

District Disaster Management Plan [DDMP] Template

For School of Good Governance & Policy Analysis,
Bhopal

Government of Madhya Pradesh,

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ACKNOWLEDGEMENT

I have been able to prepare this project with the data from various sources. However, it would not have been possible without the kind support and help of many individuals and organization. I would like to extend my sincere thanks to all of them.

I am highly indebted to the team Seeds Technical Services Mr. Amit Tuteja, Ms. Shivangi Chavda and Mr. Sunish Jose for their guidance and constant supervision as well as for providing necessary information regarding the project & also for their support in completing the project.

I would like to express our gratitude towards SGPA administration Mr. Akhilesh Argal, Mr. Haider Rizvi and Mr. Gaurav Khare for giving me this opportunity and a project of value, their kind co-operation and encouragement helped me in completion of this project.

I would like to express my special gratitude and thanks to Mr. Dilip Kr Singh, Disaster Management Institute, Bhopal for his invaluable support for providing me important documents and maps.

My thanks and appreciations also go to District administration of Hoshangabad and their employees in developing the project who have willingly helped me out with their abilities.

TABLE OF CONTENTS OF DISTRICT DISASTER MANAGEMENT PLAN

A . GENERAL	8
1. Overview	8
1.1 District Profile	8
1.1.1 Location and Administrative divisions	8
1.1.2 Geography and Topography	9
1.1.3 Demography and Socio Economics	10
1.1.4 Climate and Weather	10
1.1.5 Health (Medical)	11
1.1.6 Education	12
1.1.7 Agriculture and Land use	14
1.1.8 Housing patterns	15
1.1.9 Industrial set ups	15
1.1.10 Transport and Communication Network	16
1.1.11 Power stations and Electricity installations	16
1.1.12 Major historical, religious places, tourist spots	17
1.2 Scope and Ownership of District Disaster Management Plan	17
1.2.1 Authority of the Plan	17
1.2.2 Responsibility & Accountability of the Plan	17
1.3 Purpose of the Plan	18
1.4 Objectives	18
1.5 Approach	18
2. Institutional Arrangements	18
2.1 District Disaster Management Authority	18
2.2 District Disaster Management Committee	18
2.3 District Emergency Operations Center	19
2.4 District Disaster Information Management System	19
2.5 Urban Area Disaster Management Committee	19
2.6 Block Level Disaster Management Committee	20
2.7 Gram Panchayat / Village Disaster Management Committee	20
B. HAZARD, VULNERABILITY, CAPACITY ASSESSMENT AND RISK PROFILING	21
1. Hazards Assessment	21
1.1 History of past disasters	21
1.2 Major applicable hazards	22
1.3 Seasonality of hazards	22
2. Vulnerability Analysis – [Physical , Social , Economic ,Natural and Institutional]	22

3. Capacity Analysis - [Physical , Social , Economic , Institutional, Natural, Resources]	23
4. Risk Analysis	24
4.1 Potential Impacts of applicable hazards and existing vulnerabilities	24
4.2 Risk Profiling of the district	25

C. DISTRICT LEVEL DISASTER MANAGEMENT PLANNING 26

1. District Action Plans	26
1.1 Risk Mitigation Plan	26
1.1.1 Scope of Integrating Risk Reduction in Development Schemes	26
1.1.2 Training & Capacity Building	27
1.1.3 Community Initiatives	27
1.1.4 Risk Management Funding	28
1.2 Preparedness Plan	28
1.2.1 Preparedness before response	28
1.2.2 Pre-disaster Warning, Alerts	28
1.2.3 Evacuation preparedness	29
1.2.4 Organizing mock drills	29
1.3 Response Plan	30
1.3.1 Disaster Emergency Response Force	30
1.3.2 Crisis Management direction and coordination	30
1.3.3 Incident Command System	30
1.3.4 Rapid damage assessment and reporting	31
1.3.5 Search and rescue	33
1.3.6 Medical response	33
1.3.7 Logistic arrangements	34
1.3.8 Communications	34
1.3.9 Temporary shelter management	34
1.3.10 Water and Sanitation	35
1.3.11 Law and order	35
1.3.12 Public grievances/ media management	35
1.3.13 Animal care	36
1.3.14 Management of deceased	36
1.3.15 Civil Defense and Home Guards	36
1.3.16 Role of Private Security	36
1.3.17 NGOs and Voluntary organizations	36
1.3.18 Relief management planning	37
1.3.19 Media management	37
1.3.20 Fire Services	37
1.4 Recovery and Rehabilitation Plan	38
1.4.1 Restoration of basic infrastructure	38
1.4.2 Reconstruction of damaged buildings/ social infrastructure	38

1.4.3	Restoration of livelihood	38
1.4.4	Psycho-social interventions	38
1.5	Cross cutting elements	39
1.5.1	Community Based Disaster Management	39
1.5.2	Needs of the Special vulnerability Groups	39
1.5.3	Addressing climate induced anthropogenic issues	39
2	Standard Operating Procedures:	40
2.1.1	General SOPs for each line department	
2.1.2	Hazard Specific SOPs	41
2	Financial Provisions for Disaster Management	41
2.1	District Disaster Response Fund	41
2.2	District Disaster Mitigation Fund	41
3	Coordination Mechanisms with Other Stakeholders	42
3.1	Mapping of Stakeholders in the District	42
3.1.1	Public and Private Sectors	42
3.1.2	NGOs and CBOs	42
3.1.3	Religious Institutions	42
3.1.4	Academic Institutions	43
3.1.5	International Humanitarian Organizations	43
3.2	Responsibilities of the Stakeholders	43
4	Inter- District Coordination Mechanisms – [Standard Operating Procedures / Protocols]	43
5	Intra- District Coordination Mechanisms – [with Block Headquarters]	43
6	Dissemination of the Plan	44
6.1	Plan Evaluation	44
6.2	Plan Update	44
7	Annexure:	45
7.1	Important Contact Numbers	45
7.2	District profile support files	45
7.3	Inventory of resources	45
7.4	Media related detailed information	45
7.5	Do's and Don'ts of potential hazards	45
7.6	Detailed maps	45

Structure of District Disaster Management Plan (DDMP)

A . GENERAL

A 1 Overview

A 1.1 District Profile

Hoshangabad district lies in the central Narmada Valley and on the northern fringe of the Satpura Plateau. It lies between the parallels of 22 degree 15 minute and 22 degree 44 minute east. In shape, it is an irregular strip elongated along the southern banks of Narmada River. Its greatest length from south-east to north-east is 160 kms.

A 1.1.1 Location and administrative divisions

Table A 1.1.1

Location (in degrees) -	Latitude – 22° 44.56' - 22°46.10'		
	Longitude - 77°43.37' - 78°32.20'		
District Area (in sq. kms.) -	6707 sq.km.		
Administrative information-			
No. of sub divisions	4		
No. of Tehsils:	8		
No. of Municipal Boards:	4		
No. of Blocks:	7		
No. of Gram Panchayats:	450		
No. of Villages:	929		
No. of Police Chowkees : 7	Umardha (bankhedhi), Semri harchadan (sohagpur) bagra tawa (babai), saandiya (pipariya) matkuli, itarsi(kesla), banapura		
No. of Police Stations: 15	Itarsi	Hoshangabad	Sivpur
	Pipariya	Babai	Pachmarhi
	Sohagpur	Pathrota	Seoni malwa
	Bankhedhi	Rampur	Kesla
	Tawa nagar	Gurra	Dolariya
No. of Post Offices:	Main office=1,Branch offices=154,Primary office =24		
Name of adjacent districts:	Chindwara in south-east, Raisen in north-east, Sehore in north, Narsinhpur in east, in the south Betul, in west, Khandwa in south-west, Hoshangabad in north-west.		

*Source: Handbook 2010

A 1.1.2 Geography and Topography

Madhya Pradesh is located in the geographic heart of India. The state straddles the Narmada River, which runs east and west between Vindya and Satpura ranges, these ranges and the Narmada River are the traditional boundaries between North and south of India.

Table A 1.1.2

Name of rivers and lakes:	Narmada, Tawa. small-Dudhi and Denwa
No. of dams, embankments:	4, Barna in Raisen, Tawa in Hoshangabad and Bargi in Jabalpur and Sarni dam
Name of existing mountains:	Satpura range
Highest elevation (in meters):	4354 sq.km
Forest cover in the district	2229.74 sq.km

* Source: Handbook 2010

A 1.1.3 Demographic and socio economics

The total number of households in Hoshangabad are 2, 75,650. The total population according to the latest records is 1240975, 648970 being men and 592005 being women. Population density comes to around 223 people per sq km. The total numbers of APL families are 157161, BPL 81043 and AAY ones are 13056. Majority of the people at Hoshangabad take up agriculture as their main occupation and labor, masonry and factory work as secondary occupation.

Table A 1.1.3

Total household:	275650			
Total population:	1,240,975			
Male:	648,970			
Female:	592,005			
Population density:	185			
Income - APL and BPL Families:	Tehsil	APL	BPL	AAY
	Hoshangabad	26007	11433	1315
	Pipariya	23037	13392	2637
	Seoni Malwa	28195	11200	2445
	Sohagpur	20487	9776	1752
	Babai	14383	10411	1803

	Bankhedi	12958	9284	1518
	Itarsi	29120	14597	1493
	Dolariya	2974	950	93
Occupation - Main occupation of people:	Agriculture			
Secondary occupation of people:	Daily wage earners, labourers in factories			

* Source: department of food and department of employment.

A 1.1.4 Climate and weather

The climate of Hoshangabad district is normal. All the seasons come in the district. An average height from the sea level is 331 mts. and average rain fall is 134 cms. The average maximum and minimum temperatures are 32 deg.C and 19 deg.C respectively. Overall, the climate of the district is neither hotter nor cooler except the winter season of the Pachmarhi.

Table A 1.1.4

Rainfall-	
Total annual rainfall of last year:	1311.7 cu.mm
Average rainfall (last 10 years):	1303.125 cu.mm
Temperature-	
Average Maximum Temperature:	43
Average Minimum Temperature:	11
Demarcation of crucial seasons-	Using data for last 40 years ,it is evident that every 10 years there is at least one severe flood in the district
Months of excess rainfall, leading to flood situation:	July and August
Months of water scarcity, leading to drought situation:	N.A

* Source: meteorological department and relief department

A 1.1.5 Health (Medical)

15 Primary Health Centers, 7 Community Health Centers and 152 Sub-Health Centers. Besides these, there are 6 Homeopathic Centers and one is Unani Hospital along with 39 Ayurvedic Hospitals in the district. Besides these hospitals and dispensaries, the selected private nursing home and hospitals are also available in the district. One military hospital is also available in the Itarsi town and Pachmarhi.

Table A 1.1.5

Name of block	No. of district hospital:1			No. of Primary Health Centers:2 Dolariya, Misrodh	
Hoshangabad	No. of medical officers	No. of nurses, compounders	No. of beds:	No. of medical officers	No. of nurses, compounders
	16	63,2	300	2,1	(0,0)(0,1)
Bankhedhi	No. of Community Health Centers (CHCs): 1			No. of Primary Health Centers:2 Umardha, Tangna	
	No. of medical officers	No. of nurses, compounders	No. of beds:	No. of medical officers	No. of nurses, compounders
	3	8,2	50	2,0	(0,0) (0,1)
Seoni malwa	No. of Community Health Centers (CHCs): 1			No. of Primary Health Centers:3 Kaamthi, Shivpur, Babadiya bhau	
	No. of medical officers	No. of nurses, compounders	No. of beds:	No. of medical officers	No. of nurses, compounders
	4	3,2	50	1,0,1	(0)(0)(1)
Pipariya	No. of Community Health Centers (CHCs): 2			No. of Primary Health Centers:2 Saandiya, Semri	
	No. of medical officers	No. of nurses, compounders	No. of beds:	No. of medical officers	No. of nurses, compounders
	7,1	(18,3)(1,0)	100		(0,0)(0,1)
Babai	No. of Community Health Centers (CHCs): 1			No. of Primary Health Centers:1 Bagratawa	
	No. of medical officers	No. of nurses, compounders	No. of beds:	No. of medical officers	No. of nurses, compounders
	3	8,4	50	2	0,1

Sohagpur	No. of Community Health Centers (CHCs): 1			No. of Primary Health Centers:1 Shobhapur)	
	No. of medical officers	No. of nurses, compounders	No. of beds:	No. of medical officers	No. of nurses, compounders
	3	6,0	50	1	0,0
Kesla	No. of Community Health Centers (CHCs): 1 and JSR Itarsi			No. of Primary Health Centers:2 Gurra, Jamaani	
	No. of medical officers	No. of nurses, compounders	No. of beds:	No. of medical officers	No. of nurses, compounders
	1,10	0,(25,2)	50,100	1,0	(1,0) (0,1)

* Source: Health department

Table A 1.1.5

Block name : hoshangabad	No. of Hospitals: 1 district hospital No. of Primary Health Centers (PHCs): 2(Dolariya, Misrodh)	No. of medical officers: 16 (working) No. of nurses, compounders: 63 nurse,2 compounder No. of beds: 300 No. of ambulances: 3 No. of medical officers: 2,1 No. of nurses, compounders: (0) (0,1) No. of beds:
Block name : Bankhedi	No. of Primary Health Centers (PHCs): 2(Umardha, Tangna) No. of Community Health Centers (CHCs): 1 No .of trained first aid volunteers in the block: 0	No. of medical officers: 2,0 No. of nurses,compounders: 0,1 No. of beds: No. of medical officers: 3(working) No. of nurses,compounders: 8 ,2 No. of beds: 50
Block name : Seoni malwa	No. of Primary Health Centers (PHCs): 3(Kaamthi,Shivpur,Babadiya bhau) No. of Community Health Centers (CHCs): 1	No. of medical officers: 1,0,1 No. of nurses, compounders: (0),(0,0,1) No. of beds: No. of medical officers: 4(working) No. of nurses, compounders: 3,2

		No. of beds: 50
Pipariya	<p>No. of Primary Health Centers (PHCs):2(Saandiya,Semri)</p> <p>No. of Community Health Centers(CHCs):2(Pipariya, Panchmari)</p> <p>No .of trained first aid volunteers in the block: 0</p>	<p>No. of medical officers:</p> <p>No. of nurses, compounders:</p> <p>No. of beds:</p> <p>No. of medical officers: 7,1 (working)</p> <p>No. of nurses, compounders: (18,3) (1,0)</p> <p>No. of beds: 100</p>
Babai	<p>No. of Primary Health Centers (PHCs): 1(Bagratawa)</p> <p>No. of Community Health Centers (CHCs): 1</p> <p>No .of trained first aid volunteers in the block: 0</p>	<p>No. of medical officers: 2</p> <p>No. of nurses, compounders:0,1</p> <p>No. of beds:</p> <p>No. of medical officers: 3(working)</p> <p>No. of nurses, compounders: 8 nurse, 4 compounder</p> <p>No. of beds: 50</p>
Sohagpur	<p>No. of Primary Health Centers (PHCs): 1(Shobhapur)</p> <p>No. of Community Health Centers (CHCs): 1</p> <p>No .of trained first aid volunteers in the block: 0</p>	<p>No. of medical officers:1</p> <p>No. of nurses, compounders:0,0</p> <p>No. of beds:</p> <p>No. of medical officers: 3(working)</p> <p>No. of nurses, compounders: 6,0</p> <p>No. of beds: 50</p>
Kesla	<p>No. of Hospitals: JSR Itarsi</p> <p>No. of Primary Health Centers (PHCs):2(Gurra, Jamaani)</p>	<p>No. of medical officers: 10</p> <p>No. of nurses, compounders: 25,2</p> <p>No. of beds: 100</p> <p>No. of medical officers: 1,0</p> <p>No. of nurses, compounders: (1,0)(0,1)</p> <p>No. of beds: 50</p>

	No. of Community Health Centers (CHCs): 1(purani itarsi) No .of trained first aid volunteers in the block: 0	No. of medical officers: 1 No. of nurses, compounders: 0 No. of beds: 50
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A 1.1.6 Education

Schools of all cadres are present across the Hoshangabad district. Enrolment of students in every level block wise is provided in the table below. There is 1 polytechnic college in the district and 9 more colleges that come under Bhopal University.

Table A 1.1.6

Literacy rate: Blocks: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Seoni malwa</td></tr> <tr><td>Itarsi</td></tr> <tr><td>Hoshangabad</td></tr> <tr><td>Babai</td></tr> <tr><td>Sohagpur</td></tr> <tr><td>Pipariya</td></tr> <tr><td>Bankhedi</td></tr> </table>	Seoni malwa	Itarsi	Hoshangabad	Babai	Sohagpur	Pipariya	Bankhedi	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Female</th> <th>Male</th> <th>Total</th> </tr> </thead> <tbody> <tr><td>38799</td><td>61555</td><td>100354</td></tr> <tr><td>64455</td><td>91761</td><td>156216</td></tr> <tr><td>44768</td><td>65069</td><td>109837</td></tr> <tr><td>22080</td><td>39050</td><td>61130</td></tr> <tr><td>23342</td><td>42125</td><td>65467</td></tr> <tr><td>35284</td><td>55786</td><td>91070</td></tr> <tr><td>18735</td><td>33030</td><td>51765</td></tr> </tbody> </table>	Female	Male	Total	38799	61555	100354	64455	91761	156216	44768	65069	109837	22080	39050	61130	23342	42125	65467	35284	55786	91070	18735	33030	51765
Seoni malwa																																
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23342	42125	65467																														
35284	55786	91070																														
18735	33030	51765																														
No. of Secondary schools: Babai: Seoni malwa: Pipariya: Bankhedi: Kesla: Hoshangabad: Sohagpur: No. of High/Middle schools: Babai:	(Govt.) 18 20 13 7 28 28 10 67																															

Seoni malwa:	104
Pipariya:	69
Bankhedi:	58
Kesla:	76
Hoshangabad:	83
Sohagpur:	75
No. of Primary schools:	
Babai:	154
Seoni malwa:	236
Pipariya:	159
Bankhedi:	144
Kesla:	177
Hoshangabad:	157
Sohagpur:	167
No. of Anganwaris:	1540
No. of Other colleges:	9
Total (Aprox.) Students Strength in all the educational institutions:	176160

* Source: education department

A 1.1.7 Agriculture and Land use

The major crops grown in Hoshangabad are Soya bean, Jowar, Maize and Wheat. The cropping seasons are Kharif and Rabi based on the summer and winter times of cropping. The land is classified into uncultivated or barren land, cultivated and pastures land which account to 300.9, 540.89 and 263.21 sq km respectively. The soil in Hoshangabad is medium, deep black soil and it comes under the Malwa zone.

Table A 1.1.7

Cropping pattern -	
Type of major crops:	Soybean in kharif season and wheat in rabi season
Cropping seasons:	Kharif and rabi season

Land classifications- Forest land: Barren & Uncultivated land: Cultivated land: Pasture land:	807.47 227.6 and 300.9 540.89 263.21
Soil classifications Recurrent flood hit area:	Generally Medium and deep black soil. Geotechnically, the town is settled on thick alluvium which is a very thick layer of sand mixed with clay and silt- which is not very compact and quite loose. All low lying areas along the banks of Narmada

* Source: agriculture and soil department

A 1.1.8 Housing Pattern:

Type of housing construction, material used in housing, types of flooring etc.

1. A Type Adobe, Field stonemasonry, unburnt brick walls.
2. B Type Burnt Brick Houses.
3. C Type RCC and framed structure.
4. X Type Others (Light building material GI sheet, Asbestos sheets).

Most of the houses in the Hoshangabad district are Pucca houses made up of RCC/Brick and the most common type of flooring is G, G+1.

Table A 1.8

Housing pattern- Type of housing construction: Type of material used: Flooring types: (Ground and above)	Kuccha/ pucca houses RCC / Brick G, G+1, G+2
---	--

* Source: municipal and revenue department

A 1.1.9 Industrial set ups

In the district, there is only one industry namely Security Papers Mill, Hoshangabad which is functioning under the Ministry of Finance, Government of India. Other than this some other units working are Ordinance Factory, Itarsi which works under Ministry of Defense, Government of India and Railway Engineering Factory, Diesel Shade, Oil Federation (manufacturing plant), Banapura. The main trades in the district are Handicraft, Silk, Leather, Pulses etc. Apart from these, the main business deals in the delivering of Sand and Tiles which come from river Narmada.

Table A 1.1.9

Total no. of industries (Govt., Semi Govt. and Pvt),	
a) No. of Major Accident Hazard Units/ Polluting industries/ Industrial Areas:	SDM and Ordinance factory The Bombay Burmah Trading Corpn. Ltd., Itarsi
Total workforce involved in these industrial units:	1209 in SDM
b) No. of Medium industries :	8
Total manpower involved in these units:	54
c) small scale industries :	316
Total manpower involved in these units:	786
Any major accident occurred in any of the industrial units (Loss of life >10, or Financial loss > 1 Crore).	N.A

* Source: Department of industries

A 1.1.10 Transport and communication network

Hoshangabad is freely connected by road and rail from the state capital, Bhopal and it is about 70 kms. away from it. It is connected by rail with all major cities of the state. One of its tehsil namely Itarsi is linked with all major cities of the country due to main railway junction of the central railway, which is 18 kms. far away from the district head-quarter. From Itarsi, you can also move to Pachmarhi by road, which is one of the most popular tourist spot of the district.

Table A 1.1.10

<p>1) Transport Connectivity of block Hoshangabad w.r.t. following networks:</p> <p>a) By Road</p> <p>b) By Rail</p> <p>c) By Air</p>	<p>District and village roads</p> <p>1(Hoshangabad)</p> <p>Bhopal airport</p>
<p>2) Transport Connectivity of block Kesla w.r.t. following networks:</p> <p>a) By Road</p> <p>b) By Rail</p>	<p>District and village roads</p> <p>1(Itarsi)</p>
<p>3) Transport Connectivity of block Pipariya w.r.t. following networks:</p> <p>a) By Road</p> <p>b) By Rail</p>	<p>District and village roads</p> <p>1(Pipariya)</p>
<p>4) Transport Connectivity of block Bankheddi w.r.t. following networks:</p> <p>a) By Road</p>	<p>District and village roads</p>
<p>5) Transport Connectivity of block Sohagpur w.r.t. following networks:</p> <p>a) By Road</p>	<p>District and village roads</p>
<p>6) Transport Connectivity of block Seoni malwa w.r.t. following networks:</p> <p>a) By Road</p>	<p>District and village roads</p>
<p>7) Transport Connectivity of block Babai w.r.t. following networks:</p> <p>a) By Road</p>	<p>District and village roads</p>
<p>8) Communication network</p>	<p>yes</p>

i) No. of wireless stations in the respective blocks	yes
ii) Availability of telephone, mobile services in each block	yes
iii) Availability of internet facility in the blocks	0
iv) No. of HAM Radio Stations in the blocks	

*Source: transport department, police control room and BSNL office

A 1.1.11 Power stations and electricity installations

Table A 1.1.11

List of sub-power stations in the district:	49
Electricity outreach in the district:	902 villages
Available sources of electricity in district, like DG sets etc:	0

* Source: electricity and power department

1.1.12 Major historical, religious places, tourist spots

Table A 1.1.12

List of religious centers in the district: Ghats along the river Narmada	Average presence of visitors per day Around 1-1.5 lac people on amavasya and purnima days every month.
List of the tourist spots in the district: Pachmarhi hill station.	During season: 4000 tourists per day. Off season: 1000-1500 tourists per day.

* Source: homeguard department and NIC portal

(SEEDS will take lead for the portion 1.2 to 1.5)

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:

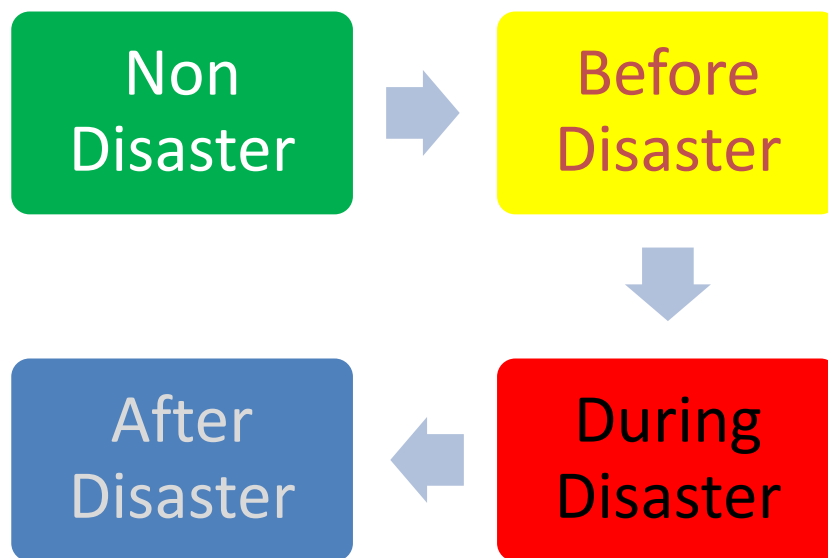
- Assess all risks and vulnerabilities associated with various disasters in the district
- Promoting prevention and preparedness by ensuring that Disaster Management (DM) receives the highest priority at all levels in the district.
- Prevention and minimization of loss of human lives and property by 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

This section will cover the basic structure for institutional arrangements, as mandated by the DM Act 2005, including the broad functions of DDMA, DEOC, DDMAC/ DDMC/ BDMC/ GPDMC etc and its inter linkages with upward and downward (state level and Block level). The section will also throw light on the role of the key entities pertaining to the emergency response functions, and will also address the modalities part, as mandated by Madhya Pradesh State Disaster Management Policy 2011.

A 2.1 District Disaster Management Authority (DDMA)

Table A 2.1

Date of inception of DDMA	Not formed yet : members proposed
Members of DDMA, their name, along with actual designations, and current position in DDMA like Chairman, Secretary or Member etc	Chairman: District Collector Secretary: Chairman, Zilla Panchayat Members: Upper Collector, Hoshangabad Police Commissioner, Hoshangabad Chief Medical Officer, Hoshangabad Karya paalan Yantri, Lok nirman vibhag District Commandant, Hoshangabad.
Roles and responsibilities of DDMA DDMA roles:	<ul style="list-style-type: none"> • 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

	<p>circumstances of the district and prevailing gaps in institutional capacity and resources of the district</p> <ul style="list-style-type: none"> • 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.
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*Source: DDMA ACT

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

DDMC has been formed on July22,2011 formed

Table A 2.2

Functionaries	Designation	Office address	Residence Address	Office contact	Residence contact	Mobile no
Nishant wadwade	Chairman, DDMC	Collector office	Collector house malakhedi road	252800	252900	9425019888
J.N. Shivhare	Adhikshan yantri(Tawa)	office Adhikshan yantri, opposite van vibhag	F-2 civil lines	252365	253886	9826652138
S L Karwadia	Adhikshan yantri, member	Adhikshan yantri,MP region electricity distrbution co. Rasulia	B-1 MPEB colony rasulia	255594	255089	9406902469
Shriman. Shukla	CMO,member	District panchayat	E-2 panch bangla malakhedi road	253362	253361	9424422223
Ashok Bajpayee	Upper collector, member	Collector office	C-1 panch bangla malakhedi road	252145	253354	9425381037
Sapna Shivale	Sdm	office of anuvibhagya adhikari	D-3 panch bangla malakhedi road	252106	253354	9425190552
RM Tiwari	Pracharya member	Administration, Narmada college	Near Mangalwara mainward school	254095		9425356652
Mrs.P Oswal	“	Administration home science college	Near Gas godown, kothi bazaar	254072	251002	9407253010
G P Pandre	Commandant officer	Homeguards office hoshangabad	G-2, saket nagar	252153	252553	8085406652
G.S Mandalai	Karyapalan yantri member	PWD hoshangabad	e-type bungalow in front of SNG school	252518	253347	9425473956 9893601947

G.K. Chaturvedi	Deputy officer, Panchayat	Panchayat social justice	F-2 commissioner colony	252283	251242	9826675530
G.D. Gulwase	Deputy officer, Veterinary	Veterinary services	“	254130	275610	9669874422
B.L.Pathak	Deputy officer, Agriculture department	Agricultural development and welfare	E-1 commissioner colony	251003	254212	9826675615
Ashok Yadav	C.M.O	District hospitals	F-2 saket nagar	252464	252223	9826256678
P. P. Pandey	Deputy officer, tribal development department	Tribal development office	F-1 pipariya naka commissioner colony	252248	252389	9425469676
H.K.Bathri	Deputy officer, Information prakashan	Communication department	G-4, commissioner colony	251288	252979	9826835560 8089699837
R.S. Khral	District food officer, member	District food supply department	Food officer district office.	252477		9926583289
Deepak Rai	Head, PWD	Nagar palika parishad	near Fire station on the backside of gupta ground	252434	254856	9425651072 9893426236
Kailash Gehlot	Planning department	District urban planning department	13 Rudra enclave, malakhedi road	252211		9827360536
Shravan Malviya	Head, member	Rotary club hoshangabad	Malviya hospital kothi bazaar			9827212116
D.S. Dangi	Head, member	Lions club	Narmada colony, kothi bazaar			9425042368
Mrs.Shashi kala Golaich	Deputy officer, member	Office of deputy officer, fisheries	near chakkar road, SL Dubey mangalmay parisar			9424470250 9993943649

B.K. Patel	District education officer	Office of district education department	Lives with Ghanshyam pawar near collector's house	252426		9826341421
Dayashankar Rao	Pariyojna samnvayak member	District shiksha Kendra	F-4 commissioner colony	252787		9425889853
N.K. Singh	Asst. engineer Member	Central water board	Near Central water board water tank, sadar bazaar	253029		9425609349

*Source: homeguard department

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

Table A 2.3

Location of the DEOC / DCR:	Sethanighat during floods.
Involved agencies in DEOC / DCR, Roles and responsibilities of the officials / nodal persons (phase wise):	All the 24 line departments are involved. Home guard dept, health, food, fire, relief etc.
Equipments installed (software and hardware):	Software: wireless handsets, mobiles Hardware: the life jackets and boats

* Source: relief and homeguard department

A 2.4 District Disaster Information Management System

A 2.5 Urban Area Disaster Management Committee

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

Table A 2.5

Date of inception of Urban DDMC, Location	Not formed yet
Members of Urban DDMC, their name, along with actual designations, and current position in DDMC like Chairman, Secretary or Member etc	Nagar Palika Chairman (Chairman) Nagar Palika Dy Chairman (Dy Chairman) Mukhya Nagarpalika Officer (Secretary) CMHO

Table A 2.6

Date of inception of Block level DMC, Location	Not formed yet: members proposed		
Members of Block level DDMC, their name, along with the actual designations, and current position in Block DMC like Chairman, Secretary or Member etc	1	Block Development Officer	Chairperson
	2	SHO, Police Station	Member
	3	Chairperson, Panchayat Samiti-Block	Member
	4	Medical Officer In charge, Dispensaries	Member
	5	Assistant Engineer, I&PH	Member
	6	Assistant Engineer, PWD	Member
	7	Assistant Engineer, HPSEB	Member
	8	Inspector, Food & Supplies	Member
	9	Platoon Commander, Home Guards	Member
	10	Range Officer, Forests	Member
	11	In charge, Fire Station	Member
	12	Junior Engineer (JTO), Telecom	Member
	13	SEBPO	Member Secretary
	14	From two prominent NGO's working in the block in the field of Disaster Management	Members

A 2.7 Gram Panchayat / Village Disaster Management Committee

Table A 2.7

Date of inception of Gram Panchayat level DMC, Location	Enclosed in Annexures
Members of Gram Panchayat level DMC, their name, along with actual designations, and current position in GP level DMC like Chairman, Secretary or Member etc	Gram Sarpanch Up Sarpanch Secretary - Panchayat Patwari Head Teacher, Primary School

*though gram panchayat level DMC exists in the vulnerable and prone areas it should also be formed in other villages of the district as well.

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

Hazard, Vulnerability, Risk & Capacity analysis (HVRC) is the most important part of the plan as the entire planning process will be based on its outcome. Any error in identifying the frequency, magnitude and projected impact leads to incorrect identification of major hazard and hence an imperfect plan. The necessary outcomes of the HVRC analysis will be the type of hazards that the district is prone to, history of hazards, impact analysis of the worst case, the area, people and infrastructure that is prone to the risk of these hazards and their vulnerability of being damaged by such disasters due to their vulnerability characteristics. Vulnerability Assessment should deal with the natural, socio-economic vulnerability, housing vulnerability and the environmental vulnerability. The vulnerability atlas of BMTPC can also be referred for this purpose. After knowing the existing hazards and potential vulnerabilities, the risk analysis will be carried out. HVRC analysis will also include resource inventory/capacity analysis, preparedness analysis in terms of network of communication systems, public distribution systems, storage facilities, transportation facilities, medical facilities, fire stations, cyclone shelters with their capacity, presence of NGOs and other volunteers etc so as to enable quick response.

B 1. Hazard Assessment

Table B.1.1 History of past disasters

Type of hazard	Year of occurrence	Area affected	Impact on life	Hazard prone zone in district
Flood	83,84,86,91,93,94, 96,99,06,07,09	Regions next to Narmada river	Severe, casualty was very high	Low lying areas inhabited on the banks of river Narmada.
Earthquake	The region has experienced 7 earthquakes in last 150 years, among which two had magnitude more than 6.	Narmada-Son fault zone	Moderate effect to residents	Hoshangabad, which is very close to the high-risk zone being situated very close to two faults and hence close to a cross fault.

*Source: Relief department and DMI

Table B.1.2 Major applicable hazards

Earthquake: Hoshangabad is very close to the active SONATA fault, which is the root cause for seismic activities in the region. The area falls under seismic zone III, which comes under moderate seismic risk region. The region has experienced 7 earthquakes in last 150 years, among which two had magnitude more than 6 and has currently been identified by DMI as one of the high risk zone that needs to be upgraded in zone IV.

Flood is a frequent phenomenon in the district. In the last 80 years, more than 76 times, flood had inundated the low lying area (Figure 3). Floods in the area are caused due to Narmada River and its tributaries. Data of last 80 years show that every year flooding is there up to certain extent but at least once in 10 years extreme flooding takes place.

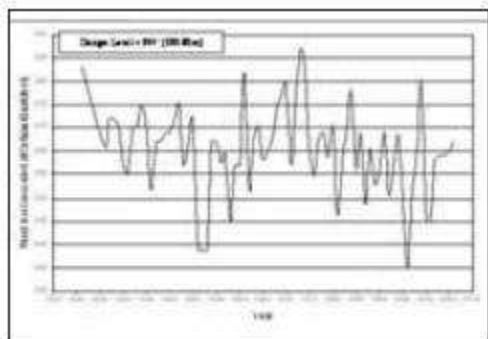


Fig 3: flood levels recorded at Hoshangabad

Type of applicable hazards	Hazard prone areas in the district
<p>Flood,</p> <p>earthquake,</p> <p>fire,</p> <p>industrial & chemical disasters,</p> <p>stampede</p>	<p>146 villages and 76 gram panchayats that are the low lying areas</p> <p>Seoni-malwa, Budhni, Bordha, Kesla, Suplai, Matkuli, Pipariya, Bankhedhi and Panchmari.</p> <p>Narwahi ki aag</p> <p>Areas near the spm and ordinance factory</p> <p>Ghats along Narmada all over the district.</p>

*Source: DMI, Homeguards department and Relief department

Table B.1.3 Seasonality of hazards

Hazard	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Flood								yes	yes			
Earthquake	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Fire				yes	yes	yes						
Road Accidents	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

*Source: Homeguard department, relief, Police control room and municipal

B 2 Vulnerability Analysis

- Physical vulnerability- some of the areas have been identified as vulnerable by the municipal like roads connecting the vulnerable villages especially the roads connecting to Seoni malwa.
- Social Vulnerability- Sohagpur has been identified as being the most vulnerable in terms of social vulnerability with a total population of 18300. Population that has been identified as most vulnerable has been calculated by the relief department
- Economic vulnerability - it is very complicated just like social vulnerability and it varies according to the economic stratification of a block.
- Environmental vulnerability- livestock population that is resident in the area those are vulnerable have been calculated by the veterinary department and Sohagpur has turned out to be the most vulnerable followed by Seoni malwa.
- Institutional vulnerability- the district does not have any Block level or urban level but it comprises of village level DMC in some of the prone villages but not in all of them so such village level DMC's should be formulated in all the villages.

Table B.2

- **Tehsil wise vulnerability: Floods**

Name of Tehsil	Physical/Infrastructural Vulnerability	Environmental/ Natural vulnerability	Social vulnerability	Economic vulnerability	Institutional vulnerability
Hoshangabad	Road towards Seoni malwa submerges	10876 approx. livestock	7400 population approx.	18 villages get affected	There is absence of a proper DDMC/ DDMA. The home

					department is severely understaffed and short of resources.
Babai		12218 approx. livestock	15150 population approx.	15 villages get affected	Limited trained personnel
Pipariya		4002 approx. livestock	14800 population approx.	13 villages get affected	Limited trained personnel
Bankhedhi		10176 approx. livestock	9560 population approx.	10 villages get affected	Limited trained personnel
Seoni malwa	Road towards Hoshangabad submerges	15439 approx. livestock	4900 population approx.	21 villages get affected	Limited trained personnel
Dolariya		15916 approx. livestock	5900 population approx.	18 villages get affected	Limited trained personnel
Itarsi	This is the most Developed or urbanized Place of the district having a good connectivity. As a result, this is the area that will lead to maximum infrastructural loss in case of any disaster	1059 approx. livestock	1200 population approx.	2 villages get affected	Limited trained personnel
Sohagpur	This is a highly flood prone area.	17769 approx. livestock	18300 population approx.	31 villages get affected	Limited trained personnel

*Source: Relief department, veterinary, municipal and revenue department

B 4. Risks Assessment

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

Type of hazard	Vulnerable areas *	Vulnerability	Potential Impact
Flood	sethanighat and low lying areas along the riverside of Narmada	People who live there unalarmed about the flood, also the livestock of the people there, poorly constructed	Loss of life, crops and livestock, also houses can be washed out.

earthquake,	Seoni-malwa, Budhni, Bordha, Kesla, Suplai, Matkuli, Pipariya, Bankhedi and Panchmari.	houses. Lives of people and livestock, houses on the zone. Loss of lives and crop.	Deaths, serious injuries, loss of livestock and property.
drought,	No such record	Lives of people who come there and severe injuries that can occur.	Stark reduction in food supply and deaths due to lack of water.
stampede	Sethanighat-religious fairs.	Loss of lives, severe injuries, loss of livestock and property.	Loss of life and injuries.
fire,	Places close to open fields	People who are exposed to it at that time	Loss of life and livestock
industrial disaster,	spm and ordinance factory	People who work in the factories, people who live around the factory, water and air around.	Loss of lives, poisonous gases spread around the place leading to genetic impairments for the future generations, water and other resource pollution.
Accidents	On highways or for that matter anywhere.	People travelling in the vehicles, people in the vicinity of the accident.	Loss of lives, severe injuries.

** ITARSI junction being one of the busiest junctions is also vulnerable to rail accidents so if needed railway authorities should be approached for their disaster management plan.

B 4.2 Risk profiling of the district

With maximum occurrence of floods more than any other disaster that is 76 times floods has occurred in the last 80 years, we can safely say that Hoshangabad is majorly a flood prone district. With some of the major rivers like Narmada, flowing across the district, during heavy rains floods become inevitable. The low lying areas especially get affected by the upsurge of the river waters or

because the rain water backflows and they are more vulnerable than the other places. Within the district Sohagpur block has been identified as one of the most vulnerable blocks followed by Seoni malwa block both in terms of social and environmental vulnerability.

Since there haven't been any major earthquakes, people have a conception that Hoshangabad isn't an earthquake prone district. But the scientific or rather the seismic studies say that Hoshangabad is situated in zone 3 and some part of it are proposed to be included in zone 4. Hence Hoshangabad can be counted as one of the earthquake prone districts as well.

FLOOD:

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

EARTHQUAKE:

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

C . DISTRICT LEVEL DISASTER MANAGEMENT PLANNING

C 1 District Action Plans

C 1.1 Mitigation Plan

C 1.1.1 Scope of Integrating Risk Reduction in Development Schemes

Issues faced regarding constructions:

- Constructions taking place at individual level do not conform to the established construction norms.
- Norms aren't percolated to every level of construction.
- Infrastructure development should pass through all the stages in safety assurance.
- Issues faced regarding infrastructure, repair & maintenance
- Regular monitoring and evaluation of buildings and other constructions should be ensured
- Repairs should be done according to the need.
- Issues regarding transport
- Regular checking of vehicles and whether they are in proper working condition and repair of the vehicles when necessary and cancellation of license of bad conditioned vehicles.

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

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

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

Structural: Structural Mitigation Measures

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

Category A: Adobe, fieldstone Masonry Buildings

Category B: Brick Construction Masonry Buildings

Category C: R. C. C. Construction

Category X: Traditional & Conventional Construction

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

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

- b. Construction control:** The best protection against earthquake is a strong built environment. The quality of buildings, measured by their seismic resistance is of fundamental importance. Minimum design and construction standards for earthquake and flood resistant structures legislated nationally, are an important step in establishing future minimum levels of protection for important structures. India now has building codes and regulations for seismic and flood resistant design. These codes are in constant review by the experts. The below mentioned building codes are generally practiced in India:
- **IS: 1893, 1984** - Criteria for earthquake resistance design of structures
 - **IS: 13828, 1993** - Guidelines for improving low strength earthquake resistant masonry buildings

- **IS: 13920, 1993** - Ductile detailing of reinforced concrete structures subjected to seismic forces- code of practice
- **IS: 13827, 1993** - Guidelines for improving earthquake resistance of earthen buildings
- **IS: 13935, 1993** - Guidelines for repairing & seismic strengthening of buildings

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

NON STRUCTURAL:

Land use planning: Damage to a building depends primarily upon the soil conditions and topology of the area. Hoshangabad district comes under moderate risk zone in terms of earthquake (Zone 3) and flood disaster. But a part of it is also recommended by DMI to be included under zone 4 of earthquake as it lies on a cross fault region and the villages on the banks of Narmada are more prone to floods especially during monsoons. Referring the geological map of the region, it has been observed that the cluster of small faults is concentrated near.

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

Mitigation strategies

The mitigation strategy for Hoshangabad district involves the following elements:

- Further growth of human settlements in the low lying areas of S and Narmada basins should be checked through land-use planning. Such areas are vulnerable not only from flood hazards but are also vulnerable to earthquake liquefaction, which may increase the damage manifold. The department of Town and Country Planning will take care of seismic hazards while preparing the development plans for the district;
- Appropriate building codes will be made applicable for new engineered & non engineered constructions, and should be strictly enforced by local body. The Municipal Corporation of local area will ensure the construction as per Indian Standard Building Codes;

- Infrastructure department will do the retrofitting of public buildings under their maintenance charge. Generally PWD, Rural Engineering Services and Housing Board maintain the public buildings. The expenditure for such retrofitting will be taken care under maintenance head.
- Community awareness will be raised regarding seismic resistant building construction techniques and seismic retrofitting of existing buildings. Housing Board will be the nodal agency to provide training through workshops and demonstrations. PWD and RES will support MPHB in these efforts;
- Community awareness will be raised regarding 'do's and don'ts' in the event of an earthquake with the involvement of Panchayati Raj institutions and CBOs. Revenue department will be the nodal agency for this activity.

Priority List of public buildings to be retrofitted in the most vulnerable tehsils of Hoshangabad District (*source: municipality)

First Priority (within three years)

1. All Hospital buildings

- District hospital, Hoshangabad
- Civil hospital, Hoshangabad
- Community Health Centre, Hoshangabad

2. Office of the district collector

3. Office of the Superintendent of Police

4. Police Control Room, Hoshangabad

5. Police Control Room, Hoshangabad

6. All Police Stations of the vulnerable blocks of Hoshangabad

7. Tehsil buildings

8. School buildings at block headquarters

9. Residences of District Collector and S.P. at Hoshangabad

Second Priority (within five years)

1. Primary Health Centers.
2. Office buildings of PWD, PHE, WRD, Home guards
3. Residences of other key officials of the district

Third Priority

1. Rest of the Government buildings

Development schemes:

NREGS: The MGNREGA achieves twin objectives of rural development and employment. The MGNREGA stipulates that works must be targeted towards a set of specific rural development activities such as: water conservation and harvesting, afforestation, rural connectivity, flood control and protection such as construction and repair of embankments, etc. Digging of new tanks/ponds, percolation tanks and construction of small check dams are also given importance. The employers are given work such as land leveling, tree plantation, etc. It has a very broad spectrum which can be used for the benefit of the population that are vulnerable and are likely to be affected.

1. Construction of Tube wells can be done.
2. Building of Roads for places which are not connected to other parts of the district.
3. Leveling of low lying areas during flood to a higher level to prevent those areas.
4. Construction of check dams and embankments and drainage systems to prevent flooding of those areas.

IAY: This scheme can be used for the rehabilitation of the affected villages by making constructions for the affected population.

Sarva shiksha abhiyan:

This scheme can be used for creating awareness about mitigation and preparedness about accidents that are in control of man, in collaboration with educational institutions to the people so that they can make use of it when required.

NRHM:

This scheme can be used to facilitate for voluntary first aid during disaster and training the local population to deal with minor injuries so that they do not have to wait for professional help to help any individual. Training of nurses can be carried out as a preparatory plan.

Mukhyamantri Avas yojana:

The scheme can facilitate the rehabilitation programs among the affected villages or the ones that are likely to be affected and lie in the vulnerable zone. They can come up with collaboration with the construction norms.

Jal Abhishekh Abhiyan:

The aim of the scheme is to provide safe drinking water so it can be used to provide for clean drinking water during response and relief period .It can work in collaboration with sanitation systems during relief period and help in avoiding any kind of future epidemics in the affected region.

Samagra Swachta Abhyan:

This scheme can also be used for providing sanitation in the relief camps to the affected population. Since relief camps are the places where lot of diseases and epidemics may break out, proper defecation and sanitation should be ensured by this scheme.

Madhyanah Bhojan Karyakram:

The scheme can provide for food supply during emergency situations in the affected areas or even in the relief camps.

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 / District. Authority will ensure Community participation through initiatives like Community Based Disaster Management (CBDM) to promote local ownership, address local needs, and promote volunteerism.

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

C 1.1.4 Risk Management Funding

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

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

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

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

Short term funding: RBC again.

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

Brief steps about the preparedness plans of respective departments, including Home, Health, R&R, Police, Civil Defense, Municipal Board etc.

C.1.2.2 Pre-Disaster Warning, Alerts

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

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

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

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

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

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

C.1.2.3 Evacuation stage

Evacuation is a risk management strategy, which may be used as a means of mitigating the effects of an emergency or disaster on a community. It involves the movement of people to a safer location.

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

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

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

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

Types of evacuation

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

(a) Immediate evacuation, which allows little or no warning and limited preparation time as in the case of earthquakes and air accident.

(b) Pre-warned evacuation resulting from an event that provides adequate warning and does not unduly limit preparation time as in the case of flood and cyclones.

Principles of Evacuation Planning

- Establishment of a management structure for organization, implementation, coordination and monitoring of the plan.
- Determination of legal or other authority to evacuate.
- Clear definition of rules and responsibilities.
- Development of appropriate and flexible plans.
- Effective warning and information system.
- Promoting awareness and encouraging self-evacuation.
- Assurance of movement capability.
- Building confidence measures and seeking cooperation of the affected community.
- Availability of space for establishment of relief camps having requisite capacity and facilities.
- Priority in evacuation to be accorded to special need groups like women, old and sick, handicapped and children.
- For effective evacuation, organization and running of relief centers, cooperation and involvement of all agencies viz. Community, volunteers, NGOs, NCC / NSS, Home guards and civil defense, 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, and 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 Home guards, 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, and 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.

Organizing mock drills

- Mock drills are conducted at the state, district/ City, block, Gram Panchayat and Village/Resident Welfare Association/ Schools/ Market Trade Association, etc levels to test the plans prepared for different hazards. It also helps to identify the gaps in the plans prepared, test the skills acquired by various task forces and the response time of the different service providers - both government and non government. the importance of mock drills to prepare the local community to best respond during an emergency, we must put serious thoughts on the potential panic it can cause as everyone involved may not realize the simulation nature of the exercise. These drills ensure better and coordinated response during a disaster by making everyone aware of their role and responsibilities. In the Indian context, these drills help reinforce the Incident Command System coming up under each State and District Disaster Management Authority and clarify their roles and responsibilities. Mock drills also help in preparing responding agencies determine what resources would be required and help them carry out a capacity assessment. Organizing a mock drill requires detailed planning about the event and role of each stakeholder participating. A "building block approach" to mock drills can be adopted, where drills are planned in a cycle, i.e. each building on the experience of the earlier one preceded by extensive sensitization and preparedness of all stakeholders in partnership with various organizations and community. Mock drills held using this technique help increase the acceptance level and understanding of the community towards such initiatives. mock drills not only help in testing and building capacities of disaster management teams, but also provide ample scope for identifying areas of improvement.

Some specific recommendations for ‘before’ and ‘during’ the drills to ensure “no panic,” go as follows:

Before the Drill

- Conducting different drills for different emergencies based on the vulnerability so the community can find out gaps in their preparation and response and take the necessary steps

- Making available "do's and don'ts" lists for various emergencies to stakeholders before planning a drill
- Involving the community and using local resources and knowledge, so they are able to relate to the drill process
- Keeping the District Administration, local hospital, fire brigade and police station informed of any planned drill
- Preparing a detailed event chart with time and activities (i.e. information of the event, warning dissemination, place of occurrence, effect/impact of disaster, de-warning and de-briefing)
- Preparing a safety plan before the drill (Route Chart, First Aid box at the site, proper search and rescue equipment/information for any emergency contract number, police, fire, health system, revenue control room, and the skilled manpower immediately available in case of a real emergency)
- Ensuring “manageable” community participation, to prevent a real time disaster
- During the Drill
 - Bringing in the media as part of the mock drill team to disseminate messages on the purpose of the drill
 - Monitoring response time, to enable the community to learn how to minimize loss
 - Ensuring proper coordination among various stakeholders during the drill
 - Having a skilled safety team on standby for any emergency support
 - Ensuring proper security arrangements are in place at the mock drill location
 - The ownership of the mock drills should be in the hands of the home commandants as they are well versed with the practicalities of the disasters and how to deal with them.

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

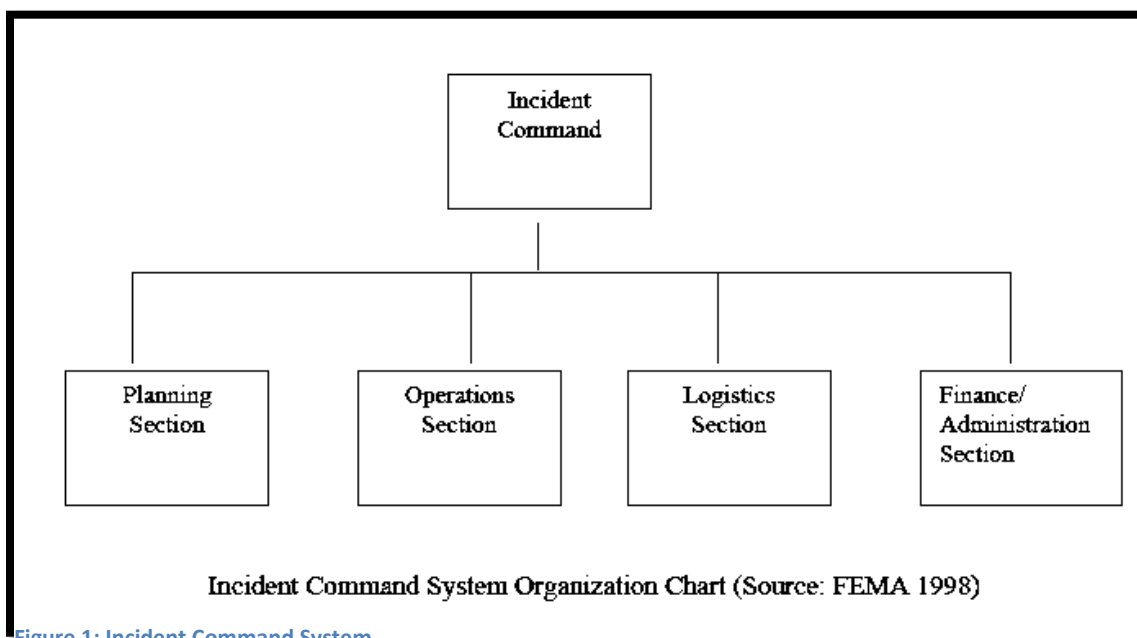


Figure 1: Incident Command System

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 pre-requisite 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 1: Initial Assessment Report

Table 2: 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	H	
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, Health dept, Fire dept and also the people that voluntarily form teams to help the ones in need. Proper 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 3: District Search & rescue Team

S.No.	Name and designation of trained S&R Team member
	<p><i>The Search & Rescue team is formed as and when required and the members & equipments are taken according to the nature of the disaster (and also on their availability).</i></p> <ul style="list-style-type: none"> ● Police Officers (2 or more) ● Home guards (2 or more) ● Swimmers (In case of flood) ● A construction engineer (From P.W.D.) ● Driver (For Every vehicle) ● Any person with the prior experience of the disaster (From Home Guard/Police Dept.) ● A doctor or nurse or at least a person having first aid training ● A Class IV Officer (Health Dept.)

<Source: Home Guards Office, >

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 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 4: Medical Response Team

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

<Source: Health Dept., >

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 annexure for the detailed information pertaining to 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 GoI.

Its phase wise implementation has also begun. State Governments should ensure its 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:

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

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

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

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

- Information and awareness
- Dissemination of warning
- Preparing community to compact disasters
- Do's and Don'ts and action to be taken by the community in case of evacuation
- Emergency measures in case of floods and earthquake including landuse planning
- Rescue and relief plan of the Government

- Location of relief camps, modes of transportation provided by the State, approach routes, arrangements for live stocks, provision of facilities in the relief camps and security arrangements.

C 1.3.20 Fire services

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

C 1.4 Recovery and Reconstruction Plan

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

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

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

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

Medical Rehabilitation

In case of earthquake, the injury may be reported in terms of amputation of organs and bone fractures, which requires months to be normal. In that case, it is the responsibility of Health

Department to take care of injured. For the handicapped, the State Government's Social Welfare and Women and Child Welfare Department provide funds for getting them functional.

Psychological Rehabilitation

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 counseling centers for the psychological rehabilitation of the persons affected by the disasters. These centers shall work on similar lines of family counseling centers, 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 1.4.1 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.

PI 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 counseling centers for the psychological rehabilitation of the persons affected by the disasters. These centers shall work on similar lines of family counseling centers, 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 recognized. 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 Defense, Home Guards and youth organizations such as NCC, NSS and NYKS. The deployment of the armed forces will also be organized on as required basis. Establishment/raising of NDRF should progressively reduce deployment of the Armed Forces. However, Armed Forces would be deployed only when the situation is beyond the coping capacity of State Government and NDRF.

C 1.5.2 Needs of the Special vulnerability Groups

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

Special workforce should be trained to help old people evacuate their homes after the disaster. Awareness and sensitization among the men of the community should be done to evacuate the old people, disabled and women and children first and then evacuate themselves. First aid must be catered to the vulnerable groups and then to the others. Special Medical equipments required by the disabled people should be kept at disposal when and where required.

C 1.5.3 Addressing climate induced anthropogenic issues

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

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

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

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

C 2 Standard Operating Procedures (and Checklists)

Standard Operating Procedures

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

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

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

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

C 2.1 Hazard specific SOPs for designated Departments and Teams

Non Disaster Time
<ul style="list-style-type: none">• 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 synchronise 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.• 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.
Warning Time
<ul style="list-style-type: none">• 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.
During Disaster

<ul style="list-style-type: none"> • 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.
After Disaster
<ul style="list-style-type: none"> • Organise initial and subsequent technical assessments of disaster affected areas and determine the extent of loss and damage and volume and nature of relief required. • Keep the DDMA informed of the situation. • Ensure supply of food, drinking water, medical supplies and other emergency items to the affected population. • Visit and coordinate the implement of various rehabilitation programmes. • Coordinate the activities of NGOs in relief and rehabilitation programmes. • Allocate funds for the repair, reconstruction of damaged infrastructure after considering their overall loss and damage

Department of Home

Non Disaster Time
<ul style="list-style-type: none"> • Vulnerability map of the block / Tehsil • Resource Inventory, Capacity analysis. • List of cut off areas with safe route map for communication. • Formulation/ Updation of Disaster Plan for the District.
Warning Time
<ul style="list-style-type: none"> • List of storage facilities, dealers of food. • Control room setup/assignment of control room duty. • Pre-positioning of staff for site operation centres. • Pre-arrangements to be made as per the demand of various departments.
During Disaster
<ul style="list-style-type: none"> • Arrangement of alternative communication/generator sets etc. • Arrangement of vehicles/boats of for evacuation. • Dissemination of warning/coordination with District Control room.

<ul style="list-style-type: none"> • Monitor the working of various departments and make frequent visits to disaster struck areas to cross-check.
<ul style="list-style-type: none"> • After Disaster
<ul style="list-style-type: none"> • Estimating the loss and damage and keep a record. • Share experiences with all the departments. • Continuous aid & proper arrangements till situation is under control. • Monitor that the Repair & Restoration work is in progress as planned. • Examine the performance reports of various departments. • Examine the reports in order to make amendments and prepare a better strategy by taking inputs from all departments.

Department of Health

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

<ul style="list-style-type: none"> • Ensure cleanliness at the medical camps. • Frequent checks on the Staff/Doctors on duty. • Postmortem of dead bodies.
After Disaster
<ul style="list-style-type: none"> • Monitoring against spreading of diseases • Continuous medical aid & proper arrangements till situation is under control • Dead/Injured counselling • Injured/handicapped to be treated and arrangement for healthy living facilities • Provide healthy rehabilitation to disaster affected people.

Department of Transport

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



<ul style="list-style-type: none"> • Take steps for movement of affected population to safer areas. • Collate and disseminate information regarding operational and safe routes and alternate routes, fuel availability etc. to personnel operating in the field. • Launch recovery missions for stranded vehicles.
After Disaster
<ul style="list-style-type: none"> • Assess damage to transportation infrastructure. • Take steps to ensure speedy repair and restoration of transport links.

Department of Public Works

Non Disaster Time
<ul style="list-style-type: none"> • Designate one Liaison Officer in the department as the Disaster Preparedness Focal Point. The Chief Executive Engineer will be the liaison. • Take precautionary steps for the protection of government property against possible loss and damage during disaster. • Formulate guidelines for safe construction of public works. • Prepare list, with specifications and position, of heavy construction equipment within the district. • Organize periodic training of engineers and other construction personnel on disaster resistant construction technologies. • Inspect all roads, road bridges by a bridge engineer, including underwater inspection of foundations and piers. A full check should be made on all concrete and steel works. • Inspect all buildings and structures of the state government (including hospital buildings) by a senior engineer and identify structures which are endangered by the impending disaster. • Emergency tool kits should be assembled for each division, and should include: • The designation of routes strategic to evacuation and relief should be identified and marked, in close coordination with police and district control room. • Prepare mitigation plan for the department and enforce the same. • Advise the district disaster management authority on structural mitigation measures for the district. • Repair, Maintenance and retrofitting of public infrastructure. • Identify / prioritize mitigation activities of lifeline buildings and critical infrastructure and coordinate with the DDMA for its implementation. • Place danger sign boards in the areas highly prone to specific type of disasters, such as road accidents etc.
Warning Time
<ul style="list-style-type: none"> • Establish radio communications with DEOC.

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

During Disaster

- Provide assistance to the damage assessment teams for survey of damage to buildings and infrastructure.
- Adequate road signs should be installed to guide and assist the drivers.
- Begin clearing roads. Assemble casual laborers to work with experienced staff and divide into work-gangs.
- Mobilize community assistance for road clearing by contacting community organizations and village disaster management committees.
- Undertake cleaning of ditches, grass cutting, burning or removal of debris, and the cutting of dangerous trees along the roadside in the affected area.
- Undertake construction of temporary roads to serve as access to temporary transit and relief camps, and medical facilities for disaster victims.
- As per the decisions of the District Emergency Operations Center undertake construction of temporary structures required, for organizing relief work and construction of relief camps, feeding centers, medical facilities, cattle camps and Incident Command Posts.
- If possible, a review of the extent of damage (by helicopter) should be arranged for the field Officer-in-Charge, in order to dispatch most efficiently road clearing crews, and determine the equipments needed.
- If people are evacuating an area, the evacuation routes should be checked and people assisted.
- Identify locations for setting up transit and relief camps, feeding centers and quantity of construction materials and inform DEOC accordingly.

<ul style="list-style-type: none"> • Take steps to clear debris and assist search and rescue teams. • Provide sites for rehabilitation of affected population
After Disaster
<ul style="list-style-type: none"> • Carry out detailed technical assessment of damage to public works. • Assist in construction of temporary shelters. • Organize repairs of buildings damaged in the disaster • Prepare detailed programs for rehabilitation of damaged public works. • Arrange technical assistance and supervision for reconstruction works as per request.

Department of Irrigation and Water Resources

Non Disaster Time
<ul style="list-style-type: none"> • Communication establishment with District and Block/ Tehsil Control Rooms and departmental offices within the district. • An officer to be appointed as nodal officer. • Activation of flood monitoring mechanism • Methods/communication arrangement of alerting officers on various sites established • Check the preparation level of the department. • Identify the areas that face the maximum flow of the major rivers and also make the locals aware about it. • Identify the flood prone areas and demarcate them and also send a flood surveillance team to such areas. • Mark the maximum safe level of water at all the embankments of rivers, reservoirs and dams.
Warning Time
<ul style="list-style-type: none"> • Mechanism evolved for forewarning settlements in the down stream/evacuation/coordination with other dam authority. • Identification of materials required for response operations • Repairs/ under construction activity are well secured • Water level gauges marked • Inlet and outlet to tanks are cleared • Watch and ward of weak embankments & stock piling of repair materials at vulnerable points • Guarding of weak embankments • All staff informed about the disasters, likely damages and effects. • Procure necessary inventory for flood situations and keep it properly maintained. • Inventories for the case of breakage of dam/embankments like sand sacks, rocks, etc need to be brought and checked well in advance.

<p>During Disaster</p> <ul style="list-style-type: none"> • Surveillance of flood hit/susceptible areas. • Make announcements about the coming flood. • Usage of advanced technology like GPS to calculate damage and the areas where maximum damage would occur. • Safety of equipments of the Irrigation department to be maintained. • Survey of major dams, embankments, bridges, channels etc is done. • Emergency help services to areas where bank got broken.
<p>After Disaster</p> <ul style="list-style-type: none"> • Estimating the loss and damage and keep a record. • Surveillance for protection of people. • Share experiences with the department. • Formulate a checklist and re-prepare an emergency plan. • Training of staff to minimize the loss of life/property.

Department of Agriculture

<p>Non Disaster Time</p> <ul style="list-style-type: none"> • Designate a focal point for disaster management within the department. • Identify areas likely to be affected. • Arrange for keeping stock of seeds, fertilizers and pesticides. • A pests and disease monitoring system should be developed to ensure that a full picture of risks is maintained. • Historical data to be gathered on the drought prone areas.
<p>Warning Time</p> <ul style="list-style-type: none"> • Provide timely warning to DEOC/DDMA about droughts. • Check available stocks of equipments and materials which are likely to be most needed after the disaster. • Stock agricultural equipments which may be required after a disaster • Determine what damage, pests or diseases may be expected, and what drugs and other insecticide items will be required, in addition to requirements of setting up extension teams for crop protection, and accordingly ensure that extra supplies and materials, be obtained quickly. • Provide information to all concerned, about disasters, likely damages to crops and plantations, and information about ways to protect the same. • All valuable equipments and instruments should be packed in protective coverings and stored in room the most damage-

proof
During Disaster
<ul style="list-style-type: none"> • Depute one liaison officer to the DEOC. • Monitor damage to crops and identify steps for early recovery. • Estimate the requirement of Seeds Fertilizers Pesticides, and Labour. • Organize transport, storage and distribution of the above with adequate record keeping procedures. • Ensure that adequate conditions through cleaning operations are maintained to avoid water-logging in flooded areas.
After Disaster
<ul style="list-style-type: none"> • Quantify the loss and damage within the quickest possible time and finalize planning of agriculture rehabilitation. • Ensure availability of adequate supply of seeds, seedlings, fertilizers, pesticides and agricultural implements. • Assist farmers to re-establish their contacts with agriculture produce market and ensure that appropriate prices be offered to them.

Department of Rural Water Supply & Sanitation

Non Disaster Time
<ul style="list-style-type: none"> • Provide clean drinking water in all areas rural/urban. • Regular cleaning of nals and prevent them from choking. • Facilitate proper drainage in all areas to prevent diseases.
Warning Time
<ul style="list-style-type: none"> • Proper arrangement of water tankers in good condition. • Arrange for generators in advance. • Make necessary arrangements of chlorine tablets for disaster prone/expected areas. • Repair the platforms of tube wells if required and any other necessary repairs if required to avoid damage.
During Disaster
<ul style="list-style-type: none"> • Cleaning water sources and continuous monitoring. • Supply of clean water at hospitals and medical camps. • Provide water through water tankers wherever required. • Provide emergency help to clean and start tube wells & other water sources.

<ul style="list-style-type: none"> • Repair of damaged water sources to be carried out. • Aware people about how to keep the hand pumps free of microbial infections.
After Disaster
<ul style="list-style-type: none"> • Reinforcement & reconstruction of damaged sources and to keep records. • Share experiences with the department. • Training of employees. • Formulate a checklist and re-prepare an emergency plan.

Department of Veterinary

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

Department of Fire Service

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

Department of Telecommunications

Non Disaster Time
<ul style="list-style-type: none"> • Communication establishment with District and Block /Tehsil Control Rooms and departmental offices within the division. • An officer to be appointed as nodal officer. • Continuous training of staff on the usage of new equipments that are procured.

Warning Time
<ul style="list-style-type: none"> • Prepare an inventory of resources that would be required and procure the material based on estimation. • Train staff on quick response to restore the Tele-connectivity of the district.
During Disaster
<ul style="list-style-type: none"> • Standby arrangements for temporary electric supply or generators. • Inspection and repair of poles etc. • Identification of materials required for response operations.
After Disaster
<ul style="list-style-type: none"> • Repair of damaged poles & lines etc as soon as possible to restore Tele-connectivity in the district. • Share experiences with the department. • Training of employees for better performance.

Home Guards

Non Disaster Time
<ul style="list-style-type: none"> • Get details of the staff with their address and phone numbers • Arrange for details of fuel arrangement for ships-mechanized launches at the time of emergency. • Do's and Don'ts to be observed during emergencies and details of priorities should be given to the staff. • Set up for evacuation of people from affected area of the river side area. • Details of buildings, vehicles and equipments and list of contractors with vehicles and equipments should be procured. • Prepare map showing rivers and the important routes • Maintain communication equipments, telephone line, telex lines, megaphone and amplifiers with statistical data. • Make a list of details of important telephone numbers of water supplies, control room, hospitals, drainage system, railway stations, bus depots, strategically important places, Army Air force Navy camps and other sensitive places, major industrial units, and other communication channels which can be used during emergency. • Ensure the arrangement for transportation & evacuation of people from the affected areas. • Prepare the action plan regarding repairs and alternative ways in case of disruption of transportation. • Prepare plan showing the alternative routes and arrangement for transportation of goods etc; during emergencies. • Inspect the garages and control point etc; which are damage prone. • Make due arrangement for materials to restore the facilities in case the movement of the materials and goods on the ports are damaged. • Prepare an action plan to avail on temporary bases, the technical personnel from the nearby district which is not affected.

<ul style="list-style-type: none"> • Collect the details of swimmers in the district. • Make arrangement for sufficient fuel during emergency.
<p>Warning Time</p>
<ul style="list-style-type: none"> • Maintain the equipments available such as cranes, diesel generator, earth mover machines, de-dusting pumps, cutters, tree cutters, ladders, ropes, flood lights, shovels, axes, hammers, RCC cutters, etc. which can be used during emergency and will ensure that those are in the working conditions. • Take due care to see that the transportation at shelters and emergency hospital is not disrupted during calamities. • 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. • Specifically take action to ensure that the fishermen do not move out for fishing as well as sailing during the final warnings of flood, etc. • Evacuate the fishermen to a safe place and if they deny, to get it done forcefully. • Ensure that the warning signals are received in time and shown immediately to the people.
<p>During Disaster</p>
<ul style="list-style-type: none"> • Undertake the work of search and rescue and also the relief work • Set up a temporary special control room and information centre at the main bus station. • Immediately contact the district control room and will assist in the work • Ensure that the staff is on duty at the headquarters. • Assign the work to be done by the subordinate officers and staff regarding transportation under DDMP and to send them to their sites. • Ensure the availability of resources included in the DDMP and will make due arrangements to get those during emergency. • Consult the liaison officer to close the ports and sailing in the rivers, which is damage prone or dangerous for the safety of the people as well as the property. • Assist the administration to send the messages regarding warning to the remote area
<p>After Disaster</p>
<ul style="list-style-type: none"> • Follow the instructions of District Liaison Officer. • Carry out the duty assigned for search and rescue work. • Engage the resources and manpower available to manage the disaster. • Review the matters regarding closing of movement at the port for safety measures and will ensure that it is restarted very soon. • To contact the district control room if additional equipments, vehicles, manpower, technical personnel are necessary to

restore the port related activities.

- Prepare a primary survey report of damage and send it to the District Control Room and to the administrative head.
- Collect the details of approach roads connecting the damaged area and get them repaired in co-ordination with the competent authority

Rural Development Department

Non Disaster Time

- 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.
- 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.
- Organize awareness programmes for BDO's, Panchayat secretaries and Gram Pradhans on structural and no-structural mitigation activities.

Warning Time

- 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 Disaster

- 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

<ul style="list-style-type: none"> Assess initial damage
After Disaster
<ul style="list-style-type: none"> Quantify the loss/damage Organize 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

Panchayat Raj

Non Disaster Time
<ul style="list-style-type: none"> 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.
Warning Time
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> Coordinate with local authorities and support the response efforts. Coordinate the support from unaffected gram Panchayats.
After Disaster
<ul style="list-style-type: none"> Ensure proper distribution of reconstruction schemes and monitoring of the same during Block development committee and Zila Parishad meetings

Forest Department

Non Disaster Time
<ul style="list-style-type: none"> Prepare a department disaster management plan for the district. Depute one liaison officer for disaster management. Forest Fire prone areas should be identified and extra vigilance be ensured in such cases. Depute one liaison officer within the department, who will be in contact with the SEOC during disasters.

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

Department of Food & Civil Supplies

Non Disaster Time
<ul style="list-style-type: none"> • Make go downs in disaster prone areas in advance. • Collect necessary resources keeping the type and intensity of disasters that have previously occurred or are expected to occur. • Make proper arrangements so that the stock in the go downs does not rot/spoils.
Warning Time
<ul style="list-style-type: none"> • Make necessary arrangements according to the expected requirements and procure the material which the department is short off. • Form teams and train them on how to ration resources.
During Disaster
<ul style="list-style-type: none"> • Proper keeping of resources. • Arrangements made for the distribution like vehicles through help from DDMA or other departments. • Make an inventory according to the prevailing needs and the estimated time and hence procure the needful.

After Disaster
<ul style="list-style-type: none"> • Use the equipments/resources from time to time so that they remain in working condition. • Strict monitoring to keep a check on unauthorized using of resources and legal proceedings to be carried out if required.

Electricity Department

Non Disaster Time
<ul style="list-style-type: none"> • Prepare and manage inventory for emergency operations. • Training of electricity department workers and make sure that proper norms are being followed at the time of installation of various electric units/instruments. • Make various applicable and implementable schemes regarding the setup and examination of electrical units/instruments. • Make people aware so as to minimize the damage to life/limb caused due to electricity.
Warning Time
<ul style="list-style-type: none"> • Make provisions for providing electricity to rehabilitation centers in disaster hit areas & to cut off electric supply from risky areas in case of emergency. • Follow proper regulations monitor continuously so that in case of wire breakage the current does not spreads. • Make proper arrangements and follow stringent norms such that in case of a natural calamity, (like earthquake, flood, cyclone etc) the high tension line does not get damaged.
During Disaster – Response
<ul style="list-style-type: none"> • Cut off electricity immediately after receiving information about any disaster so as to minimize the damage caused. • Survey the spot and estimate (also help in estimation) the damage caused. • Be ready to provide electricity in areas where it is needed and can be provided safely. • Make a plan about how to re supply electricity to important areas, site operation centers, Industries, etc. • Examine and repair major poles, transformers & wires necessary for getting electricity supply back to areas needed. • Minimize the damage caused to life by demarcating dangerous areas and cutting electricity in time. • Restore the electricity facility in affected areas.
After Disaster – Recovery and Rehabilitation
<ul style="list-style-type: none"> • Repair of damaged poles, transformers and conductors etc as soon as possible to restore electricity in the district. • Surveillance for protection of people. • Share experiences with the department. • Formulate a checklist and re-prepare an emergency plan.

Department of Education

<p>Non Disaster Time – Preparedness</p> <ul style="list-style-type: none"> • Identify one Liaison Officer in the department at district level as Disaster Management Focal Point. • Develop district level disaster management plan for the department • In consultation with DDMA, state education directorate and state education board include disaster related subjects in the curricula in schools, and colleges. • Arrange for training of teachers and students on Dm and school safety activities. • Ensure that all schools and colleges develop their disaster management plans. • Ensure that construction of all educational institutions in earthquake zones is earthquake resistant. • Conduct regular mock drills in the educational institutes
<p>Non Disaster Time –Mitigation</p> <ul style="list-style-type: none"> • Identify structural and non structural mitigation measures and get them implemented. • In coordination with the SSA &/or Public works department assess schools and colleges buildings conditions and place the proposal of retrofitting of the structurally unsafe buildings with the state education department and/or DDMA. • Make departmental mitigation plan and ensure its implementation. • Ensure that earthquake resistant features are included in new school buildings.
<p>During Disaster – Response</p> <ul style="list-style-type: none"> • In the event of disaster, place required number of education institutions and their buildings, under the DEOC for use as emergency shelter and relief centre, if necessary. • Students and staff trained as task forces as part of the school disaster management planning’s can provide local voluntary assistance for distribution of relief material and assistance to special needy people in the locality.
<p>After Disaster – Recovery and Rehabilitation</p> <ul style="list-style-type: none"> • Determine the extent of loss in educational institutions and submit the report to DDMA and state education department.

Department of Industrial Health and Safety

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

Department of Urban Development

<p>Non Disaster Time</p> <ul style="list-style-type: none"> • 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.
<p>Mitigation</p> <ul style="list-style-type: none"> • 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
<p>Alert and Warning Stage</p> <ul style="list-style-type: none"> • 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
<p>Response</p> <ul style="list-style-type: none"> • 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.
<p>Recovery and rehabilitation</p> <ul style="list-style-type: none"> • Implement recovery & rehabilitation schemes through municipalities for urban areas.

Indian Red Cross and NGOs

<p>Non Disaster Time</p> <ul style="list-style-type: none"> • 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.
<p>Alert and Warning Stage</p> <ul style="list-style-type: none"> • 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. • Mobilise volunteers and issue instructions for sending them to potential disaster affected areas. • Take part in evacuation programme of population with close cooperation of volunteers • Coordinate with pre identified NGOs for possible joint operations.
<p>During Disaster :</p> <ul style="list-style-type: none"> • 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.
<p>After Disaster</p> <ul style="list-style-type: none"> • 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.

C 2.2 SOPs for all concerned Line Departments

DISASTER SPECIFIC SOP'S

FIRE:

POWER DEPARTMENT: As electricity is one of the reasons because of which the crops and fields of the people catch fire during summers due to some electricity fault.

- To ensure that the wires hanging from the pole are not loose,
- People should not be allowed to connect the wires themselves it should be declared as unauthorized.

POLICE DEPARTMENT:

- They need to 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:

- Along with the water tankers the gram panchayat must also be equipped with fire fighters.

EARTHQUAKE:

MUNICIPALITY

- Old buildings in the district must be identified and demolished for reconstruction so as to avoid any major damages during an earthquake.
- 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.

DROUGHT:

The following activities shall be carried out in order to prevent the situation of draught.

MUNICIPALITY

- In order to store and use the Monsoon water stop dam, check dam and reservoirs must be constructed
- To reserve water in the main water body newer manmade 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.

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.

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.

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.

C 3.1 District Disaster Response Fund will basically cover the disaster response, relief, and rehabilitation part.

C 3.2 District Disaster Mitigation Fund will basically cover the disaster mitigation and preparedness activities

Funds generation:

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

1. Estimation of funds required based on detailed damage assessment report and consolidation of the same and the sectoral and regional heads.

2. Contracting with funding agencies and evolving detailed operating procedures for fund flow and corresponding covenants.

FUND DISBURSEMENT AND AUDIT:

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

Pl check with DC office, Revenue Deptt for more details.

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:

Note: List of all stakeholders addressed in C 4.1 has to be checked with DC office/ DDMA/ DDMC.

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.

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

C 4.1.2 Non Governmental Organizations and Community Based Organisations:

Local NGOs and CBOs, due to their proximity to community, can act as a vital link between government and community particularly during emergencies. The Role of NGOs and CBOs in disaster management will be elaborated stage wise (preparedness, response and recovery) in this section.

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

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

C 4.1.3 Religious Institutions:

There are number of religious institutions with infrastructural facilities and committed work force. These facilities can be used as shelters during disasters and the work force could be used as volunteers during response and recovery activities. Details of all these institutions and allied information will be provided here.

C 4.1.4 Academic Institutions: (search online for all disaster management institutions in districts)

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.

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.

No such organizations working in Hoshangabad.

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

- Reviewing the threat of disasters
- Vulnerability of the district to such disasters
- Evaluating the preparedness
- Considering the suggestions for improvement of the response document DDMP

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

Responsibilities of District collector:

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

- Get in touch with the local Army/Navy/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.

C5 Inter- District Coordination Mechanisms – [Standard Operating Procedures / Protocols]

- If a district has dams, the neighboring districts should be warned when the dams are opened as the water flow from them might cause flood in the adjoining rivers. This requires proper coordination among the districts by the help of officials of reservoirs by informing district authorities about when and how much water is being released so that these authorities can share this information with the CWC who can then help in predicting or forecasting which all areas are likely to be affected.

- During the time of disaster if the district is unable to cater to the requirements of the situation, it can seek help from the nearby districts in terms of resources or man power like health department, home guard department, RTO, fire department, food and police.
- Every key department can do with a POC who can be equipped with powers to order forces to the districts in need immediately so that further losses can be minimized.
- The emergency team should have the updated checklists, contact numbers and information about all the districts.
- In case of earthquake affected districts, the neighboring districts should provide and help in coordinating for temporary shelters along with the line departments.

C 6 Intra- District Coordination Mechanisms –

This section elaborates 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 the 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 DEOC is established at the time of disaster and the power of sanction of relief is vested with officials of Revenue Department at different levels, depending upon the operational needs. With the help and coordination of all the line departments the relief and response work can be carried out easily and in a smooth manner. 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 working in the district.

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 Zilla 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 DEMMP 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, Home guards
- iv. Executive Engineer, PWD.
- v. Divisional Engineer, MPEB
- vi. Chief Medical Officer , CMO
- vii. Municipal Commissioner
- viii. Chief Executive Officer, Zilla 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

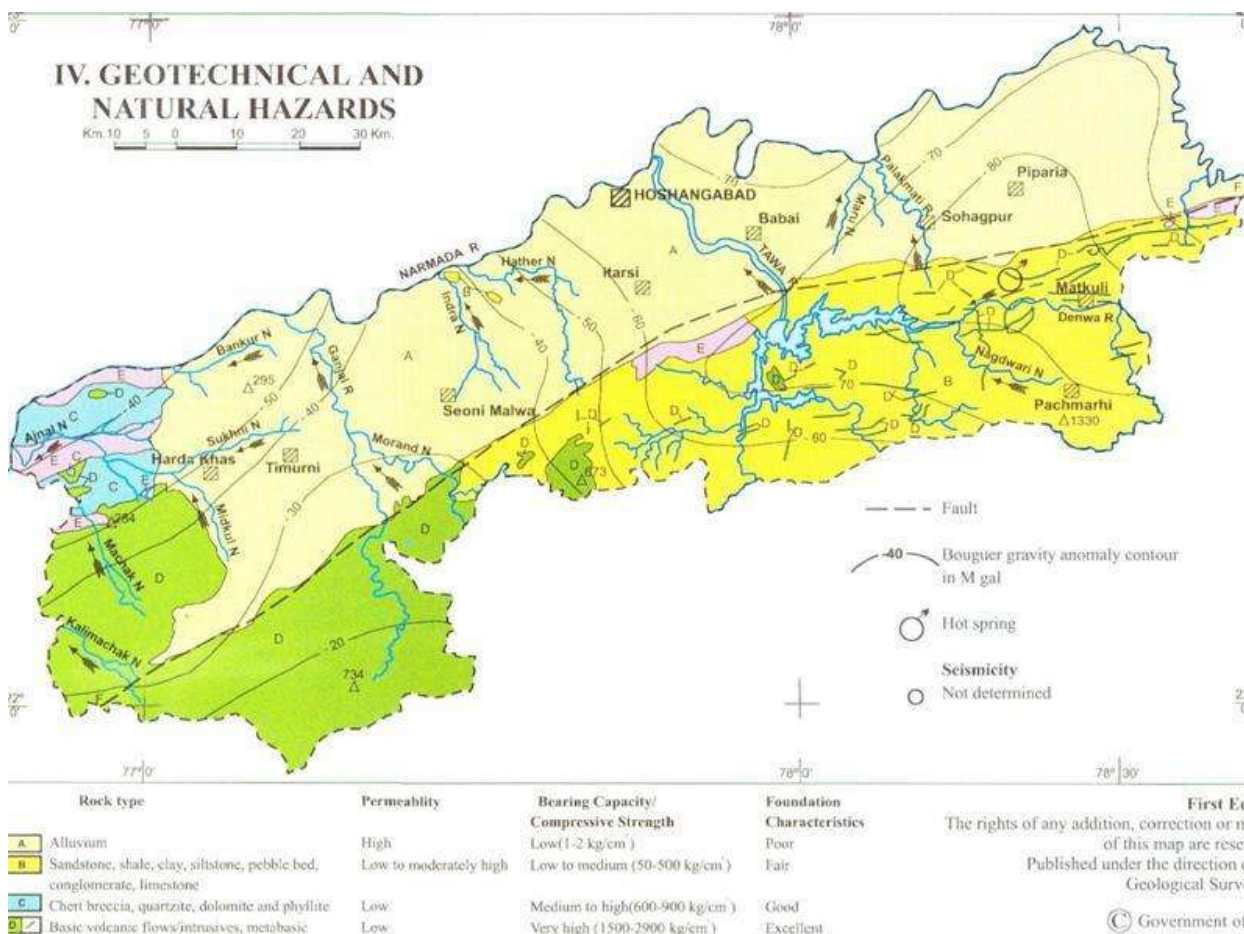
➤ District Emergency Control Room (DECR)

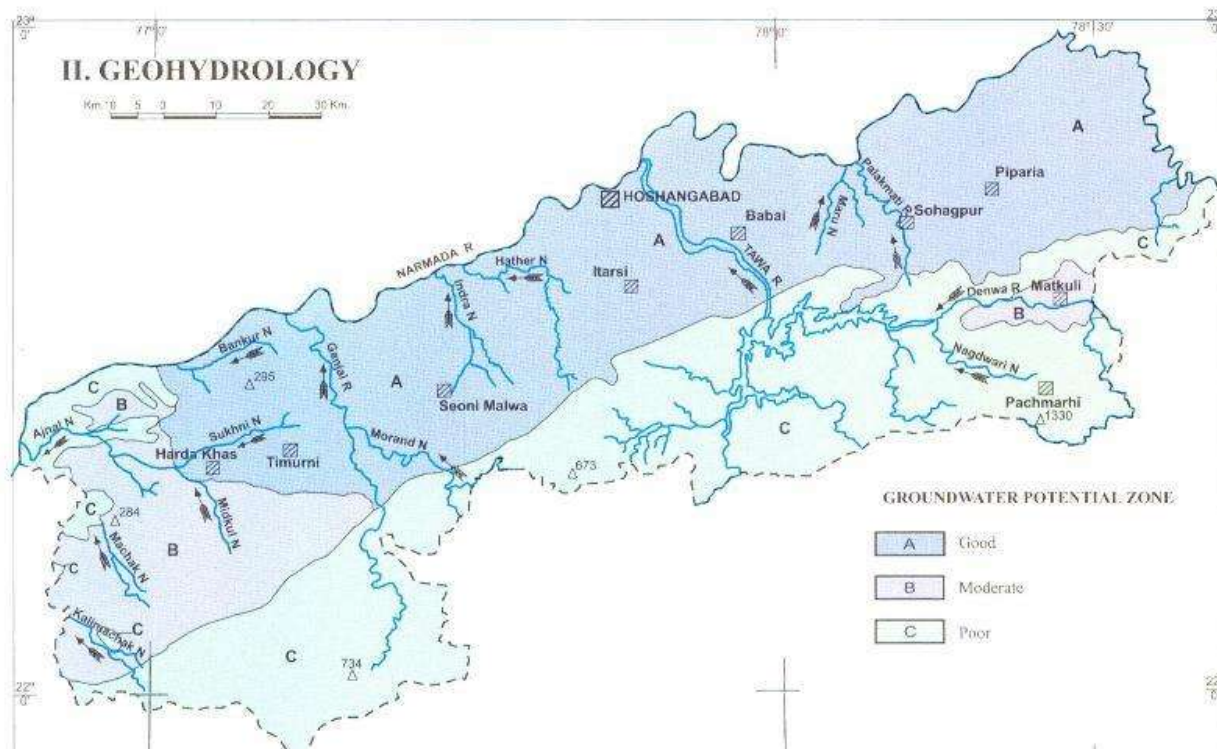
A single District Emergency Control Room (DECR) will function with desk arrangements for specific activities during an emergency. DECR will have senior representatives from the key resource organizations to facilitate a coordinated response. The DECR would be linked to Emergency Operation Centre (EOC)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

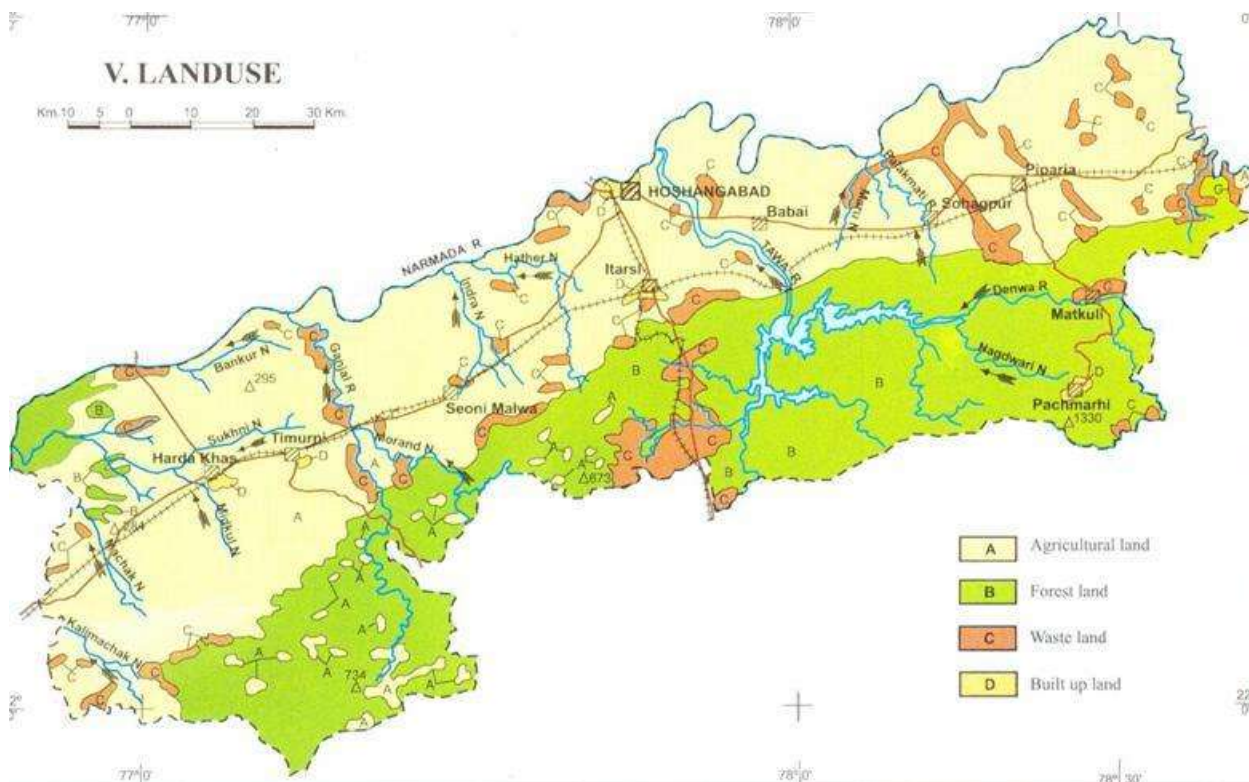
➤ Site Operation Center (SOC)

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.



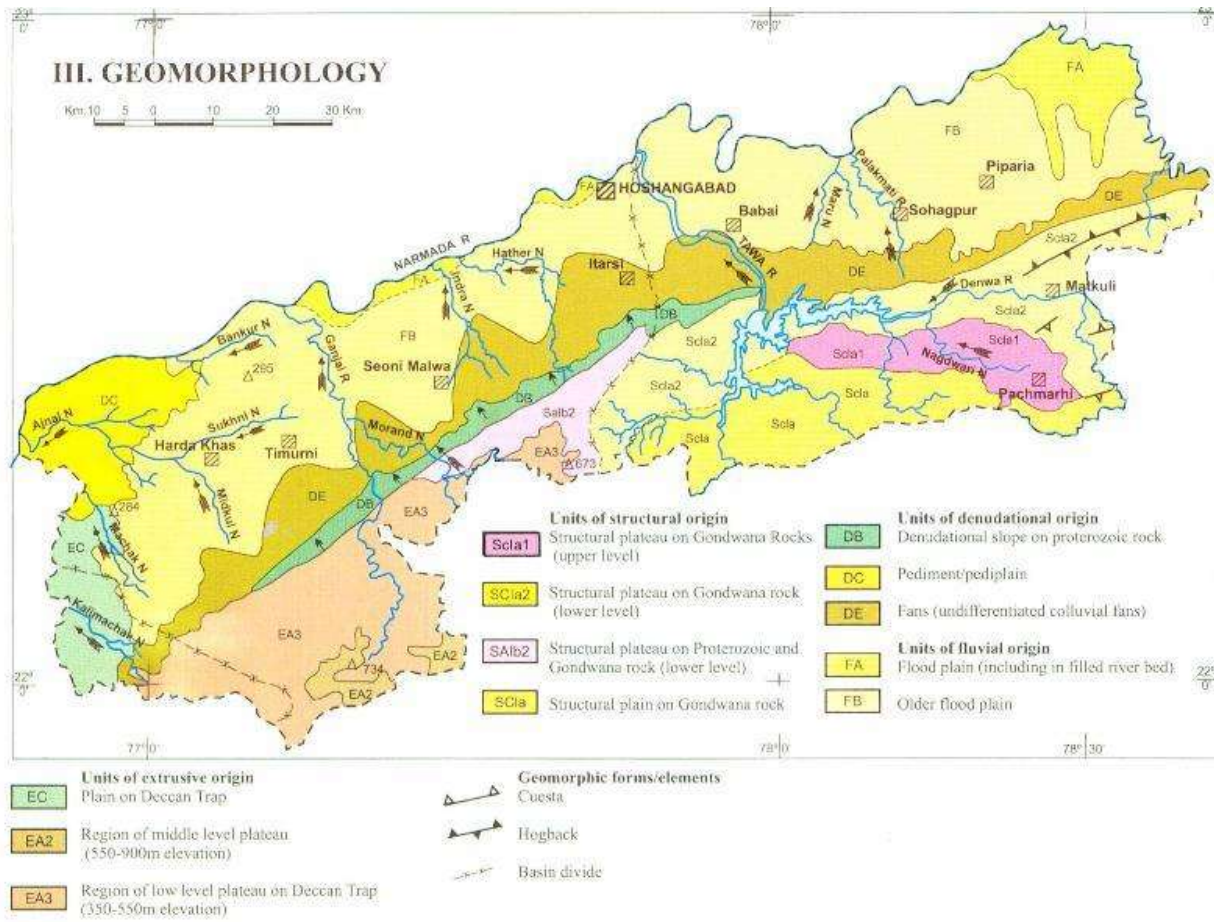


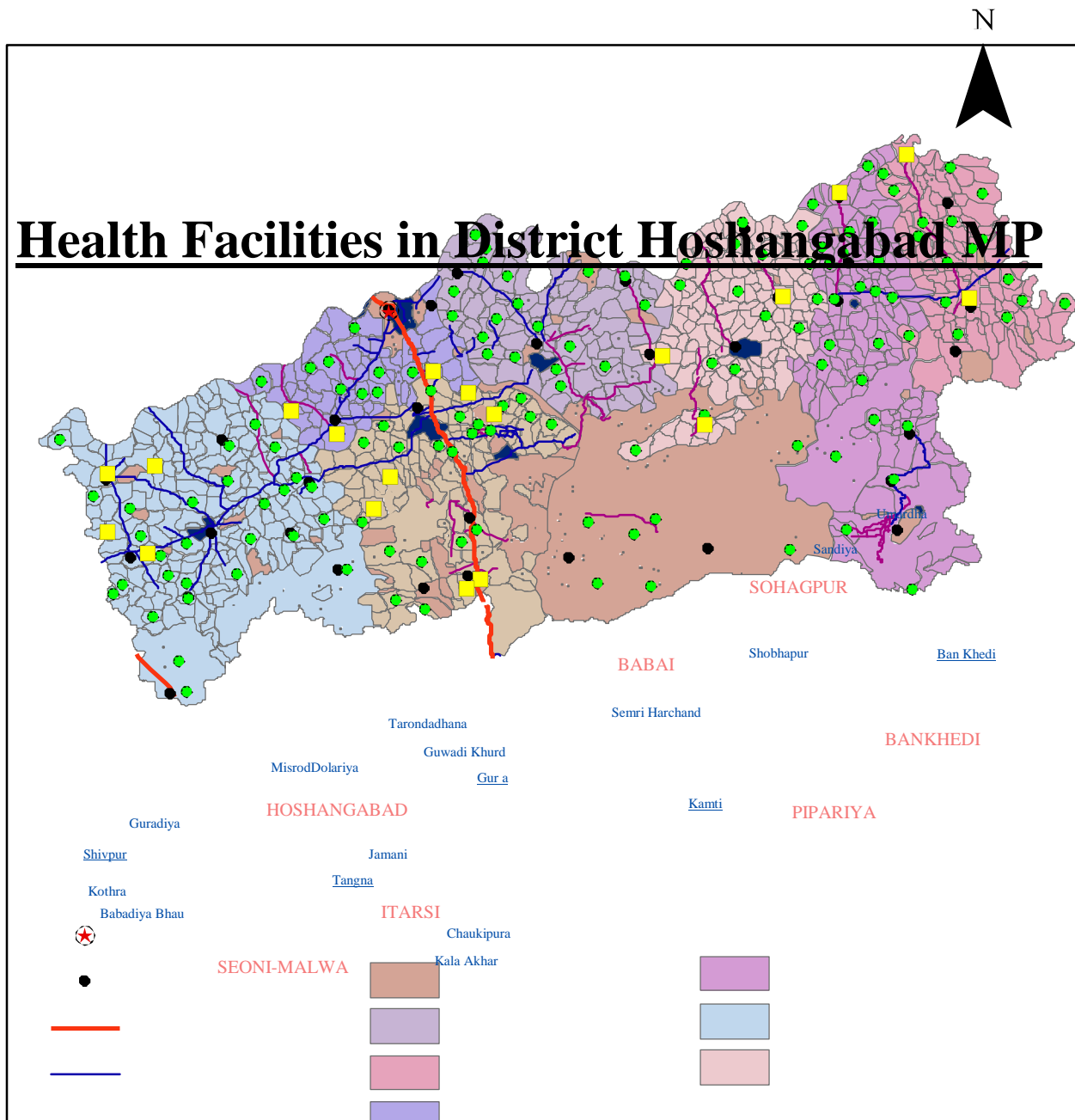


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 dia, Kolkata.

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Compiled by	: D.N. Rabate and J.N. Solanki Geologists (Sr.)	Database upto	1992
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FDO by	: S.S.S. Murthy and K.P. Padade, Draftsmen		





Legend

- District Hq
- Towns
- Urban Area
- National Highway
- District Roads
- Other Roads

PHC's

TALUK NAME

Sub Centres

PIPARIYA

BABAI

SEONI-MALWA

BANKHEDI

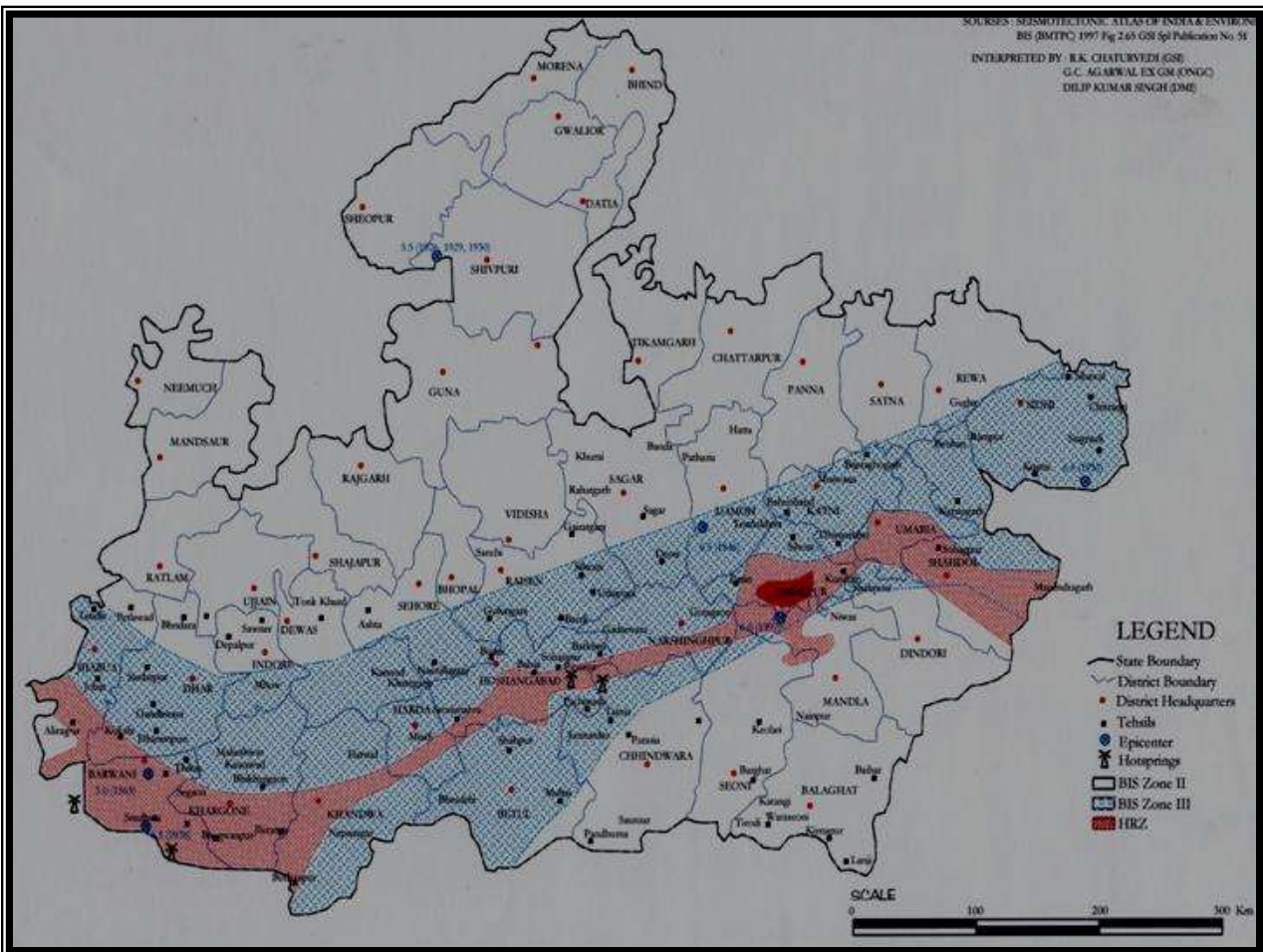
SOHAGPUR

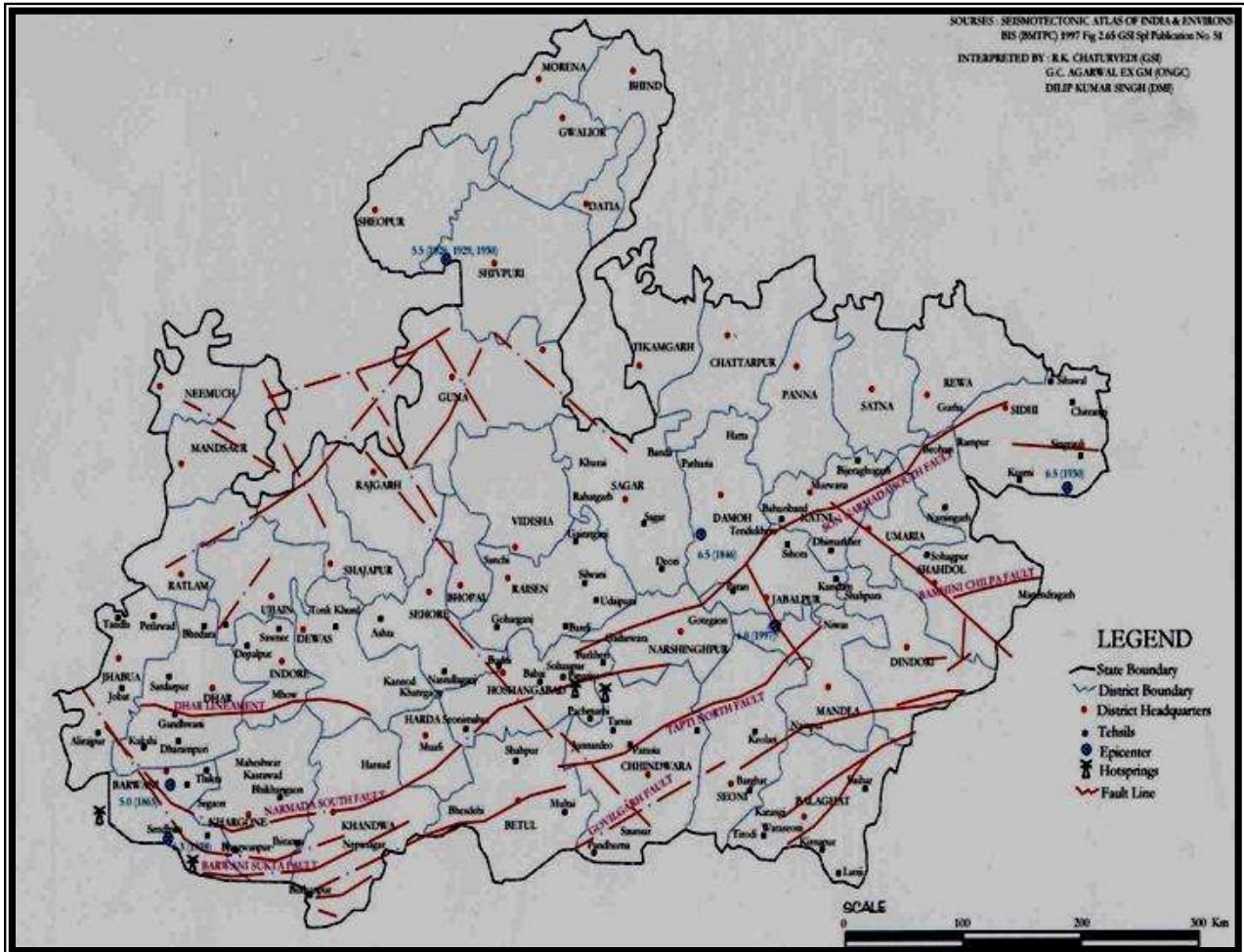
HOSHANGABAD

ITARSI

0 5 10 20 Kilometers

Map composed by NIC





FLOOD PRONE REGIONS OF HOSHANGABAD

