer, PWD
Transportation(Fit Vehicles available with nodal agencies, in emergency)	Annexure		R.T.O. , Damoh
Total no. of boats (with info about capacity, size, contact of Orgn./owner etc)	Annexure	Homeguard	Mr. R. Sharma (C. C. , Homeguard) 9826265955
Availability of fire fighting equipments, Fire tenders	Annexure		Nagar Nigam
List of PDS Shops	Annexure		
Veterinary Hospitals	Annexure		

#### B 4. Risks Assessment

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

Type of hazard	Vulnerable areas *	Vulnerability	Potential Impact	Identified safer places *
Flood	Hattaa	Population at risk, communication failure, drinking water problem, livestock safety issues.	Loss of crop, so as livelihood and houses Loss of lives, livestock	Patharia, Damoh Proper.
Earthquake	Entire District	Population, Communication, Livestock, water issues, etc.	Loss of life.	Open fields are the most safe area
Drought	Entire District	Agriculture, Drinking Water, Livestock.	Loss of crop.	Alternative Source of water
Stampede	Areas where Fairs are organized (Bandhakpur, Kundalpur, Damoh)	Loss of life	Loss of life	Proper movement space.
Industrial disaster	Narsinghgarh (Diamond Cement)	Loss of Life	Loss of Life	Proper exit plan & mock drills.
Accidents	Mainly Highways	Loss of Life	Loss of Life	Road safety programmes.
Epidemic	Villages identified (List attached.)	Loss of Life	Loss of Life	Routine distribution of Medicines.

## **B 4.2 Risk profiling of the district**

In case of Damoh district, the applicable hazards are flood, earthquake, drought, stampede and industrial incidents etc.

Damoh district is also susceptible to physical, environmental, economic, institutional and social vulnerability, as mentioned in this chapter.

Considering the potential capacities, applicable hazards and existing vulnerabilities, the most risk prone zones and safest places have been identified and also depicted in the annexure part.

## **C . DISTRICT DISASTER MANAGEMENT PLAN**

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

#### **C 1.1 Mitigation Plan**

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

It will address and align the pertinent issues of construction (structural & non-structural elements), infrastructure, repair & maintenance, transport, sanitation, research & technology transfer and land use planning.

- Under the National Rural Employment Guarantee Act, provide for strengthening and maintenance of such physical features that may vitally protect/help in rescue of communities during disaster situations. Under this act maintenance and strengthen of dam, ponds etc. will take place and also it will provide the job to unemployed youth. Especially under the construction of smaller dam, stop dam, rural road rural youth can work under MNREGA and reduced the vulnerability. Addition to this during the time of disaster like flood or drought if any plan has been taken by Zila Panchayat for relief and construction of drains for reducing the impact of flood so this job can be implemented under MNREGA. Apart from this Unemployed youth can also work during disaster for relief work under MNREGA so that rescue & relief will be fast.
- Under Indira Awaas Yojana (IAY) all the houses should be advised and instructed to construct earthquake resistant. Special instruction should be provided by district administration to block level and block will guide and instruct to Gram Panchayat for the construction of houses under Indira Awaas Yojana (IAY) for earthquake resistant house

construction. The training should be provided at gram Panchayat level for construction of small earthquake resistant houses under this scheme. This vulnerability due earthquake can be reduced.

- Under SSA (Sewa Siksha Abhiyan) whatever schools are being constructed should be earthquake resistant by following the proper guidelines. This should be instructed from the district SSA office. Also awareness should be spread at Gram Panchayat level about earthquake-resistant house by education department.
- PDS system should be made very efficient and should play a critical role during the time of disaster. As the PDS have sufficient foods in stock for providing food during crisis.
- Under NRHM special attention should be given to the diseases like Falaria, Dengu, Chickengunia and jaundice in umaria district so that epidemics can be avoided. Under this scheme proper vaccination should be carried out by the district health administration through CHC and PHC. Apart from Special camp should be arranged at block level or Gram Panchayat level about awareness of diseases and how to be safe. Doctors should be trained to tackle the epidemic in that region. Under this scheme there should be doctors and stock of medicines related to the epidemics by which generally people of these areas are affected.
- The same way, under PMGSY (Pradhanmantri gram Sadak Yojna), proper communication should be established in Akash Koh area of Manpur block where transportation become vulnerable during rainy seasons. It should give special attention to the water logging area which is more affected during the rainy seasons. Roads should be constructed under this scheme in rural area for the proper communication from village to block. There are some areas more affected during rainy seasons transportation become very difficult so these areas should get priority.
- In order to deal with the severe cases of Drought, the components of National Food Security Mission (NFSM) should also to be linked based on the relevance and according to the needs of the sufferers, in line with the criteria of the mission.

### **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. – **There is a list of swimmers and divers that are there in the district. Apart from this no initiative by the community was reported. There was no Community formed Task Force reported in the district.**

**A Village level/ Block level team of young volunteers if made, could be very helpful in spreading awareness and also at time of any disaster.**

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.

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

**Short term provisions cover:** Immediate loss incurred due to disasters.

**Long term provisions cover:** Issues like setting up of fire stations, watershed management, planting trees along the river etc.

**Insurance schemes:** Act as important source of funds for restoration of private business enterprises. The Collector should 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.

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**

This section will primarily focus on preparedness of local communities in order to safeguard their lives by taking appropriate actions in the face of any disaster and to ensure that agencies are able to respond to the potential damage zones in a prompt and coordinated manner. In most disaster situations the loss of life and property could be significantly reduced through appropriate preparedness measures and warning system. It will be necessary that with respect to every disaster, the concerned agencies will be designated to issue the warnings. During this section, it will be ensured that the pre-disaster warning & alerts, preparedness before response and

dissemination of warning, and evacuation activities have will be carried out in coordination with concern line departments.

**C.1.2.1 Preparedness before response**

Each department should have its internal plan ready beforehand, so as to be quick to respond.

**C.1.2.2 Pre-Disaster Warning, Alerts**

**Effective flood forecasting system:** It would provide 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 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)** :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.

**Table C. 1.2.2**

Hazards	Agencies
---------	----------

<b>Flood</b>	<b>Reports procured from weather department -&gt; Teams sent to the concerned areas for getting the area evacuated if required. -&gt; Loudspeakers, Radio, Newspapers, Local TV channels are made use of in this regard.</b>
<b>Drought</b>	<b>Local TV Channels, Radio, Loudspeakers, Newspapers, Local Daily/ Weekly</b>
<b>Industrial</b>	<b>Fire extinguishers to be placed for emergency purposes. Easy access to main electricity switch. Loudspeakers installed all around the working area.</b>
<b>At times of Fairs (Mela)</b>	<b>Continuous caution announcements are made in the area of Fair. Keep the crowd moving, make a predefined circuit (entry and exit.)</b>

**C.1.2.3 Evacuation stage**

Procedural steps for evacuation of people under threat or likely to be affected by the disasters.

Warning Alert -> Local Authority is made to get the word spread as to where and how to assemble for being taken to a safe area -> Teams reach and make the people move to safe areas.

**(Although this is the flow, but still a concrete flow is needed for better results)**

**Recommended Evacuation Procedure :**

Evacuation must be correctly planned and executed. The process of evacuation is usually considered to include the return of the affected community.

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.

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 1.3            Response Plan**

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

Prompt and effective response minimizes loss of life and property. A caring approach for the special needs of vulnerable sections is also important. The existing and the new institutional arrangements need to ensure an integrated, synergized and proactive approach in dealing with any disaster. This is possible through contemporary forecasting and early warning systems, fail-safe communication and anticipatory deployment of the specialized response forces. A well informed and prepared community can mitigate the impact of disasters.

**Community Emergency Response Teams:** A community may consider sponsoring a Community Emergency Response Team (CERT). A CERT is a volunteer group of citizens who are trained and equipped to respond if emergency services are unable to meet all of the immediate needs of the community following a major disaster, especially if there is no warning as in an earthquake.

**Emergency Response Personnel:** Emergency response personnel need to be trained and plan for various contingencies and response activities, such as evacuation, traffic control, search, and rescue.

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

In contrast to risk management, which involves assessing potential threats and finding the best ways to avoid those threats, crisis management involves dealing with threats before, during, and after they have occurred. That is, crisis management is proactive, not merely reactive. It is a discipline within the broader context of management consisting of skills and techniques required to identify, assess, understand, and cope with a serious situation, especially from the moment it first occurs to the point that recovery procedures start.

Following are the key disaster management team at district level:

- Warning Dissemination Team
- Shelter Management Team
- Evacuation and Rescue Team
- First-Aid and Health Team
- Sanitation and Carcass disposal Team
- Counselling Team
- Damage Assessment Team
- Team for collection, storage and distribution of Relief materials.

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

Incident Management System is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to aid in the management of resources during an emergency incident such as disaster. The incident command system (ICS) is a component of an overall incident management system. Incident Command Systems provides a standard approach to the management of the site of any large-scale disaster event. It is designed to be a model tool for “command, control, and coordination” of a response which provides a mean to coordinate the efforts of individual agencies as they work toward the common goal of stabilizing the incident and protecting the life, property, and the environment. ICS establishes separate command posts, known as Incident Command Post, throughout the affected area to manage the actual response operational activities if the disaster is widespread and large-scale.

**The ICS is based upon a five-component model that includes the following.**

1. Command
2. Operations
3. Planning
4. Logistics
5. Finance & Administration

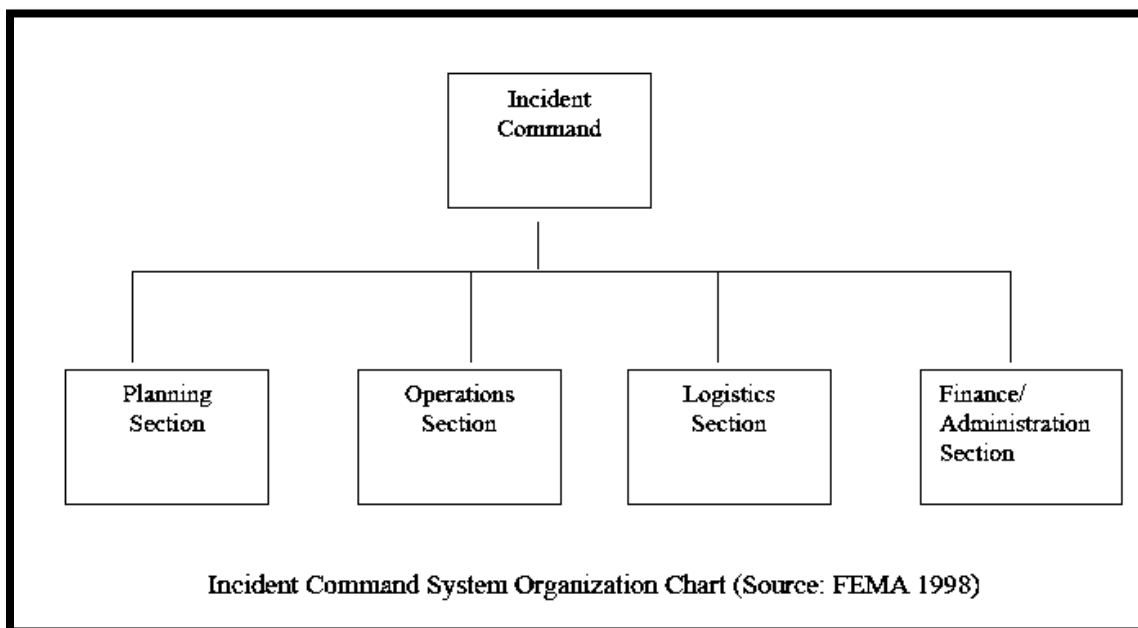


Figure 1: Incident Command System

### Brief Idea of Each Component of the ICS

1. **Command:** this function establishes the framework within which a single leader or committee can manage the overall disaster response effort. A single Incident Commander is responsible for the successful management of the response during operational period in an area. If the incident grows in size and extends throughout many jurisdictions, multiple incident commanders can be useful with an area command authority may be established to coordinate among the incidents. Incident Commander requires the following Command Staffs to support him, which are as followings,
  - Public Information Officer – the single media point of contact
  - Safety Officer – Responsible for identifying safety issues and fixing them, he has the authority to halt an operation if needed.
  - Liaison Officer – Point of contact for agency to agency issues.
  
2. **Operations:** this section carries out the response activities described in the IAP along with coordinating and managing the activities taken the responding agencies and officials that are directed at reducing the immediate hazard, protecting lives and properties. This section manages the tactical fieldwork and assigns most of the resources used to respond to the incident. Within operations, separate sections are established to perform different functions, such as emergency services, law enforcement, public works...etc.
  
3. **Planning:** this section supports the disaster management effort by collecting, evaluating, disseminating, and uses information about the development of the emergency and status of

all available resources. This section creates the action plan, often called “Incident Action Plan” (IAP), which shall guide emergency operations/response by objectives. Followings are the six primary activities performed by the planning section, including,

- Collecting, evaluating, and displaying incident intelligence and information
  - Preparing and documenting IAPs
  - Conducting long-range and contingency planning
  - Developing plans for demobilization
  - Maintaining incident documentation
  - Tracking resources documentation
4. **Logistics:** the process of response includes personnel, equipments, vehicles, facilities...etc, all of which will depend upon the acquisition, transport, and distribution of resources, the provision of food and water, and proper medical attention. The Logistic section is responsible for the mentioned process.
5. **Finance And Administration:** this section is responsible for tracking all costs associated with the response and beginning the process for reimbursement. The finance and administration section becomes very important when the national government provides emergency funds in place that guarantee local and regional response agencies that their activities, supply use, and expenditures will be covered.

A traditional command structure exists in the administrative hierarchy which manages disasters in India. It has been planned to strengthen and professionalise the same by drawing upon the principles of the ICS with suitable modifications. The ICS is essentially a management system to organise various emergency functions in a standardised 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, planning, safety, media management, etc. It also aims to put in place such teams in each district by imparting training in different facets of incident management to district level functionaries. The emphasis will be on the use of technologies and contemporary systems of planning and execution with connectivity to the joint operations room at all levels.

The local authorities do not have the capacity to play an efficient role at local level to support the DEOC’s requirements for field information and coordination. The DEOC will therefore need to send its own field teams and through them establish an Incident Command System. The system will comprise:

- Field command
- Field information collection
- Inter agency coordination at field level
- Management of field operations, planning, logistics, finance and administration



Rapid Assessment Teams and Quick Response Teams described below will be fielded by the DDMA through the DEOC as part of the Incident Command System.

#### **C 1.3.4: Rapid damage assessment & reporting**

The Rapid Assessment Teams will be multi-disciplinary teams comprising four or five members. They will mainly comprise senior level specialized officers from the field of health, engineering, search and rescue, communication and one who have knowledge of disaster affected area, physical characteristic of the region, language etc. These officials should share a common interest and commitment. There should be a clear allocation of responsibilities among team members. To make a first / preliminary assessment of damage, the assessment report will contain the following basic elements or activities

- Human and material damage
- Resource availability and local response capacity
- Options for relief assistance and recovery
- Needs for national / international assistance

Deployment of search and rescue teams can help in reducing the numbers of deaths. A quick response to urgent needs must never be delayed for the reason that a comprehensive assessment has yet to be completed. The following teams must be sent to disaster site or disaster affected area as early as possible, even prior to First Information Report.

- First Aid Team
- Search and Rescue team
- Communication Teams
- Power Team
- Relief Teams
- Rehabilitation teams
- Transport Team

All other focal departments will keep ready their response teams, which may be deployed after receiving the first information report.

Representative of the affected community directly informs either the nearest district administration office, police station or any government official or an NGO, who will then inform either the Sub-Divisional Officer/SDM or his office or directly to the DEOC on the toll free numbers. All the information coming to the SDM or DEOC will be communicated to the Deputy Commissioner, who based on the available information, if deems fit, will activate DEOC in the emergency mode.

A clear and concise assessment of damages and needs in the aftermath of a disaster is a prerequisite for effective planning and implementation of relief and recovery measures. The objectives of damage and needs assessment are to determine:

- Nature and extent of disaster
- Damage and secondary threats
- Needs of the population

Two types of assessment that may have to be carried out are:

1. Initial Assessment
2. Technical Assessment

Rapid Assessment Teams will carry out the Initial Assessment

**Table: 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: District Search & rescue Team**

It is the duty of the DDMA to provide specialized life saving assistance to district and local authorities. In the event of a major disaster or emergency its operational activities include locating, extricating and providing on site medical treatment to victims trapped in collapsed structures. In the event of any disaster the **Home Guards** along with the support of the Police dept. form teams to locate injured and dead and try to rescue the ones in need. There are other bodies too that help these departments in this work, like the PWD, training for search and rescue process needs to be undertaken so as to minimize the time taken in rescuing someone. Also proper methodology and resources are needed to carry out a search & rescue mission.

The tactics used in the search & rescue process vary accordingly with the type of disaster that we are dealing with. In case of flood, a boat and trained swimmers are a must while in case of an earthquake sniffer dogs and cutting tools with trained manpower is a binding requirement. The household register that is maintained by the warden should be maintained for every village as it proves to be of great help in case of a disaster like an earthquake. Because in case of the aforementioned disaster people get trapped in the debris of buildings and houses and it becomes difficult to estimate how many people are present in the debris. But if a household register is maintained then the task becomes quite easy and effective to find out almost correctly that how many people would be present in any building/house at any given time. Thus the resources can be justifiably distributed and more lives can be saved. This kind of process is highly recommended in this particular district which lies in moderate earthquake prone region.

For flood it is recommended that the boats that are used should be light weight and the motor should be of 'luma' type, so that it becomes easy for the rescue team to lift the boat and carry it to the spot. Also a heavy boat needs deep water to float and as the basin of river Narmada is filled with huge boulders so it might not allow the boat to float or may even damage the boat, hence hampering the entire process in midway.

**Table 1: District Search & rescue Team**

S.No.	Name and designation of trained S&R Team member
	<p><i>The Search &amp; Rescue team is formed as and when required and the members &amp; equipments are taken according to the nature of the disaster (and also on their availability).</i></p> <ul style="list-style-type: none"> <li>● Police Officers (2 or more)</li> <li>● Home guards (2 or more)</li> </ul>

	<ul style="list-style-type: none"> <li>• Swimmers (In case of flood)</li> <li>• A construction engineer (From P.W.D.)</li> <li>• Driver (For Every vehicle)</li> <li>• Any person with the prior experience of the disaster (From Home Guard/Police Dept.)</li> <li>• A doctor or nurse or at least a person having first aid training</li> <li>• A Class IV Officer (Health Dept.)</li> </ul>
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<Source: Home Guards Office, Damoh>

**C 1.3.6: Medical response**

Medical preparedness is a crucial component for any DM Plan. The DDMA, in close coordination with the CM&HO, **Health Department**, will formulate policy guidelines to enhance our capacity in emergency medical response and mass casualty management. DM plans for hospitals will include developing and training of medical teams and paramedics, capacity building, trauma and psycho-social care, mass casualty management and triage. The surge and casualty handling capacity of all hospitals, at the time of disasters, will be worked out and recorded through a consultative process, by the district of Damoh in the pre-disaster phase. The District authorities will be encouraged to formulate appropriate procedures for treatment of casualties by the private hospitals during the disasters. This plan will also address post-disaster disease surveillance systems, networking with hospitals, referral institutions and accessing services and facilities such as availability of ambulances and blood banks.

Medical response has to be quick and effective. The execution of medical response plans and deployment of medical resources warrant special attention at the District level in most of the situations. The voluntary deployment of the nearest medical resources to the disaster site, irrespective of the administrative boundaries, should be emphasized. Mobile medical hospitals and other resources available with the State should also be provided to the district in a proactive manner. Post-disaster management of health, sanitation and hygiene services is crucial to prevent an outbreak of epidemics. Therefore a constant monitoring of any such possibilities is necessary.

**Table 2: Medical Response Team**

S.No.	Name of team member & Designation
	<ul style="list-style-type: none"> <li>• A Child Specialist</li> <li>• A Medical Expert</li> <li>• A Medical officer (Dresser)</li> <li>• Epidemic Duty Doctor and compounder (As per rooster)</li> <li>• Driver (For Every vehicle)</li> <li>• A Class IV Officer (Health Dept.)</li> </ul>

<Source: Health Dept., Damoh>

### C 1.3.7: Logistic arrangements

As per the data available, district has a total of 194 load carrying and 202 passenger vehicles. In addition to it, it also keeps a list of Heavy goods vehicles, Light goods vehicles, tractors, etc.

A separate list should be compiled of those vehicles that are in working condition, and are easily available at the time of disaster, so that it can be called for by the search and rescue team during emergency.

An emergency stock of fuel for disasters is usually maintained at petrol pumps and this should be made mandatory. The Logistics Section is responsible for the following:

- Facilities
- Transportation
- Communications
- Supplies
- Equipment maintenance and fueling
- Food Services
- Medical Services
- Ordering Resources

The **Logistics Section** Head manages the Logistics Section. On very large incidents, or on incidents requiring a great deal of equipment or facilities, the Logistics Section may be divided into two branches – Service Branch and Support Branch. This is most often done for span of control reasons, resulting in a more manageable organization. Six Units may be established within the Logistics Section:

1. Supply Unit
2. Facilities Unit
3. Ground Support Unit
4. Communications Unit
5. Food Unit
6. Medical Unit

### C 1.3.8: Communications

The **communication dept.** Has the following duties like sending all out-messages on behalf of camp officer of the relief camp, data collection, record keeping, assistance in locating missing persons, information center, organization of information for site operations center and on specific demands, maintaining in-message and out-message register. In addition to it the following facilities are available in the communication room:

- Telephones
- Fax
- Intercom units
- VSAT connection
- PC with modem and printer
- Mobiles
- Photocopying machine
- Wireless

The media should handle such sensitive situation carefully as it may affect the victims mentally. It should issue authenticated and verified information as far as possible rumors should not be spread and should also be prevented from spreading. Correct data should be published after well quantifying it so that the public is not ill-advised.

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

Pl refer the annexure for detailed information pertaining to identified temporary shelters.

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

Restoring Water and Sanitation Services: roles and responsibilities of **Municipal deptt.**

- Work under the team leader of restoration of essential services and supervise functions of all groups
- Attend planning meetings of the section
- Brief team members about the objectives and strategy to achieve the goal
- Project requirement of Task Forces, Strike Teams and Single Resource for water and sanitation services, if required
- Repair water lines or supply water tanks of the affected sites
- Supply drinking water tank to inaccessible area
- Repair tube wells
- Check contamination of water and provide facilities for water purification
- ***Involve employees of Notified Area Committee, Municipality or Corporation for sanitation services and ensure that work is in progress***
- Involve community
- Maintain the record of important activities performed

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

***Maintaining law & order is major responsibility of the Police dept.*** and apart from this other stakeholders are also involved in it. The Police Department along with the Home Guards moves the affected people to safer places. They also help the Revenue Department to carry out relief work without any encumbrance or hindrance during the disaster period. And it is their duty to safeguard the property of the victims.

The Police dept. maintains law and order in such a panic struck situation and safeguards the people (especially women and old) from theft, teasing or molestation in the disaster struck and the relief camp area. It also co-ordinates the search and rescue operation through NCC/VTF/NGO. It will also arrange for security at the relief camps/relief material storages. It is also responsible to maintain law and order at the time of distribution of relief material. It assists the authorities for evacuation of people to the safe places and makes due arrangements for post mortem of dead bodies, and hastens legal procedure for speedy disposal. It specially protects the children, women, old and the physically challenged at the shelter places.

### **C 1.3.12: Public grievances/missing person's search/media management**

A **Public Grievance Redressal Committee** at the district level has to be constituted under the chairmanship of the District Collector to address the grievances of the public regarding missing persons. It is the duty of the search and rescue team to search for the missing people, live or dead.

The media should handle such sensitive situation carefully as it may affect the victims mentally. It should issue authenticated and verified information as far as possible rumors should not be spread and should also be prevented from spreading. Correct data should be published after well quantifying it so that the public is not ill-advised.

### **C 1.3.13: Animal care**

Animals, both domestic as well as wild are exposed to the effects of natural and man-made disasters and thus it is the ***duty of the Veterinary department to take care of them***. It is necessary to devise appropriate measures to protect animals and find means to shelter and feed them during disasters and their aftermath, through a community effort, to the extent possible. It is pertinent to note that many communities have shown compassion to animals during disasters, and these efforts need to be formalized in the preparedness plans. The Departments/Ministries of the GoI such as Animal Husbandry and Dairy Department, Social Justice & Empowerment and the district has devised such measures at all levels.

### **C 1.3.14: Management of deceased**

***The Carcass Disposal team is responsible for the clearance of carcasses after the disaster.*** The team should put in all efforts to prevent the spread of any kind of disease by disposing off the carcasses at the earliest and in the manner that they are supposed to. The unclaimed bodies need to be burnt or buried accordingly. And before that they need to be kept in a morgue or on ice in a separate location.

The health department will immediately start the procedure for post mortem of the dead bodies, if required, as per the rules. Disposal of dead bodies should be carried out in a way that such it does not hurts the sentiments of anyone. And also great care should be taken that the dead bodies should not become the brooding ground for pathogens, which may cause illness or maybe become a reason for some epidemic. Arrangement should be made to issue death certificates of the deceased to the relatives.

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

The mandate of the Civil Defense (CD) and the Home Guards should be redefined to assign an effective role in the field of disaster management. They will be deployed for community

preparedness and public awareness. A culture of voluntary reporting to duty stations in the event of any disaster should be promoted.

A proper Civil Defense set up in every District would be a boon for disaster response as the neighborhood community is always the first responder in any disaster. The proposal to make Civil Defense District centric and be involved in disaster response has already been approved by the Gov. Its phase wise implementation has also begun. State Governments should ensure it's operationalization in their respective districts.

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

The guards of private companies can be called for assistance if required but for that purpose they need to be trained well enough for the occasion well in advance. So this training can be carried out in the Home Guard dept. or in the Police Line training grounds by the officers designated by the district authorities for the purpose.

As per the recent private security bill introduced by the State Govt., the private guards and security agencies have to play a very vital role in disaster management, and especially in the disaster response stage. These guards would act as an extra helping hand and thus would hasten the process of relief work.

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

NGOs and voluntary organizations are the first to respond before any outside assistance can reach the disaster site. In certain disaster prone areas a group of young volunteers are being formed and trained to undertake essential tasks which would reduce loss of life and property.

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

Functions of infrastructure desk, logistics, health, operations, communication and information Dept. are as stated below.

#### ***Functions of Infrastructure Desk***

- Shelters for affected people with sanitation facilities
- Temporary structure for storage
- Kitchens
- Medical facilities
- Education facility
- Recreational facility
- Postal facility
- Temporary repairs to damaged infrastructure



***Functions of Logistics Desk***

- Issue Village relief tickets to the affected families
- Organize distribution of Relief Supplies
- Receive, store, secure, relief materials for relief camps and affected villages
- Co-ordinate supplies distributed directly by NGOs and other organizations including private donors
- Ensure proper maintenance of vehicles and equipment
- Ensure optimum utilization of resources such as fuel, food, and other relief materials
- Mobilize and co-ordinate the work of the volunteers ensuring community participation
- Organize facilities for staff and volunteers

***Functions of Health Desk***

- Disposal of dead bodies
- Disposal of carcasses
- Disposal of waste and waste water
- Treatment of the injured and the sick
- Preventive medicine and anti-epidemic actions
- Inspection of food, water supplies, sanitation and disposal of waste

***Functions of Communication and Information Management Desk***

- Data collection
- Record keeping
- Assistance in locating missing persons
- Information center
- Organization of information for Site Operations Center and on specific Demands
- Maintaining In-Message and Out-Message Register
- Sending all Out-Messages on behalf of Camp Officer of the Relief Camp

***Functions of Operation Desk***

- Salvage operations
- Feeding centers for two weeks to be set-up at the earliest

**C 1.3.19: Media Management**

The media is responsible for collecting reliable information on the status of disaster and disaster victims and broadcasting it for effective coordination of relief work at every level.

A strategy needs to be formulated for managing mass media such as newspapers and television in terms of dissemination of information at the wake of disasters. Clear guidelines would help the administration in avoiding communication of wrong information and creating panic. The nodal

person will act as the Public relations officer and the person will coordinate with the local media to publicize the right information

### **C 1.3.20: Fire Services**

Fire Service has always been discharging duties round the clock & gets themselves ready to responds in any emergent nature of calls. ***The Fire and Emergency Services are crucial and most immediate responders to disasters.*** The staff of Fire Services should be trained and retrained in disaster management skills, and will be further upgraded to acquire multi-hazard rescue capability, in order to tackle any emergency related to fire or the allied substances.

The Police will be trained and the Fire and Emergency Services upgraded to acquire multi-hazard rescue capability. Home Guards volunteers will be trained in disaster preparedness, emergency response, community mobilization, etc. The district may take the help of the State Government for capacity building and sensitization of their forces.

As the roles and responsibilities of the Fire dept are more than clear to them, hence the Fire dept. can itself be considered as a quick response team for this particular purpose.

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

This section will restore normalcy to the lives and livelihoods of the affected population, by short and long term measures. Short-term recovery will return the vital life support systems to minimum operating standards while long term rehabilitation will continue till complete redevelopment of the area takes place.

**(Relief funds are given to the victims)**

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**

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. 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. The NGOs together with business organization shall be encouraged to adopt the various villages for reconstruction.

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**

Restoration of livelihoods through Grants, outside assistance and by other means, the list of potential sources will be mentioned here.

Pl verify with Dept of Home, R & R, Rural & Urban Upliftment Boards, of respective areas.

#### **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.

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 organisations such as NCC, NSS and NYKS. The deployment of the armed forces will also be organised on an 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.

### 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 has been shifted. 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. 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.

## **C 2.1            SOPs for all concerned Line Departments (SOP`s are attached as Table C 2.1)**

SOPs for Revenue, Home, Irrigation Dept, Electricity Dept, Transport, Health, Power, Media, Agriculture Dept, Police, Dept of Industries, District Medical Officer, Public Works Dept, Telecommunication Dept, Rural Water Supply & Sanitation Dept, Veterinary Dept, Fire Service, Civil Defence, Municipal Board, Transport, Town Planning, Food & Civil Supplies Dept. and all other concerned departments, will be prepared and maintained.

Standard Operating Procedures for all relevant departments will be prepared in following format:

**Table C 2.1**

### **STANDARD OPERATING PROCEDURES**

#### **2.1.1 Department of Revenue & Relief**

The Department of Revenue & Relief plays a critical role in the implementation of the disaster management action plans. The department will be the nodal agency for the activities of the DEOC and also the primary agency in the case of Information and Planning, Relief supplies, Shelter, Help lines and donations emergency support functions.

#### **Preparedness function**

- To appoint a nodal officer in the DEOC.
- Establish infrastructure for DEOC and maintain in state of readiness with all equipment in working order and all inventories updated.
- Train personnel on operations of DEOC.
- Ensure basic facilities for personnel who will work at district level for disaster response.
- To coordinate the preparedness functions of all line departments.
- Establish disaster management funding mechanisms to ensure adequate resources for preparedness work, and quick availability of resources for relief and rehabilitation when required.
- Ensure that all the gram panchayats, urban bodies and blocks prepare their disaster management plan.
- Coordinate with other state departments of state and centre for their disaster management plan at the district level and synchronize the same with the district disaster management plan.
- Help District Administrators with additional resources for disaster preparedness, if necessary.
- On annual basis report to the SEC of the preparedness activities.



## **Mitigation**

- To ensure that funds are being allocated under the District Disaster Mitigation Fund.
- To ensure that structural and non-structural mitigation measures are taken by all its department offices.

## **Alert and Warning Stage**

- Maintain contact with forecasting agencies and gather all possible information regarding the alert.
- Ensure activation of District EOC in standby mode.
- Instruct all ESFs remain in readiness for responding to the emergency.
- 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.
- Dispatch field assessment teams, if required.
- Provide assessment report to the DDMA.

## **Response**

- Activate DEOC in full form
- To coordinate and plan all activities with the ESFs
- Conduct Rapid Assessment and launch Quick Response.
- Conduct survey in affected areas and assess requirements of relief
- Distribute emergency relief material to affected population.
- Coordinate all activities involved with emergency provisions of temporary shelters, emergency mass feeding, and bulk distribution of coordinated relief supplies for victims of disasters.
- Coordinate NGO, INGO and international agencies interventions/support.

## **Recovery and Rehabilitation**

- Organize 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.

## **2.2.2 Police Department**

### **A. Preparedness**

The Superintendent of Police will co-ordinate the work of disaster management as nodal officer. He will prepare a separate and comprehensive plan of district regarding the department of police and also prepare details of resources as a part of DDMP. He will consider the following in it.

- Details of contacts of all the staff members under the district.
- Maps and statistical data of district areas.
- Resources and human resources useful at the time of disaster.
- Details of police staff and retired officers/staff of the police and the control room.
- Details of functions of staff of the district control room.
- Appointment of the nodal officer in the control room.
- Traffic arrangements towards the disaster affected areas.
- Details of anti social elements.
- Security arrangements at relief camps and food storages.
- Security for the transportation of the relief material.
- Immediate police procedures for human death.
- To assist the authorities for the evacuation of people from disaster affected areas.
- Adequate equipments for communication.
- List of swimmers.
- Wireless stations in the district and communication network.
- To update the related details of Disaster Management Plan.

### **B. Alert and warning**

- Will contact the district collector.
- Make advance preparation to implement the action plan for search and rescue.
- Will prepare a plan for police personnel for search and rescue.
- Will arrange to communicate the messages through all the equipments of communication and vehicles as per the necessity.
- Will requisite vehicles after obtaining the orders for the same from the district authorities.

### **C. Mitigation and after disaster activities**

- Will arrange law and order against theft in the disaster affected area.
- Will co-ordinate the search and rescue operation through NCC/VTF/NGO.
- Will arrange for security at the relief camps/relief materials storages.
- Will see the law and order is maintained at the time of distribution of relief material.

- Will assist the authorities for evacuation of people to the safer places.
- Will make due arrangements for post mortem of dead persons, and legal procedure for speedy disposal.

### **2.1.3 Health Department**

#### **A. Preparedness**

While preparing the DDMP / updating the same, the health department shall take care to include the following particulars carefully.

- A separate plan for disaster management regarding health.
- Arrangements for exchange of information in the control room.
- Appointment of nodal officer.
- Advance arrangements for life saving medicines, insecticides and vaccines.
- Maintenance of vehicles such as ambulance, jeep and other equipments such as generators etc.
- Distribution of work by forming groups of staff during emergency.
- List of private practicing doctors / medical facilities.
- Arrangement for survey of disaster.
- Mobile dispensary units.
- Information regarding proper places for on the spot medical services in various villages during disaster.
- Dissemination of information among the people regarding the death, injury.
- Primary information of disaster related relief activities to all the staff members.
- Training to PHC / Community Health Centre staff to prevent spreading of diseases among the people, animals, and advance planning for the same.
- Blood group wise list of blood donors with contact telephone numbers and addresses.
- Training of DMTs regarding first aid.
- To prepare an action plan for the availability of equipments to be useful at the time of disaster management for medical treatment.
- Co-ordination with various government agencies – schemes to meet the necessity of equipments in emergency.
- To see that all vehicles like ambulance, jeep and equipments like generators and equipments essential for health care are in working condition.

#### **B. Alert and warning**

- Will ensure the availability of important medicines, life saving medicines, insecticides and if necessary contact for additional supply.
- Round the clock control room at the district level

- Will send the health staff for duty in their areas as per the plan of disaster management.
- Activate the mobile health units for the post disaster situation.
- Will organize in advance to mobilize the local doctors and local voluntary agency for emergency work.
- Will contact the blood donors for blood donation, on the basis of lists prepared.

### **C. Mitigation and Post Disaster Activities**

- Provide first aid to the injured and shifting of seriously injured people to the nearby hospital.
- Send sufficient stock of medicines to the affected areas immediately.
- Will make arrangements for the available additional health staff in the affected areas deputed by the state authority.
- Will organize to get the insecticides to prevent spreading of diseases.
- Will ensure the purity of drinking water by testing the sources of water.
- Will depute the mobile units for first aid.
- Distribution of chlorine tablets and other necessary medicines from house to house.
- Will shift the seriously injured people to the hospital.
- Will immediately start the procedure for post mortem of the dead persons as per the rules.

### **2.1.4 Department of Home**

Department of Home has an important role of providing security, logistics, and if necessary, assistance in distribution of relief items and provision of equipment for emergency response. It is also the primary agency for Search and rescue.

#### **Preparedness function**

- Designate one Liaison Officer in the department as the Disaster Preparedness Focal Point.
- Designate one officer for the DEOC.
- Prepare an operational Plan for responding to any type of disaster.
- Establish, maintain and train district level search and rescue response team.
- Impart training to the members of Police Force in first aid, evacuation, rescue and relief operations.
- To conduct Search and Rescue training to gram panchayat task forces.
- Prepare an inventory of all man power and equipment available.
- To prepare an inventory of volunteers who have already completed training courses successfully and can be utilized in the search and rescue operations.
- Identify the 'High Risk' and 'Risk' areas for different disasters and instruct the existing police installations located in those areas for keeping themselves in readiness for undertaking emergency rescue, evacuation relief operations.

- Maintain and operate the DEOC throughout the year in preparedness mode during no-disaster times and in emergency mode during disaster times.
- Arrange drills for fire extinguishing, rescue, evacuation and transportation of injured persons and prepare coordinated Action Plans in cooperation with District administration and concerned local agencies
- Hold annual drills on disaster preparedness and response.

### **Mitigation**

- Make departmental mitigation plan and ensure its implementation.
- Organise road safety and fire and festival safety awareness programs for schools and community.

### **Alert and Warning Stage**

- Depute one liaison officer for disaster management within the department.
- Representative to be positioned at the DEOC.
- Maintain communications with the police installations in the areas likely to be affected by disaster.

### **2.1.5 Indian Red Cross and NGOs**

The Indian Red Cross would perform the following duties within the ambit of its own rules and regulations and organizational structure, in association with DEOC. Similarly other state, district or local level NGO's will coordinate with the DEOC and ICP's during disaster times.

### **Non Disaster Time – Preparedness**

- Take steps for preparing community based disaster management plans with facilitation from DDMA.
- Identify volunteers in disaster prone areas and arrange for their training.
- Awareness raising programs, seminars and meetings with the people for improving their capacity to face disasters.
- Maintain contacts with District Administrators on its activities.
- Ensure road communication and pre-positioning of relief material as close as possible to disaster prone communities.

### **Alert and Warning Stage**

- Issue warning notice to all concerned including the preparedness programs Designate a liaison officer for maintaining link with the DEOC of the District.
- Keep the survey and relief team of head quarters on stand-by in readiness with required transport and equipment.

- Mobilize volunteers and issue instructions for sending them to potential disaster affected areas.
- Take part in evacuation program of population with close cooperation of volunteers
- Coordinate with pre identified NGOs for possible joint operations.

#### **During Disaster**

- Ensure survey of loss and damage in affected areas and dispatch of relief teams from concerned Red Crescent Society Units.
- Assist the Province Government to determine loss, damage and needs related information.
- Give emergency assistance to disaster affected people especially in the following cases:
- Help in rescue and evacuation work, temporary shelter, first aid, food and clothing,
- Arrange for distribution of relief material received from Red Crescent Unit of areas not affected by disaster and from headquarters.
- 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.

#### **After Disaster**

- Participate in reconstruction and rehabilitation programmes in special circumstances.
- Take steps for correct and effective evaluation of preparedness work and for correcting errors/weakness in such work.
- Extend Cooperation to the district EOC for disaster documentation.

### **2.1.6 Department of Food, civil supplies and consumer affairs**

- The department will be responsible for identifying the basic needs of food in the aftermath of a disaster or emergency, to obtain appropriate supplies and transporting such supplies to the disaster area. It is the primary agency for Food emergency support function for DEOC.

#### **Non Disaster Time – Preparedness**

- Develop a district disaster management plan for the department & update it annually.
- Develop a plan that will ensure timely distribution of food to the affected population.
- Maintain a stock of food relief items for any emergency.

#### **Non Disaster Time – Mitigation**

- Prepare & implement department's mitigation plan

#### **Alert and Warning Stage**

- Catalogue of available resources of food

### **During Disaster**

- Determine the critical need of food for the affected area in coordination with DEOC and ICP's
- Coordinate with local authorities and other ESFs to determine requirements of food for affected population.
- Mobilize and coordinate with other ESFs for air dropping of food to affected site.
- Prepare separate food packs for relief camps as well as large quantity containers.
- Ensure that food distributed is fit for human consumption
- Ensure quality and control the type of food.
- Allocate food in different packs that can be given to families on a taken home basis while others that can be distributed in relief camps
- Control the quality and quantity of food that is distributed to the affected population.
- Ensure that special care in food distribution is taken for women with infants, pregnant women and children.

### **After Disaster**

- Establishment of PDS points as per the changed scenario/resettlements (If any)
- Issuing of duplicate ration cards to the disaster victims, who lost their papers.

## **2.1.7 Department of Panchayati Raj**

### **Non Disaster Time – Preparedness**

- Develop a disaster management plan for the department at district level & update it annually.
- 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.
- Conduct gram panchayat level mock drills as part of preparedness.

### **Non Disaster Time – Mitigation**

- Prepare & implement department's mitigation plan
- Ensure that all the development schemes of the department have a mitigation component as an integral part.

### **During Disaster**

- Coordinate with local authorities and support the response efforts.
- Coordinate the support from unaffected gram panchayats.

### **After Disaster**

- Ensure proper distribution of reconstruction schemes and monitoring of the same during Block development committee and zila parishad meetings.

## **2.1.8 Department of Urban Development**

- Department is a secondary agency for Public health & sanitation, Power, public works & engineering, information & planning, food, drinking water and shelter emergency support function for DEOC, especially for the urban areas.

### **Preparedness function**

- Designate one Liaison Officer in the department at district level as the Disaster management Focal Point.
- 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.
- To conduct regular training the staff on minimum standards for shelter, relief camps and tent structures.
- Prepare department's disaster management plan.
- Develop alternative arrangements for population living in structures that might be affected after the disaster.

### **Mitigation**

- Designate one Liaison Officer in the department as focal point for the mitigation activities.
- Coordinate with the DDMA for implementation of mitigation activities in the urban areas.
- Prepare & implement department's mitigation plan

### **Alert and Warning Stage**

- In case of damage to offices, assist local authorities to establish and house important telecom equipment and officials at the earliest
- Setting up water point in key locations and in relief camps

### **Response**

- Quick assessment of damaged areas and areas that can be used for relief camps for the displaced population
- Locate adequate relief camps based on survey of damage
- Clear areas for setting up relief camps
- Locate relief camps close to open traffic and transport links
- Set up relief camps and tents using innovative methods that save time
- Provide adequate and appropriate shelter to the entire population



- Coordinate with other ESFs in equipping shelter and relief sites with basic needs of communication and sanitation.
- Maintaining and providing clean water
- Procurement of clean drinking water.
- Coordinate with DEOC & ICP's for proper disposal of dead bodies in the urban areas.

### **Recovery and rehabilitation**

- Implement recovery & rehabilitation schemes through municipalities for urban areas.

### **2.1.9 Department of Rural Development**

Department of Rural development is one of the main departments that have the mandate to implement vulnerability reduction projects to alleviate poverty and improve people's livelihoods. It is also the secondary agency for Public works and engineering, Information and planning, relief supplies, food and drinking water emergency support functions for the DEOC. At the block level, it is the main agency for preparation of block disaster management plan, especially, the mitigation plan for the block, which will highlight the locale specific needs of Gram Panchayats and hence will feed the information on local priorities to the district disaster management plan.

#### **Non Disaster time – Preparedness**

- Designate one Liaison Officer in the department and the district as the Disaster Management Focal Point.
- Develop a district disaster management plan for the department.
- Prepare maps showing population concentration and distribution of resources.
- Encourage disaster resistant technological practices in buildings and infrastructure.
- Encourage the people in earthquake prone areas to adopt earthquake resistant technologies.
- Report activities in periodic meetings of the district disaster management advisory committee and to DDMA.
- In coordination with PWD conduct regular training to the engineers of the department.

#### **Non Disaster time – Mitigation**

- Appoint one officer as focal point for mitigation activities
- On the basis of its developmental responsibility, liaise with other line departments and agencies for a coordinated mitigation approach.
- In coordination with the DDMA, conduct building assessments, identification of structural and non structural mitigation activities.

- Organise awareness programmes for BDO's, Panchayat secretaries and gram pradhans on structural and no-structural mitigation activities.

### **Alert and Warning Stage**

- Focal Point in department to keep in touch with the DEOC.
- Alert all concerned about impending disaster.
- Ensure safety of establishments, structures and equipment in the field
- Ensure formation of committee for rescue, relief and rehabilitation work and local volunteer teams

### **During the Disaster – Response**

- Ensure information flow from affected gram panchayats and maintain regular contact with DEOC (24 hrs).
- Support revenue department in establishing ICP's in the affected areas
- Ensure availability of drinking water at times of need.
- Provide necessary infrastructure to carry out relief works
- Assess initial damage

### **After Disaster - Recovery and Rehabilitation**

- Quantify the loss/damage
- Organise reconstruction of damaged houses on self help basis with local assets and materials received from the government.
- Take up repair/reconstruction work of infrastructure damaged by disaster

## **2.1.10 Water Supply Department**

### **Preparedness**

The water supply dept. shall ensure the following to be included in the DDMP:-

- Setting up of control room and arrangement for the control room operator.
- Assign the responsibility as nodal officer to the Executive Engineer or any other officer.
- Prepare an alternative contingency plan to provide drinking water in case of failure of regular water distribution system during disaster.
- Detailed information of available water resources throughout the district.
- Arrangement of Govt. or private tankers to provide water temporary and immediately.

- Preventive measures for water borne diseases and chlorination of water.
- Availability of safe drinking water in the affected areas.
- Inform the staff about the disaster.

#### **B. Alert and warning.**

- Organize the teams to check the sources of water / drinking water.
- Standby arrangements of tankers for drinking water through tankers or any other available source.
- Will make available chlorine tablets in sufficient quantity and arrange to distribute through DMTs.

#### **C. Mitigation and Post disaster work.**

- Implement the alternative contingency plan to provide drinking water in case of failure of regular water distribution systems during disaster.
- Will start work for immediate repairing of water pipes in case of damage.
- Will arrange to check the water tanks, overhead tanks, and pumps, reservoirs and other water resources.
- Will contact the electricity authorities to re-establish the electric supply in case of failure.
- Will provide chlorinated water either by activating group water supply schemes
- Will provide drinking water to the relief camps / relief kitchens, shelters etc. through available resources.

### **2.1.11 Irrigation Department**

#### **A. Preparedness**

The irrigation department shall carefully include the following particulars while preparing / updating the DDMP:-

- Contact address and phone numbers of all the staff / officers, vehicles and swimmers of the District.
- Details of irrigation related factors in the district such as rivers, pools canals, large and medium dams, etc.
- Control room arrangements and appointment of Nodal Officer.
- Details of damage prone areas.
- Location of water level gauge station for flood situation.

- To disseminate information /warning to the damage prone areas in case of flood situation.
- Details of immediate action to be taken in case of leakage in large water storage reservoirs.
- Supervision over major storage / reservoirs.
- Very clear explanation of disaster and priorities during disasters to all the staff.
- Effective working of control room at every major dam.
- Enough and ultra modern equipments for communication.
- Periodical checking of Dam /Waste veer, canal –tunnel, roads leading to Dams etc. for maintenance during normal time.

#### **A. Alert and warning**

- Ensure that communication equipments like telephone, mobile phone, wireless set and siren etc. are in working conditions.
- Keep the technical and non-technical staff under control, ready and alert.
- Get status report of ponds, dam, canal and small dams through technical persons.
- Will take decision to release the water in consultation with the competent authority and immediately warn the people living in low lying areas in case of increasing flow of water or overflow.
- Keep the alternative arrangements ready in case of damage to the structure of dam / check dam to leakage or overflow in the reservoirs.
- Make due arrangements to disseminate the information about the increasing and decreasing water level whatever it may be to the community, media etc.
- A senior office will remain and work accordingly at large storage reservoirs.
- Will arrange to provide the dewatering pumps, generators, trucks and bulldozers, excavator, boats for search and rescue operations wherever required.

#### **B. Mitigation and Post disaster work.**

- Will obtain the clear picture of the condition of all the reservoirs through teams of technical officers.
- Ensure about no overflow or no leakage.
- If overflow or leakage is found, start immediate action to avoid adverse effect to the reservoir as per the action plan.
- If there is no possibility and risk, keep the people and media informed about “everything is safe”.
- If overflow or any leakage is found, he will immediately warn the people living in the low lying areas.
- Will take due care for the transportation of drinking water if drinking water is provided through irrigation scheme.

- Will assist the local administration to use boats, dewatering pumps, etc. search and rescue operations.

## **2.1.12 Public Works Department**

### **A. Preparedness**

- Details of the staff members with their contact addresses and telephone numbers.
- Details of buildings, vehicles and equipment as well as the names of contractors and the vehicles & equipment used by them.
- Maps of the areas in the district with the statistical data related to available resources.
- The position of approach roads and other road of all the villages including bridges, railway crossing etc.
- To strictly observe the rules during the constructions regarding earthquake and cyclone proof materials.
- The PWD will inspect periodically the buildings, residences, high rise buildings under their control.
- Damage prone road bridges and arrangement for their inspections
- Action plan for emergency repairs.
- Will appoint an officer of the rank of Assistant Engineer to coordinate during emergency at the District Control Room.
- Will maintain the departmental equipments such as bulldozers, tractors, water tankers, dumpers, earthmovers excavator, de-watering pumps, generators, cutters, tree cutters, ladders, ropes, flood lights, shovels, axes, hammers, RCC cutters etc; which can be used during emergency and will quarterly check up these to ensure in working condition.

### **B. Alert and warning**

- Will immediately contact the District Control Room for assistance.
- Will ensure that all the staff members remain on duty at the headquarters.
- Will send the officers and the staff assigning them specific duties for the DDMP
- Undertake all the action for the disaster management required to be done by the PWD after receiving instructions from district liaison officer.

### **C. Mitigation and Post Disaster Activities**

- Will follow the instructions of the District Liaison Officer
- Will remain active for search and rescue activities
- Will provide all the available resources and manpower for disaster management.

- Will mobilize the service of technical personnel for the damage survey work to help the district administration
- Will prepare a primary report of damage in the affected area within 12 hrs / 24 hrs looking to the emerging situation
- Will make arrangements for electricity, water, and latrines in the temporary shelters. Will also inspect the approach roads leading to the temporary shelter and repair the same if so required.

### **2.1.13 Agriculture Department**

#### **Preparedness**

- All the details of his subordinate staff with addresses and phone numbers and resources of irrigation for agriculture in all the villages.
- Details of buildings, vehicles and equipments under his control and list of contractors with vehicles and equipments used by them.
- Maps showing details of agricultural resource laboratory, seed center, agriculture training school with statistical data.
- Details regarding agricultural production, extension, seed growth centers, agriculture university campus, training centers etc;
- Action plan regarding the repair/alternative arrangement in case of agricultural production related facilities are disrupted.
- Will prepare the action plans to avail the technical, semi technical and administrative employees along with vehicles from nearby district and taluka offices.
- Will inspect the sub-ordinate offices, other centers and sub-centers under his control, which are damage prone.
- Will prepare a sub-plan for timely and speedy availability of machines and equipments to restoration of the economic activities in case of loss of properties as well as crops.
- Will maintain the departmental equipments such as diesel generators, dumpers, generator, cutters, tree cutters, ladders, ropes, flood lights, shovels, axes, hammers, RCC cutters, cable wires, fire equipments, de-dusting equipments etc; which can be used during emergency and ensure every 3 months those are in working condition.
- Will prepare a list of public properties related to agriculture in the damage prone areas and will in advance make arrangements to lessen the damage.
- Will take due care to see that the emergency services at hospital, shelters, with special reference to agriculture are not disrupted.

#### **B. Alert and warning**

- Will immediately contact the District Control Room and will assist in the work assigned to him as a part of his duty.
- Will ensure that the staff under this control is on duty at the headquarters.
- Will assign the work to his subordinate officers and staff the work to be done regarding agriculture under DDMP and will send them to their sites.
- Will receive instruction from the district liaison officer and will take necessary action.
- Will ensure the availability of resources included in the DDMP and will make due arrangement to get those during emergency.
- Will make groups having vehicles for emergency work and will assign the areas to them.
- Will set up a temporary Control Room for the dissemination of information for emergency work and will appoint a nodal officer.

### **C. Mitigation and Post Disaster Activities**

- Will follow the instruction of the District Liaison Officer.
- Will carry out the duty assigned to him for search and rescue work.
- Will deploy the resources and manpower available to manage the disaster.
- Will review the matters regarding discontinuation of movement for safety measures and will see that it is restarted very soon.
- Will send DMTs with necessary equipments in case the crop is washed away, and if there is water logging in a very large amount.
- Will act in such a way that the human life is restored again speedily and timely in the priority areas.
- Will contact the circle office or central control room if machines equipments, vehicles, man power, technical personnel are required to restore the agricultural activities.
- Will make arrangement to avail the external helps to manage to disaster.
- Will collect the details of loss of crops to send it to the district administration.
- Should have the details of village wise various crops in the district.
- Will prepare a primary survey report of crop damage in the area and will send the same to district control room and also to the administrative head
- Will immediately put the action plan in real action during the emergency.

## **2.1.14 POWER**

### **A. Preparedness**

While preparing a separate plan regarding M.S.E.D.C /Energy Department will prepare the list of available resource as a part of DDMP. It will include the following:

- Details of the staff members with their contact addresses and telephone numbers.

- Maps showing the power stations, sub-stations, Diversification of Power units (DPs), transformers and major electric lines with detail information.
- Other important details like water supply scheme depending on electricity, drainage systems, railway stations, bus-depots, ports, strategically important places, army, air force, navy camps, light houses, major hospitals and for that he will check and ensure of electric supply during emergency.
- Prepare an action plan for repairs / alternative arrangement in the case of electricity disruption as a part of DDMP.
- Inspect at every 3 months the power stations. Sub-stations etc; which are damage prone.
- The, plan should include for timely supply of electric poles, D.Ps, transformers etc; at the time of line disruption.
- To prepare an action plan for immediate procurement of the required tools and equipments for restoration of electric supply on temporary bases.
- To prepare a list of public properties related to M.S.E.D.C, which are in the damage prone areas and will make advance arrangements to minimize the damage.

#### **B. Alert and warning**

- To contact the District Control Room and assist in their work.
- To ensure that all the employees remain present on duty at the taluka head quarter.
- To assign work to all officers/employees related to M.S.E.D.C.
- Will ensure to make available the resources available and will establish contacts for the same to deploy those at the time of emergency, which are included in the DDMP.
- To consult the District Liaison Officer to discontinue the supply in case of damage in the line or for the safety of the people and property.
- To make groups having vehicles for the emergency work and will assign the areas.
- To immediately set up a temporary control room in the office for dissemination of information during the disaster and will appoint a nodal officer from MSED C for this work.

#### **C. Mitigation and Post Disaster Activities**

- To follow the instructions of the district liaison officer.
- To perform the duties assigned for the search and rescue work.
- To deploy the resources and manpower required for the disaster management.
- To dispatch the task forces with necessary equipments to the place where the electric supply is disrupted and ensures that the same is restarted at the earliest.
- Contact the circle office or the Central Control Room of MSED C to procure the machines and equipments, vehicles, manpower, technical personnel for restoration of the electric supply.



- To utilize the external resources and manpower allotted to him in a planned manner for disaster management.
- To immediately undertake the emergency repairing work as mentioned in the action plan.
- To prepare a primary survey report regarding damage in the area and send the same to the district control room and to the own administrative head immediately.
- To make temporary arrangement for electric supply to the places like hospitals, shelter, jail, police stations, bus depots etc; with D.G. sets in.

### **2.1.15 Telephone Department**

#### **A. Preparedness**

- Details of the staff members with their contact addresses and telephone numbers.
- Details of buildings, vehicles and equipments including the contractors and the vehicles and equipments used by them.
- Maps showing the details of telephone exchanges, D.Ps, important telephone lines, hot lines, telex lines, microwave towers with statistical data.
- Details of telephone numbers of water supplies, Control Room, hospitals, drainage system, railway stations, bus depots, strategically important places, ports, Army, Air force, Navy camps, Jail, Police Station and other sensitive places, light houses, major industrial units, and other communication channels which can be used during emergency.
- Action plan for repairs/alternative arrangement in case of disruption of telephone line and microwave towers.
- Inspect the telephone exchanges/sub-exchanges in the damage prone area at every 3 months.
- To appoint an officer not below the rank of telephone inspector to coordinate the district control room during emergency.
- To maintain the equipments such as diesel generators, dumpers, generator, cutters, tree cutters, ladder &, ropes, flood lights, shovels, axes, hammers, RCC cutters, cable wires, fire equipments, etc; which can be used during emergency and ensure every month that these are in working condition.
- To ensure that the telephone lines at the shelters, emergency hospitals, police stations, control room and other places of emergency services, which can be used during disaster, are not disrupted.
- To prepare a list of public properties related to the telephone department which are in damage prone areas and will make arrangements to lessen the damage.

#### **B. Alert and warning**

- To contact the District Control Room and assist in the work.

- To ensure that the staff are on duty at the headquarters.
- To assign work to the subordinate officers as per the DDMP and send them to the sites.
- To receive the instructions from the District Liaison Officer and to do the needful.
- To ensure availability of resources included in the DDMP and establish contacts for the same during emergency.
- To setup a temporary control room for the exchange of information for emergency work and will appoint a nodal officer.

### **C. Mitigation and Post Disaster Activities**

- To follow the instructions of District Liaison Officer.
- To perform the duties assigned for search and rescue work.
- To deploy the resources and manpower available to manage the disaster.
- To review the situation regarding disconnected telephone lines due to safety measures and reestablish the communication network as soon as possible.
- To send the Disaster Management Teams with the necessary equipments for restoration of the telephone lines speedily where the lines are disrupted and to such places, which are strategically important.
- To make arrangements to obtain external help to manage the disaster.
- To prepare a primary survey report of damage and to send the same to the District Control Room and also to the administrative head within 6 hours.
- To arrange for temporary hotline services or temporary telephone connections at the District Control Room, hospitals, shelters, ports, jails, police station, bus depots, etc.
- To immediately undertake the emergency repairing work.
- To make an action plan to avail immediately and timely, telephone poles, D.Ps, transformer to the established the communication system.
- To prepare an action plan to avail temporarily, technical personnel from the nearby district, staff and vehicles from the district office which are not affected in consultation with the district authority.

## **2.1.16 Forest Department**

### **A. Preparedness**

- Addresses of members with telephone numbers.
- Details of veterinary centers, artificial insemination centers, veterinary dispensary, veterinary colleges' buildings, vehicles, mobile dispensaries and equipments under his control and also the details of vehicles and equipments used often by outsource.
- Maps showing the details of area with statistical data.

- Approach roads under forest department and their condition including bridges, causeways, railway crossing etc.
- Inspection of damage prone roads, bridges, check dams, causeways, under forest department
- To inspect periodically the buildings, residencies, high causeways under forest department
- To maintain the equipments available such as sharp instruments, insecticides, diesel generators, dumpers, generator, cutters, tree cutters, ladders, ropes, flood lights, shovels, axes, hammers, RCC cutters, cable wires, fire equipments, dedusting equipments etc; which can be used during emergency and will also ensure that they are in working condition.
- To take care of public shelters, other places to be used for evacuation with primary facilities like water
- To prepare a list of public properties in the damage prone forest areas and will make advance arrangements to lessen the damage.

### **B. Alert and Warning**

- To immediately contact the district control room and will assist in the work.
- To ensure that the staff at the headquarter is on duty.
- To assign the work to be done by the subordinate officers and staff regarding transportation under DDMP and to send them to their sites.
- To arrange for wireless, telephones, manpower, forest guard in advance to disseminate information of the disaster in the damage prone areas and will play a key role with the district administration to warn the public.
- To make in advance arrangement for fuel wood and bamboos for priority areas.

### **C. Mitigation and Post Disaster Activities**

- To follow the instructions of District Liaison Officer
- To carry out the duty assigned for search and rescue work.
- To engage the resources and manpower available to manage the disaster.
- To prepare a primary report of damage for the affected areas.
- To take actions to provide electricity, water and latrine to the temporary shelters in the forest areas.
- To send task forces with vehicles, tree cutters, ropes, flood light, generator in case of closure of roads due to felling of trees.

## **2.1.17 Animal Husbandry**

### **A. Preparedness**

- Addresses of members with telephone numbers.
- Details of veterinary centers, artificial insemination centers, veterinary dispensary, veterinary colleges' buildings, vehicles, mobile dispensaries and equipments and also the details of vehicles and equipments used often by outsource.
- Maps showing the details of animal breeding laboratories, animal vaccination centers, animal husbandry training school with statistical data.
- Details of essential facilities to be provided at sensitive place such as important animal husbandry centers, veterinary college campus, training center etc;
- Arrangement of repairs/alternative arrangements in case the facilities related to animal husbandry and veterinary services are disrupted.
- To make arrangements to necessary medicines, vaccines and other material, for treatment of animals.
- To collect the details of cattle in each village of the taluka, details of safe places for the treatment of animal, milk dairies, other private veterinary doctors and facilities related to it.
- To appoint an employee not below the rank of livestock inspector to coordinate the District Control Room during emergency.
- To maintain the equipments available such as stands to keep animals, sharp instruments, insecticides, diesel generators, dumpers, generator, cutters, tree cutters, ladders, ropes, flood lights, shovels, axes, hammers, RCC cutters, cable wires, fire equipments, de-dusting equipments etc; which can be used during emergency and will also ensure that they are in working condition.
- To see that essential services related to animal husbandry and Veterinary services are not disrupted at the time of emergencies.
- To prepare a list of public properties related to animal husbandry, which are damage prone areas and will make advance planning to lessen the damage.

## **B. Alert and Warning**

- To immediately contact the District Control Room and will assist in the work.
- To ensure that the staff is on duty at the headquarters
- To assign the work to be done to the subordinate officers and staff and send them to their sites.
- To receive instructions from the district liaison officer and do the needful.
- To ensure the availability of resources included in the DDMP and will make necessary arrangements to obtain those during emergency.
- To consult the Liaison Officer to prevent the probable epidemic among the cattle and also for the safety measures.
- To make groups having vehicles for emergency work and will assign the areas to them.
- To set up a temporary control room for the exchange of information for emergency work and will appoint a nodal officer.

### **C. Mitigation and Post Disaster Activities**

- To follow the instruction of the District Liaison Officer.
- To carry out the duty assigned to him for search and rescue work.
- To deploy the available resources and manpower to manage the disaster.
- To review the matters to restart the milk collection activity where it has been closed for security measures.
- To send DMTs with necessary equipments in case of cattle death are there in the affected areas for the disposal of carcass with a view to restoration of public life and result oriented work. To arrange to treat the injured cattle.
- To contact the State Director of A.H. if additional equipments vehicles, manpower, technical personnel etc; are required for restoration of the cattle related activities.

### **2.1.18 Transport**

#### **A. Preparedness**

- Details of the staff with contact numbers, details of bus drivers, conductors, mechanical and supervisory staff.
- Details of location of buses in all the areas of the district available round the clock.
- Details of fuel arrangements for buses for emergency work.
- Do's and Don'ts to be observed strictly during emergencies and details of priorities should be given to the staff.
- Arrangement for additional buses for evacuation of people from the affected areas.
- Details of buildings, vehicles and equipments under his control and list of contractors with vehicles and equipments used by them.
- Map showing S.T. depots; pick up stand, control point, S.T. garages and important routes with equipments of communication, telephone line, telex lines, megaphone, amplifiers with statistical data.
- Details of important telephone numbers of water supply schemes, control room hospitals, drainage system, railway stations, bus depots, strategically important places, ports, Army Air force Navy camps and other sensitive places, light houses, major industrial units, and other communication channels which can be used during emergency/calamity.
- Action plan regarding repairs/alternative arrangement in case of disruption of transport services.
- Alternative routes for the transportation and road network.
- To inspect the damage prone S. T. Depots, pick up stand, control points, garage etc; at the frequency of every 3 months.

- To plan out for restoration of goods transportation in case of damages observed, to the buses & parcel van.
- To prepare an action plan to procure temporary buses, the technical personnel from the nearby district which are not affected.
- To maintain the equipments available such as cranes, diesel generator, earth over 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.
- To take due care to see that the transportation at shelters and emergency hospital is not disrupted during calamities.
- To 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.

### **B. Alert and warning**

- To set up a temporary special control room and information center at the main bus station.
- To immediately contact the district control room and will assist in the work.
- To ensure that the staff at the headquarter is on duty.
- To assign the work to be done by the subordinate officers and staff regarding transportation under DDMP and to send them to their sites.
- To receive instructions from the district liaison officer and will do the needful.
- To ensure for not allowing passenger buses to move out of the S.T. Depots during final warnings of cyclone, flood etc; to take safety measures for passengers who cannot return back to their home.
- To ensure the availability of resources included in the DDMP and will make due arrangements to get those during emergency.
- To consult the Liaison Officer to close the transportation in the damage prone areas for the safety of the people and the property.
- To make groups having vehicles for emergency work and will assign the areas to them.
- To set up a temporary control room for the dissemination of information for emergency work and will appoint a nodal officer.
- To make available the sufficient number of S.T. buses to the state administration for the evacuation of the people to safe places from the disaster prone areas.
- To assist the administration to send the messages of warning to the remote areas through the drivers/conductors on transport routes.

### **C. Mitigation and Post Disaster Activities**

- To follow the instructions of District Liaison Officer.
- To carry out the duty assigned for search and rescue work

- To engage the resources and manpower available to manage the disaster.
- To review the matter regarding closing of movement of buses for safety reason and see that those are restarted very soon.
- To send DMTs with necessary equipments if the transportation is disrupted.
- To contact the District Control Room if additional equipments, vehicles, manpower, technical personnel, which are required to restore the transportation related activities.
- To prepare a primary survey report on damage in the area and will send it to the district control room and also to the administrative head within 6 hours.
- To make temporary arrangement of transportation for control rooms, hospitals, shelters, bus depots etc.
- To immediately undertake repairs needed at the bus stations.
- To collect the details of roads, damaged and will get them repaired in co-ordination with competent authority and will restore the bus services.

After consultation with the concerned department's nodal officers, similar tables like Table C 2.1.1, C 2.1.2.....etc, will be developed for all the concerned departments as discussed above, mentioning the specific roles and responsibilities, phase wise (before, during, after and non disaster time).

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

Hazard Specific SOPs and checklists for all concerned departments, authorities, designated disaster management teams, committees and the sub committees at district and sub district level, will be prepared and maintained.

### DISASTER SPECIFIC SOP'S

#### **2.2.1 FIRE:**

**POWER DEPARTMENT:** It is one of the main reasons for fire during summer, so:

- Proper tightening of wires (not to be loose)
- Any sort of self connection made by people through electricity poles to be declared as unauthorized.

**POLICE DEPARTMENT:**

Should ensure that anti social elements are not present in the village who can indulge in any kind of notorious activities which might lead to fire accidents.

**GRAM PANCHAYAT:**

Should be equipped with water tankers as well as fire extinguishing equipments.

### **2.2.2 DROUGHT:**

#### MUNICIPALITY

- Stop dams, check dams and reservoirs must be constructed in order to store and use the Monsoon water.
- Lakes must be constructed and maintained so that the water from monsoon can be collected and used.
- Rain water harvesting should be taken up so as to prevent wastage of the monsoon water making its recollection possible and also for maintaining the ground water levels.

#### AGRICULTURE DEPARTMENT

- Awareness regarding draught resistant crops should be created among the farmers by the district agriculture officer and the committee formed in this regard will keep them informed about the draught related activities to be taken care of.

### **2.2.3 FLOODS:**

#### POLICE/ HOME GUARDS/ CIVIL DEFENSE:

- To have a search and rescue team to help people evacuate the affected area.
- Training sessions should be conducted for such teams in order to develop a better understanding that can help in action during the time of emergency.
- The teams should go through mock drills to be able to deal with any kind of disaster so that they can successfully save both life and property.
- These teams should be provided with the required resource inventory (JCB, Motor Boat etc.) that can help them in search and rescue.

### **2.2.4 EARTHQUAKE:**

#### MUNICIPALITY

- Identification, Demolition and Reconstruction of old buildings present in the district, so as to avoid any major accident.



- New buildings must be constructed keeping in mind the new norms set for construction and the degree of damage and its estimated amount should be calculated to be submitted with the district headquarters.

## HEALTH DEPARTMENT

- The doctors and the paramedical staff of district hospital and the other primary health centers should be trained in first aid and allied activities.
- A medical emergency team should be formed which can deal with any kind of serious consequences that may occur during a disaster.
- In case of extreme conditions the medical department should have a plan to establish a temporary PMC.
- The health department should have a plan setup to bring down doctors from outside when and where necessary.

### **2.2.5 ROAD ACCIDENTS:**

- Identifying the spots where the accidents took place in the past, sign boards with fluorescent paint should be put up at those places.
- At those places where the probability of occurrence of accidents is more, there speed breakers can be built in order to make the vehicles reduce the speed.
- The residents of the habitation proximate to the national highway or any such big roads have to be made aware of the possibilities of such accidents and have to be warned.
- Strict rules must be passed for ensuring people to wear helmets if on 2 wheelers and seat belts if on 4 wheelers. Also police to check if people are consuming alcohol while driving, should be stationed at few places.
- A constant patrolling on the National highways and state highways should be ensured and followed rigorously.
- It should be ensured that traffic rules are obeyed by everyone.
- It should be ensured that the vehicles that are used are in proper working condition and the drivers are licensed.
- The tollgate has an ambulance available all day and night. So immediately when the accident takes place it has to be called and summoned to the place of accident.
- Whenever required the ambulances from the district hospital can be summoned depending upon the need of the time.
- There is an emergency ward in the district hospital for 24\*7. So this service is availed to rescue the lives of the patients.

- At the same time, the nearest police chowki should be informed about the mishap and the family members of the injured or the dead should be summoned to the place where the victims are taken.

### C 3 Financial Provisions for Disaster Management

This section will focus on the financial provisions and allocations made at district level in preparing and executing the disaster management plan. All relevant Government Orders (GOs) issued from time to time, contributing to the same, will find a reference here.

(All funds are received as mentioned under RBC 64)

**C 3.1 District Disaster Response Fund** will basically cover the disaster response, relief, and rehabilitation part. While sanctioning this amount, I should be kept in mind that this fund should be sanctioned without much delay as the recovery of a lot of families depends on this fund.

**C 3.2 District Disaster Mitigation Fund** will basically cover the disaster mitigation and preparedness activities. This fund should be given well in advance and on a yearly basis. Once given, this fund should be used in keeping the equipments in a good condition and also purchasing new equipments. Proper inspection of these equipments should be done. Regular “mock drills” are the best way to keep a proper check on the condition of the equipments.

### C 4 Coordination mechanisms with other stakeholders

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

The mapping exercise will be carried out in detail, at the district level, including the following stakeholders:

(Along with the mapping of stakeholder, making them aware of their role before/during/after disaster is a must. At present none of the stakeholder has any defined role.)

##### 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. All those information will also be covered here in this section.

#### **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. The Role of NGOs and CBOs in disaster management will be elaborated stage wise (preparedness, response and recovery) in this section.

**(List of NGOs Procured)**

#### **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. Details of all these institutions and allied information will be provided here.

**(List not Procured)**

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

Academic institutions within the district and also outside the district could help with subject specific expertise for disaster management planning. This section will document all those relevant information which will be used as reference in future.

**(List Procured)**

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

There are many international humanitarian organizations that support government agencies worldwide during emergencies. These agencies as per their mandates support during the different phases of the disaster management cycle. In this section, a comprehensive list of all the concerned international humanitarian organizations will be prepared, with contact details.

#### **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 panchayats 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 Program 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/Air-force 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]**

During emergencies district may require support from other adjoining districts, which are not affected by disasters. For this the Distt. EOC head can seek help from other districts through Divisional Commissioner or State EOC. This portion will elaborate the issues pertaining to mutual support, understanding and coordination at the inter district level.

(As reported by the Nodal Officer, Inter District Cooperation & Communication is one of the major issue/problem. In this regards she suggested that:

- i) Contact of the Neighbouring district authorities who shall be contacted at times of need should be made available to the district authorities.
- ii) Ample power should be given for both (the requesting & the responding district authorities) to work on the coordination part at the earliest.

- iii) Neighbouring districts should be having orders to provide all the possible support to the district facing any kind of disaster. Although this has to be done only when the district authorities of the affected district ask for the support.
- iv) For extreme cases, Point of Contact from Army/Navy/AirForce should also be given to the District Authorities.

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

This section will elaborate the mutual coordination, and clarity of role amongst intra district nodal agencies at the district, and sub district level (including Block level headquarters), with reference to disaster management functions.

### **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. That is, if a job is done well every day, it is best done by that organization in an emergency also.

- 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.

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.

## **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.
- Under strong dining table, bed
- Against an inside wall
- Away from where glass could shatter around windows, mirrors, pictures, or where heavy bookcases or other heavy furniture could fall over
- 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**

- 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.
- 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**

- 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.
- Conduct a week-long series on locating hazards in the home.
- Work with local emergency services and officials to prepare special reports for people with mobility impairments on what to do during an earthquake.
- Provide tips on conducting earthquake drills in the home.
- 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.

