

8/6/2012

District Disaster Management Plan-Barwani

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



Prepared by: Sumedh Bansod
Intern (SOGGPA)
IIFM Bhopal

Administrative Support by:
School Of Good Governance &
Policy Analysis, Narmada
Bhavan, Arera Hills, Bhopal

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

Contents

STRUCTURE OF DISTRICT DISASTER MANAGEMENT PLAN (DDMP)	4
A. GENERAL	4
A 1 Overview	4
A 1.1 District Profile	4
A 1.2 Scopes and Ownership of District Disaster Management Plan	17
A 1.3 Purpose of the Plan	Ошибка! Закладка не определена.
A 1.4 Key Objectives	Ошибка! Закладка не определена.
A 1.5 District Plan Approach	Ошибка! Закладка не определена.
A 2. Institutional Arrangements	20
A 2.1 District Disaster Management Authority (DDMA)	20
A 2.2 District Disaster Management Committee/ Advisory Committee (DDMC/ DDMAC)	22
A 2.3 District Emergency Operations Center (DEOC) / District Control Room (DCR)	22
A 2.4 District Disaster Information Management System	22
A 2.5 Block Level Disaster Management Committee	23
A 2.6 Gram Panchayat Disaster Management Committee	23
B. HAZARD, VULNERABILITY ASSESSMENT AND RISK PROFILING (HVRC)	24
B 1. Hazard Assessment	24
B.1.1 History of past disasters	24
B.1.2 Major applicable hazards	26
B.1.3 Seasonality of hazards	27
B 2 Vulnerability Analysis	28
B 2.1 Vulnerability Elements:.....	28
B 3. Capacity Analysis	29
B 3.1 Resource inventory, Block wise	29
B 3.2 Resource inventory in fire department Barwani	30
B 4. Risks Assessment	33
B.4.1 Potential impact of applicable hazards and existing vulnerabilities.....	33
B 4.2 Risk profiling of the district.....	34
C. DISTRICT DISASTER MANAGEMENT PLAN	34
C 1 District Action Plans	35
C 1.1 Mitigation Plan	35
C 1.2 Preparedness Plan	39
C 1.3 Response Plan	41

C 1.4	Recovery and Reconstruction Plan	55
C 1.5	Cross cutting elements	56
C 2	Standard Operating Procedures (and Checklists)	58
C 2.1	SOPs for all concerned Line Departments	58
	SOP of Health Department	59
	SOP of Education Department	60
	SOP of Welfare of Women and Children Department	60
	SOP of Electricity Department	61
	SOP of Industrial Departments	62
	SOP of Department of Food, civil supplies and consumer affairs	63
	SOP of Transport Department	63
	SOP of Finance Department	64
	SOP of Public Works Department	65
	SOP of Irrigation Department	67
	SOP of Department of Social Justice and Empowerment	68
	SOP of Veterinary Department	69
	SOP of Forest Department	69
	SOP of Agriculture Department	70
	SOP of Police Department	71
	SOP of Homeguard Department	72
C 2.2	Hazard specific SOPs for designated Departments and Teams	73
C 3	Financial Provisions for Disaster Management	73
C 4	Coordination mechanisms with other stakeholders	74
C 4.1	Mapping of stakeholders in the District	74
C 4.2	Responsibilities of the stakeholders	76
C 5	Inter-District Coordination Mechanisms –[Standard Operating Procedures]	77
C 6	Intra- District Coordination Mechanisms – [with Block Headquarters]	77
C 7	Dissemination of DM Plan	78
C 7.1	Plan Evaluation	79
C 7.2	Plan Update	79
C 8	Annexure	80
C 8.1	District profile	80
C 8.2	Resources	82
C 8.3	Media and information management	83
C 8.4	Important Contact numbers	83
C 8.5	Do's and don'ts of all possible hazards	87
C 8.6	Detailed Maps	93

District Disaster Management Plan (DDMP) of District Barwani

A. GENERAL

A 1 Overview

A 1.1 District Profile

This section will provides an overview of district in terms of its geography, and topography (temperatures, rainfall, geographical area, landholding pattern, cropping pattern, rivers, livelihood details, major drinking water sources, critical establishments etc), demography (literacy rate, poverty, economy, per capita income, main occupation of the people), climate and weather, rivers, roads, housing, communications, education, health (hospitals), and other critical infrastructure such as industrial establishments etc. Map of the district will also be enclosed. The additional information will be provided in the Annexure.

A 1.1.1 Location and administrative divisions

District **Barwani** was formed on **25th May 1998**. It was carved out of West-Nimar, Khargone district. Barwani is situated on the south-west side of Madhya Pradesh and the Holy River **Narmada** is its northern border.

Barwani district is located in the south western part of Madhya Pradesh, occupying an area of 3664.8 sq.km. The district is bounded on the north by Dhar district, on the south and west by Dhule district of Maharashtra State and in the east by Khargone district. The district extends between the parallels of latitude 21° 22' and 22° 22' north and the meridian of longitude 74° 27' and 75° 30' east and falls in Survey of India toposheet Nos. 46J, 46K, 46N and 46O. The district has three subdivisions and it is divided into nine Tehsils and seven Development Blocks.

Table A 1.1.1

Location (in degrees) -	Latitude – 21°37' to 22°22' North Longitude - 74°27' to 75°30' East.
District Area (in sq. kms.) -	3664.68 sq. kms.
Administrative information-	
No. of sub divisions:	3: Barwani, Sendhava, Rajpur
No. of Tehsils:	9: Barwani, Thikari, Sendhwa, Pati, Niwali, Pansemal, Rajpur, Anjad , Warla
No. of Municipal Boards	Nagar palika: 2
No. of Blocks:	Nagar Panchayat: 5 7: Barwani, Pati, Rajpur, Thikari, Sendhawa, Niwali, Pansemal
No. of Gram Panchayats:	416
No. of Villages:	691
No. of Police Stations	13
No. of Post Offices(Block wise):	17
Year of district formation:	1998, 25th May
Name of adjacent districts:	Khargoan , Dhar in MP Nandurbar, Dhule, Jalgoan in Maharashtra.

A 1.1.2 Geography and Topography

Physically, the district comprises of three distinct natural divisions viz. Narmada valley in the northern part, uplands along southern and western margins (Satpuda Range and highly dissected Deccan Plateau) and Narrow belt of scarp ridges (Vindhyan Hill Range). The area of the district displays undulatory topography which includes highly dissected plateau, linear ridges, residual hills and low

lying plains. The highest elevation in the district is 1033 m amsl south of Ramgarh fort in Sendhwa Block. The lowest point is at elevation 149 m amsl near Talwda Deb in Rajpur Block.

About 88% of the district lies in Narmada Basin and 12% in Tapti Basin. The district area is drained mainly by the Narmada River and its tributaries like Goi and Deb. All of these tributaries flow from south to north and join Narmada. Major rivers are perennial to semi-perennial. District is surrounded by **Satpuda** (in South) and **Vindhyachal** (in North) ranges.

There are several lakes and embankments of revenue department in Barwani district. The total forest cover in district is 244.09 sq.km. and having three forest divisions.

Table A 1.1.2

Name of rivers and lakes:	Rivers: Narmada, Goi, Deb, Aner, Nahali, Borad, Gomai, Tapti Lakes: Sengwal Talab, Ralawati Talab, Pisanawal Talab, Chikhalya Talab, Salakheda Talab, Bhorwada Talab, Jamapati Talab
No. of dams, embankments:	97 large +14 small= 111
Name of existing mountains:	Satpuda Range Vindhyanchal Range
Highest elevation (in meters):	1033 m amsl at south of Ramgarh fort in Sendhwa Block
Forest cover in the district:	244.09 sq. kms.

A 1.1.3 Demographic and socio economics

As per the Census 2011, total population of Barwani district is about 13, 85,659 persons with 699578 Males and 686081 Females. The sex ratio is 985 females to every thousand males. The overall population density is 256 persons per square kilometer. There is a small population living in the urban centers as compared to the rural areas with urban population of about 2,03,873 and that of rural is 11, 81,186.

The scheduled caste population is about 5% of the total population. The scheduled tribe population in the district is just 75% of the total district population.

Table A 1.1.3

Total household:	Total- 243061
Total population:	Rural- 205589 Urban- 37472 13,85,659 (2011 census) with 27.50% growth in the decade.
Male:	699578
Female:	686081
Population density:	256 persons/km²
Total APL, BPL families:	APL: 112786 BPL:165353 Dindayal Antyoday Yojana:29220
Occupation -	
Main occupation of people:	Agriculture, Labor
Secondary occupation of people:	Gov. Service , Business

A 1.1.4 Climate and weather

The climate of the district on the whole is tropical and dry, except during south west monsoon season (middle of June to September). Winter Season is between November to February. Summer season starts from March and ends by June.

The district is influenced by South-West Monsoon which extends from June to September. The mean annual rainfall is 738.64 mm there is very little rainfall in the winter season. The monsoon rainfall accounts for 80% - 85% of the annual rainfall.

May is the hottest month of the year when general temperature goes up to 42° C, occasionally, it goes up to 47° C. December is the coldest month of the year when the mean daily temperature comes down to about 8° C.

Table A 1.1.4

Rainfall-	In monsoon (1st June to 15th October)
Total annual rainfall of last year:	746.8 mm
Average rainfall (last 10 years):	738.64 mm
Temperature-	
Maximum Temperature:	47*C in summer
Minimum Temperature:	8*C in winter
Demarcation of crucial season	
Months of excess rainfall, leading to flood situation:	June, July, August, September.
Months of water scarcity, leading to drought situation:	March, April, May, June

Details of the Average Rainfall from year 2001 to 2010. (Source: Land Records)

S.No	Year	Barwani	Pati	Rajpur	Thikari	Sendhawa	Panseml	Niwali	total	District Average
1	2001	475.5	575	442	498.4	712	627	463.6	3793.5	541.9
2	2002	545.6	570	618	903.1	1140	769	781.4	5327.1	761.0
3	2003	559.8	775.3	691	950	956.6	974	932.4	5839.1	834.1
4	2004	368.5	590.5	351	768.7	1019	768	883	4748.7	678.3
5	2005	454	440.2	271	610	618.2	648	636.2	3677.6	525.3
6	2006	996.5	1271	1208	1173.4	1304	1403	1661	9016.9	1288.1
7	2007	855.8	939	780	896	615	940	1064	6089.8	869.9
8	2008	486.9	683.4	452	547.9	506	611	673	3960.2	565.7
9	2009	549.7	558	657.7	644.9	594	686	796.9	4487.2	641.0
10	2010	650.4	647	971.2	645.2	1026	609	679	5227.8	746.8
	Total	5942.7	7049	6441.9	7637.6	8490.8	8035	8570.5	52167.9	7452.5
	Average	594.27	704.9	644.19	763.76	849.08	803.5	857.05	5216.79	745.2

A 1.1.5 Health (Medical)

In Barwani there are 1 District Hospital, 1 Civil Hospital in Sendhawa, 28 PHCs, 8 CHCs and 236 Sub health Centers. There are 243 licensed medical shops in the district.

There are two blood banks in district one is in district hospital Barwani with capacity of 300 units of blood and one is in Sendhawa. Location map of hospitals is attached in annexure 8.6.

Table A 1.1.5.1

Block Name	No. of PHC	No. of CHC	Sub health Center
Barwani	3	1	34
Pati	3	1	24
Rajpur	5	2	40
Thikari	6	1	21
Sendhawa	5	1	26
Niwali	2	1	53
Pansemal	4	1	38
Total	28	8	236

Table A 1.1.5.1

Place	No. of beds:	No. of medical officers:	No. of nurses	ANM	No. of compounders/ward boy
Dist. Hospital Barwani	300	35	NA	-	-
Civil Hospital Sendhwa	100	NA	NA	-	-
CHC	30	NA	NA	-	-
PHC	6	NA	NA	-	-
Sub health Centre	1	NA	NA	-	-
Total	437	91	81	321	113

A 1.1.6 Education

The literacy percentage in Barwani is 50.2% as per 2011 census. As per data available up to April 2012, the numbers of Government primary schools in the district are 2272, Middle schools are 635, High schools are 112, and senior secondary schools are 64 and 13 colleges. There are 1501 Anganwaris in Barwani.

Table A 1.1.6.1

Literacy rate:	50.23
Total Male:	323852
Total Female:	241000
No. of Secondary schools:	(Govt. + Private entities) (44+20)
No. of High schools:	(92+20)
No. of Middle schools:	635
No. of Primary schools:	2272
No. of Anganwaris:	1501
No. of vocational training (ITI)centers:	7
No. of Engineering colleges:	3
No. of Medical colleges:	0
No. of Other colleges:	10

Table A 1.1.6.2

S.No.	Block Name	No. of Anganwaris
1	Barwani	222
2	Pati	150
3	Thikari	187

4	Rajpur	297
5	Sendhawa	191
6	Warla	151
7	Niwali	119
8	Pansemal	186

A 1.1.7 Agriculture and Land use

Majority of population is involved in agriculture activities. Major crops are wheat, jwar, chana, Maize, Tuar etc. including Cash Crops like Soyabean, Cotton, Groundnut, and sugarcane. The total area irrigated by canals is 4.95 sq km of the total area sown 2325.82 sq. km .The total area irrigated by tube wells is 119.42 sq. km., by open wells 216.86 sq. km and by ponds & Tanks 385.11 sq. km. The total area under assured irrigation from various sources is 655.38 sq. km. This was only 28.17% of the net sown area .Thus almost 72% of the sown area in the district is dependent on rain-fed irrigation.

Generally, five types of soils are found in the district namely Kali-I, Kali-II, Kali-III, Halki Khadri and Bardi. The soils of Barwani district are classified as medium black cotton soils containing nearly 50% silt and clay together. Mostly the soils are lighter, open and drained.

Alluvial type of soil is found on both the sides of the river Narmada and in some patches on the banks of its tributaries like Goi, Deb & Bour. This type of soil is deep fertile & well drained. The soils of the rest of the district are mostly shallow & poor in fertility.

Table A 1.1.7

Cropping pattern -	Single crop, Double Crop, Mix crop, Intercrop.
Type of major crops:	Food Crops: wheat, jwar, chana, Maize, Tuar etc. Cash Crops: Soyabean, Cotton, Groundnut, sugarcane etc.
Cropping seasons:	Rabi and Kharif, summer crop in Narmada belt
Land classifications-	In Hectares
Forest land:	(158514+24442) Reserve forest+ Revenue Forest
Barren & Uncultivated land:	72051 Hact.

Cultivated land:	277121 Hact.
Pasture land:	10586 Hact.
Soil classifications	Medium Black Cotton Soil Alluvial type of soil along the drainage
Recurrent flood hit area:	Narmada belt
Drought hit area:	None

A 1.1.8 Housing Pattern

Near about 30 % of households have either semi pucca or pucca houses, rest 50% were lived in kuccha houses and the remaining 15% lived in juggis jhopris. In villages, mostly the houses are of mud or brick walls. There are some pucca houses in the villages also.

Most of the houses have construction up to Ground Floor or 1st floor. Very less Houses have construction up to 2nd and 3rd floors like Community hall, Hotel, Government department, Hospitals, Schools, and Colleges etc.

Table A 1.8

Housing pattern-	
Type of housing construction:	Kuccha and pucca houses, including houses of mud and cement.
Type of material used:	RCC / Brick/Mud/Timber/Tin Shed
Flooring types: (Ground and above)	G, G+1, G+2, G+3, etc Very few multistory buildings in Barwani not more than 4 floor.

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

Table No. : MP 28

State : MADHYA PRADESH

BARWANI

Wall / Roof		Census Houses		Level of Risk under								
		No. of Houses	%	EQ Zone				Wind Velocity m/s				Flood Prone Area in %
				V	IV	III	II	55 & 50	47	44 & 39	33	
				Area in %				Area in %				
						100					100	
WALL												
A1 - Mud Unburnt Brick Wall	Rural	57,774	26.9									
	Urban	9,414	4.4									
	Total	67,188	31.3			M					M	
A2 - Stone Wall	Rural	398	0.2									
	Urban	29	-									
	Total	427	0.2			M					L	
Total - Category - A		67,615	31.4									
B - Burnt Bricks Wall	Rural	42,489	19.8									
	Urban	19,996	9.3									
	Total	62,485	29.1			L					L	
Total - Category - B		62,485	29.1									
C1 - Concrete Wall	Rural	587	0.3									
	Urban	763	0.4									
	Total	1,350	0.7			VL					VL	
C2 - Wood wall	Rural	1,921	0.9									
	Urban	559	0.3									
	Total	2,480	1.2			VL					M	
Total - Category - C		3,830	1.8									
X - Other Materials	Rural	77,260	35.9									
	Urban	3,851	1.8									
	Total	81,111	37.7			VL					M	
Total - Category - X		81,111	37.7									
TOTAL BUILDINGS		215,041										

A 1.1.9 Industrial setup

There are no major hazardous industries in Barwani District except four fertilizer plants. Apart from these there are several Ginning mills which are open during crop season of cotton.

Table A 1.1.9

Total no. of industries (Govt., Semi Govt. and Pvt),	Gov. and semi Gov. - nil Privet-
a) No. of Major Accident Hazard Units/ Polluting industries/ Industrial Areas:	4
Total workforce involved in these industrial units:	400 (Approx)
b) No. of Medium and small scale industries :	1994 registered in last 10 years
Total manpower involved in these units:	4847
Any major accident occurred in any of the industrial units (Loss of life >10, or Financial loss > 1 Crore).	NO major Accidents except minor fire in Ginning mills.

Hazard specific industries

S.No.	Name of Industry	Location
1	Suman organics and chemicals	Pansemal
2	Suman phosphate	Pansemal
3	Godavari Phosphate	A.B. Road, Rajpur
4	Mantram Techno feb	A.B. Road, Sendhawa

A 1.1.10 Transport and communication network

Table A 1.1.10

Transport Connectivity of Barwani w.r.t. following networks:	(Road map of Barwani district is Attached in annexure.)
---	--

<p>a) By Road</p>	<p>Barwani is fairly well connected to other parts of Madhya Pradesh and India with national and state highways. The city is connected to the Agra-Bombay national highway no.3 by Khandwa-Baroda interstate highway no.26 at the distance of 45 km at Julwaniya. There are bus services to and from all of the major and minor cities near Barwani, including Indore, Khandwa, Ujjain, Dewas, Barwani, Ratlam, Khargoon Mumbai, Ahmadabad, and Baroda.</p>
<p>b) By Rail</p>	<p>Barwani has no direct railway connectivity. The Western Railway (Ratlam Mandal) has a reservation counter in Barwani (Ambedker Park on Rajghat Road). The nearest railway station is situated at Indore, which is one of the major commercial railway station of western railway. Another nearer railway station is Khandwa on the Central Railway, which is 180 km from Barwani via State highway No 26. On the Western Railway, Ratlam, Dahod and Meghnagar are closer though not well connected by road.</p>
<p>c) By Air</p>	<p>The nearest airport to Barwani is Devi Ahilyabai Holkar Airport. It distances about 150 km (3–4 hours) and provides direct connectivity to Mumbai, Delhi, Ahmedabad, Hyderabad, Kolkata, Raipur, Bangalore, Lucknow, Patna, Srinagar and Nagpur with major airlines operating on these routes.</p>
<p>1) Communication network</p> <p>i) No. of wireless stations in the respective blocks</p> <p>ii) Availability of telephone, mobile services in each block</p>	<p>Police control room has a wireless station. (Numbers are enough)</p> <p>Telephone and Mobile Services are Available in each Block, major service provider is BSNL, along with privet Telecom companies i.e. IDEA, AIRTEL, RELIENCE , VODAFONE, TATA DOCOMO.</p>

iii) Availability of internet facility in the blocks	Available at all Blocks, Broadband, wireless 3G.
--	--

Major road and rail network to be showed in the detailed map enclosed in Annexure 8.6

A 1.1.11 Power stations and electricity installations

There is no power generation unit in Barwani. Four substations of 40 MKV are there and 132 distribution centers of 33 KV to 11 KV having 5543 Transformers and 45 AST high pressure transformers. For making access of electricity available to cent per cent households in the state, schemes for all the districts in Madhya Pradesh have been formulated under Rajiv Gandhi Grameen Vidyutikaran Yojna. There are two divisions of MPEB in District i.e. Barwani and Sendhawa and 18 distribution offices.

Table A 1.1.11

List of power stations in the district: Electricity outreach in the district:	93 power grid substations 27364 three phase household connections 23159 Irrigation connections
Available sources of electricity in district, like DG sets etc:	450 DG sets for mobile towers. 62 DG sets for minor industries, petrol pumps, ginning mills, hospitals and Theaters etc.

A 1.1.12 Major historical, religious place, tourist spots

Table A 1.1.12

Major historical places ,religious centers and tourist spots in the district:	<ul style="list-style-type: none"> • Bawangaja • Beejasan • TIR-GOLA • Rajghat
---	--

Bawangaja (Chool Giri) is an important Jain pilgrimage centre. It is 6 Kms from district headquarter Barwani. There are 11 temples on the hill and they belong to 15th century. It has world's tallest

statue of **Lord Adinathji**. Jain saints **Kumbhakarna** and **Indrajeet** were said to attain Nirvana from this place only.

Beejasan is situated on the Agra-Mumbai national highway, 20 Kms from Sendhawa towards Maharashtra. It is famous for the temple of **Goddess Beejasani (Durga)**.

TIR-GOLA It is located at Khandwa-Baroda Road, in front of Sagar Vilas Palace and was built in the memory of late **son** of Raja Ranjit Singh.

A 1.2 Scopes and Ownership of District Disaster Management Plan

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

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

A 1.2 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.

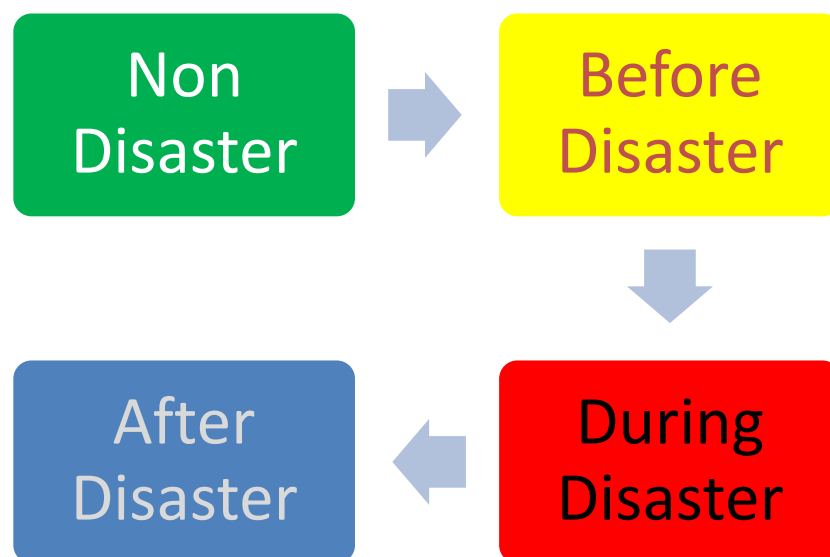
- To establish and maintain a proactive programme of risk reduction, this programme being implemented through existing sectoral and inter-sectoral development programmes and
- Mainstreaming DM concerns into the developmental planning process.
- Encouraging mitigation measures based on state-of-the-art 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	5 th September 2007
---------------------------	--------------------------------

Members of DDMA, their name, along with actual designations, and current position in DDMA like Chairman, Secretary or Member etc	District Collector/Magistrate (Chairman) .Chairman of Jila Panchayat (Co-Chairman) .Superintendent of Police (Member) .Chief Medical and Health Officer (Member) .Executive Engineer Public Welfare Department (Member) .Chief Executive Officer Jila Panchayat (Member) .Additional Collector/Additional District Magistrate (Secretary/Member) .Chief Municipality officer (Member) .Executive Engineer PWD (Member)
---	--

Roles and responsibilities of DDMA:

1. Ensuring that prevention, mitigation and preparedness activities are carried out in accordance with the appropriate guidelines.
2. Providing inputs to MPSDMA relating to various aspects of disaster management, including early warnings, status of preparedness etc.
3. Ensuring that relevant officials in the district possess the knowledge to deal with disaster management issues.
4. 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.
5. Facilitating and co-coordinating with local Government bodies to ensure that pre disaster DM activities in the district are carried out optimally.
6. Facilitating community training, awareness programmes and the installation of emergency facilities with the support of local administration, NGOs, and the private sector.
7. Establishing adequate inter-department coordination on issues related to disaster management.
8. Reviewing emergency plans and guidelines;
9. Involving the community in the planning and development process.
10. Ensuring that local authorities, including Municipal Corporations, Gram Panchayats Etc. in the district, are involved in developing their own mitigation strategies.
11. Revisiting/ reassessing contingency plans related to disaster management.

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

Table A 2.2

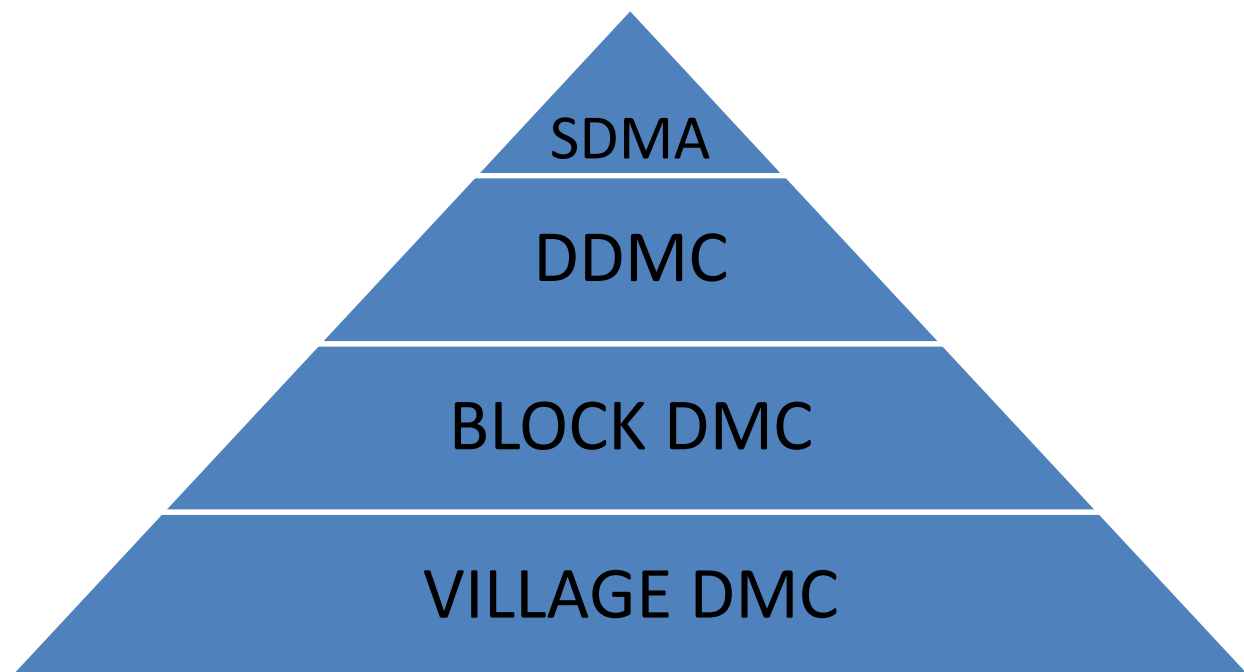
Functionaries	Designation	Address	Office contact
DM / DC	Chairman, DDMC	Office of District Collector	07284-224001
President District Panchayat	Member Secretary, DDMA	District Panchayat	07284-
CEO District Panchayat	Member, DDMA	District Panchayat	07284-222930
Additional District Magistrate	Member, DDMA	Collector office	07284-223301
Superintendent of Police	Member, DDMA	SP office	07284-222561
District Medical Officer (CMHO)	Member, DDMA	District hospital	07284-222056

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

Table A 2.3

Location of the DEOC / DCR:	Jila Panchayat Office
Involved agencies in DEOC / DCR, Roles and responsibilities of the officials / nodal persons (phase wise):	
Equipments installed (software and hardware):	It is well equipped with wireless equipments, telephones, internet facilities, computers, etc.

A 2.4 District Disaster Information Management System



A 2.5 Block Level Disaster Management Committee

Table A 2.5

S.No.	Actual Designations	Current Position In Block DMC
1.	Nagar Palika/Panchayat President	President
2.	SDM/Tahshildar/Nayab Tahshildar	Vice President
3.	SDO Police/ Thana Incharge	Member
4.	Chief Municipality Officer	Member
5.	Block Medical officer/ PHC Incharge	Member
6.	Assistant engineer MPEB	Member
7.	Assistant engineer PWD	Member

A 2.6 Gram Panchayat Disaster Management Committee

In Barwani there are village level disaster management committees in some villages which are functioning properly, and NGO Asha gram trust is also working on this with government departments and local public for other villages with collaboration with DDMC Barwani and DMI Bhopal.

Table A 2.6

S.No.	Designation	Current Position In Village DMC
1	Village Sarpanch	President
2	Up Sarpanch	Vice President
3	Secretary Panchayat	Secretary
4	Patwari	Member
5	Head Master Primary School	Member
6	02 Village Panchayat Member of most sensitive wards (nominated by Sarpanch)	Member
7	Village Kotwar	Member

Roles and responsibilities of Gram Panchayat DMC

- Assessment of hazards and risks at local level.
- Implementation of DDMP at gram level.
- Formation of volunteer groups for the disaster.
- Training and capacity building.
- Building awareness in the community.
- Organizing training and capacity building programs.
- Preparing disaster management plan for the gram.
- Taking care of inventories and equipments that can be used during disasters.

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

B 1. Hazard Assessment

B.1.1 History of past disasters

Flood:

Flood came in year 1995 in which many villages of Anjad, Pansemal and Barwani Tehsils are affected. Many people were affected in that flood, buildings were damaged completely while some were partially damaged. Relief camps were made in which people took shelter. Funds were distributed as flood relief.

Drought:

Drought like situation occurs almost every year in the district but no such incident of heavy damage is recorded. Most of the seasonal rivers dry out even before coming of summer in May – June. District administration fulfills the water need of the community by supplying water through tanks, and Drought relief funds are distributed.

Earthquakes:

Barwani district is situated on the 3rd seismic zone of earthquake vulnerability. There were incidents of some earthquake shocks in the district but they are of small intensity and no report of damages is reported. Some recent earthquakes of varying intensities came in district in 1997 and 2009; in 1993 and 1985 in Jabalpur; in 1985 in Khargone; in 1984 in Mandla; in 1975 in Dewas; in 1973 in Betul and in 1970 in Jabalpur which had their impact in Barwani also but no such damages occurred.

Breaking of dams:

There are several dams in the district which possess quite high risks during heavy rainfall. But no such report of breakage is reported yet in the district. Apart from it some of the India's biggest dams are present in adjacent districts these are Sardar Sarowar dam, Maheshwar dam and, Indira Sagar dam which all are on river Narmada.

Industrial and chemical disasters:

There are no such major hazardous industries running in the district. There are some small accidents happened in them but managed it well. So no such history of disaster is reported yet.

Road accidents:

There are road accidents occurring every year in the district and is on gradual rise. NH 03 is the main center of these road accidents where they occurred most. Apart from it the Rajpur-Barwani Road is not so good in condition and it is also a place inviting accidents.

Epidemics:

There are many incidents of occurrence of epidemics in the district in past. Recently it occurred in year 2011 in Bawadiya village in form of Chicken Guniya. Julwaniya and Pipaldhar is for (HIV AIDS). Area adjacent to Maharashtra border is prone to Bird Flu and other epidemics.

Environmental hazard:

There is vast forest cover and industrial zone in the district posing high risks to forest fires causing environmental damage and industrial accidents causing environmental degradation. But there is no such cases reported of any incidents yet.

Violence/riots:

In Barwani District there are no such records for communal riots and violence. Majority of population is tribal.

Stampede:

There are many community fairs comes in the district, like Bheelat mela, Dashehera etc. when thousands of people participates like in These places becomes highly prone to advent of disasters during festivals and fests but still no big cases are reported yet.

Fire:

Barwani city and forest areas are mostly vulnerable to the fire accidents but no such big accident is reported yet. There are some accidents of fire but they were handled well with little damage.

Table B.1.1 History of past disasters (last 30 years / as many years of data as possible)

Type of hazard	Year of occurrence	Area affected	Impact on life	Hazard prone zone in district
Flood	1995	Narmada belt	Loss of life and material	Anjad, Pansemal, Barwani
Earthquake	2009,2007	Barwani	No major impact	Whole District
Fire	Every year in Summer	Forest area and	Loss of life and material	Anjad, Barwani, Sendhawa
Drought	Years of Low rainfall	-	Loss of agriculture	Niwali, Pansemal, Barwani, Sendhawa
Stampede during Religious Fair		-	Loss of life and material	Nagalwadi village, Khajuri, Barwani, Thikari, Sendhawa
Road Accident	-	-	Loss of life and material	N.H. 03 Thikari, Rajpur, Sendhawa, Niwali
Epidemics	2011	Rural	Loss of life	Bawadiya village
Chemical Transportation and storage	-	-	-	Niwali, Anjad, Barwani, Sendhawa

Locations of hazard prone areas in are shown in the detailed maps of district, enclosed in Annexure.

B.1.2 Major applicable hazards

Type of applicable hazards	Affected vulnerabilities (Physical, social, economic, natural and institutional)	Hazard prone blocks (and also if possible GPs)

Flood	Population, Roads, Bridges, Poverty , Agriculture, River, Animal, Food security Drinking water	All the villages on bank of river Narmada. Anjad, Pansemal, Barwani, Mandwara, aamda, melan, gorikhel,mohipura, Badadha,keshawpura,Amlali, bizasan, nndgaon,pendara kukara etc.
earthquake	Population, Roads, Bridges, Poverty , Agriculture, River, Animal, Food security Drinking water	All Blocks and all villages
drought	Population, Roads, Bridges, Poverty , Agriculture, River, Animal, Food security Drinking water	Niwali, Pansemal, Pati, Sendhawa
hailstorm	Population	
fire	Agriculture Animal Food security	Forest Area Ginning factories
road accidents	Population, Roads, Bridges	N.H. 03
epidemic	Population, Roads, Bridges, Poverty , Agriculture, River, Animal, Food security Drinking water	Maharashtra Boarder Julwaniya and Pipaldhar (HIV AIDS) Bawadiya
stampede	Population,	Bawangaja Rajghat Bheelat mela Rajpur Khjuri mela Rajpur

B.1.3 Seasonality of hazards

Hazard	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Flood	-	-	-	-	-	High	High	High	High	-	-	-
Earthquake	-	-	-	-	-	-	-	-	-	-	-	-
Fire	-	-	High	High	High	-	-	-	-	-	-	-
Drought			High	High	High							

Religious Fair			High					High	High	High	High	High
Road Accident	-	-	-	-	-	-	-	-	-	-	-	-
Epidemics	-	-	-	-	-	High	High	High	-	-	-	-
Chemical Transportation and storage	-	-	-	-	-	-	-	-	-	-	-	-

B 2 Vulnerability Analysis

B 2.1 Vulnerability Elements:

Physical Vulnerability: It is present in Barwani district, As Every year flood like situation arises in district, large number of dams also present in district. Due to Backflow of Sardar Sarowar dam PWD road, NVDA Road is affected; many bridges are also at risk. Physical Vulnerability is also present in other Block like Sendhawa, Niwali, Pansemal, and Anjad as whole Barwani District comes in Earthquake Zone 3 because of which many, bridges, hospitals, houses and embankments are vulnerable.

Social Vulnerability: It is present in each block, as in district majority of population is Tribal and the literacy is very low thus they are prone to every disaster like flood, epidemic, earthquake because of awareness. Blocks like Pati, Pansemal, Barwani, Sendhawa and Niwali are prone to epidemic.

Economic Vulnerability: It is present in all block; As District is under the constitutional schedule of tribal area and main occupation of the people are Agriculture and it is adversely affects by disasters like flood, drought, Frost etc. Decrease in agricultural productivity leads to decrease in livelihood options for villagers and also their source of income and it increases poverty.

Environmental vulnerability: In Barwani Environmental vulnerability is very low as there is no any major environmental polluting industry and rivers and canals are free from pollution.

Institutional Vulnerability: There is strong need to create awareness among community regarding health and safety, Absence of relief Team at village level creates a disastrous situation for villagers. Absence of Disaster management Committee at block, Tehsil level, gram level creates a disastrous situation. There is no health risk in blocks as Health combat teams are present in each block. Institutional Vulnerability is present in all blocks because of absence of block level disaster management committee.

Table B.2

• **Block wise vulnerability**

S.No.	Tehsil	Earthquake	Flood	Drought	fire	stampede	Road accident	Chemical transport	epidemic
1	Barwani	■	■		■	■	■		

2	Anjad	■	■						
3	Thikari	■	■			■		■	
4	Pati	■							
5	Sendhawa	■		■	■	■	■	■	■
6	Pansemal	■	■						
7	Niwali	■		■					
8	Rajpur	■				■	■		
9	Warla	■		■					

The potentially applicable vulnerabilities in Barwani showed in the detailed map, is enclosed in Annexure in the end.

B 3. Capacity Analysis

B 3.1 Resource inventory, Block wise

Resource Type	Details	Number	Govt, Private
Equipments used for cutting, Search & Rescue (S&R), grinding m/c etc.	Enclosed in IDRN Data	Sufficient	Govt, Private
Temporary shelters, camps			Govt, Private
Emergency Search lights			Govt, Private
Trained manpower, professionals available in specific domain like S&R ,First Aid, Response Warning, Swimming etc.	List of all trained staff to be enclosed in the Annexure 8.6, with all contact numbers		
First Aid / Medical emergency requirements, equipments to be used	enclosed in the Annexure		Govt, Private
Location of key hospitals, blood banks, Doctors, medical stores	enclosed in the Annexure		Govt, Private
Availability of equipments like Bulldozers, Hydra, Crane, for clearance, JCB			Govt, Private
Transportation(Fit Vehicles available with nodal agencies, in emergency)			Govt, Private
Total no. of boats (with info about)			Govt, Private

capacity, size, contacts of Orgn./owner etc)			
Availability of fire fighting equipments, Fire tenders	enclosed in the Annexure		Govt.
List of PDS Shops	enclosed in the Annexure	331	Govt.
List of NGOs / CBOs	enclosed in the Annexure		
Veterinary Hospitals	enclosed in the Annexure		Govt.
Telephone Exchange	enclosed in the Annexure		Govt.
List of petrol pumps	enclosed in the Annexure		

B 3.2 Resource inventory in fire department Barwani

Fire tender-2	1800 Ltr & 2000 Ltr
Canvas pipe-100 feet 4	
Canvas pipe	2 of 50 feet each
Monitor gun	2
Hose reel pipe	200 feet
Water tanker	4 (3 stand by 1 running)
Tractor trolley	2
Tata 609	1
Door to door waste collection vehicles	2 Tata ace trolley
Sky lift-	1
Total manpower:	Drivers -7 Fireman-2

Contact person- Mr. K.S.Dodave, CMO Nagar Palika Barwani, Contact No. - 07290-222034

With reference to www.idrn.gov.in website the status of resource inventory depending upon the applicable resources the Barwani district.



COUNTRYWIDE DISASTER MANAGEMENT RESOURCE INVENTORY - QUERY RESULT

ITEM DESCRIPTION	DEPARTMENT & CONTACT ADDRESS	QUANTITY, LOCATION & SOURCE
ITEM: ABC Type DESCRIPTION: Specification of Type	DEPT NAME: Nagar Panchayat, Khetiya CONTACT ADDR: Chief Municipal Officer, Khetiya TELEPHONE: +91-07286-23228, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 1Nos SOURCE: PSUn its LOCATION: Nagar Panchayat, Khetiya DATE OF UPDATE: 1/16/2004
ITEM: Antisnake venom DESCRIPTION: Available	DEPT NAME: Nagar Panchayat, Khetiya CONTACT ADDR: Chief Municipal Officer, Khetiya TELEPHONE: +91-07286-23228, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 1Nos SOURCE: PSUn its LOCATION: Nagar Panchayat, Khetiya DATE OF UPDATE: 1/17/2004
ITEM: Bronchodilators DESCRIPTION: Available	DEPT NAME: Nagar Panchayat, Khetiya CONTACT ADDR: Chief Municipal Officer, Khetiya TELEPHONE: +91-07286-23228, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 1Nos SOURCE: PSUn its LOCATION: Nagar Panchayat, Khetiya DATE OF UPDATE: 1/17/2004
ITEM: Chlorine tablets DESCRIPTION: Available	DEPT NAME: Nagar Panchayat, Khetiya CONTACT ADDR: Chief Municipal Officer, Khetiya TELEPHONE: +91-07286-23228, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 1Nos SOURCE: PSUn its LOCATION: Nagar Panchayat, Khetiya DATE OF UPDATE: 1/17/2004
ITEM: CO2 Type DESCRIPTION: ABC, 6	DEPT NAME: Nagar Panchayat, Khetiya CONTACT ADDR: Chief Municipal Officer, Khetiya TELEPHONE: +91-07286-23228, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 1Nos SOURCE: PSUn its LOCATION: Nagar Panchayat, Khetiya DATE OF UPDATE: 1/16/2004
ITEM: Divers Teams DESCRIPTION: OBE Divers	DEPT NAME: Central Water Commission CONTACT ADDR: O.P. Patidar TELEPHONE: (07290)224863, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 1Nos SOURCE: Govt LOCATION: NA DATE OF UPDATE: 5/17/2004
ITEM: Electric Generator (10kv) DESCRIPTION: Amar Jyoti (5Kv)	DEPT NAME: Zila Panchayat Barwani CONTACT ADDR: Mr. Bharat Kumar Vyas TELEPHONE: +91-7290-222930,+ 91-7290-223300 DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 1Nos SOURCE: Govt LOCATION: Zila Panchayat DATE OF UPDATE: 1/16/2004
ITEM: Electric Generator (10kv) DESCRIPTION: All the season.	DEPT NAME: Nagar Panchayat, Anjad CONTACT ADDR: Shri K.L.Gupta TELEPHONE: 07284-251024,07284-253325 DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 1Nos SOURCE: Govt LOCATION: Nagar Panchayat, Anjad DATE OF UPDATE: 1/16/2004
ITEM: Electric Generator (10kv) DESCRIPTION: 2 No. 2kva, 1 No. 30kva, 1 No. 62.5 kva	DEPT NAME: Nagar Panchayat, Khetiya CONTACT ADDR: Chief Municipal Officer, Khetiya TELEPHONE: +91-07286-23228, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 4Nos SOURCE: PSUn its LOCATION: Nagar Panchayat, Khetiya DATE OF UPDATE: 1/16/2004
ITEM: Fire Tender DESCRIPTION: 3000 Litre Capacity	DEPT NAME: Nagar Panchayat, Khetiya CONTACT ADDR: Chief Municipal Officer, Khetiya TELEPHONE: +91-07286-23228,	QUANTITY- 1Nos SOURCE: PSUn its LOCATION: Nagar Panchayat, Khetiya DATE OF UPDATE: 1/16/2004

ITEM: General physician DESCRIPTION: Available	DEPT NAME: Nagar Panchayat, Khetiya CONTACT ADDR: Chief Municipal Officer, Khetiya TELEPHONE: +91-07286-23228, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 2Nos SOURCE: PSUs LOCATION: Not Available DATE OF UPDATE: 1/17/2004
ITEM: Halogen tablets DESCRIPTION: Available	DEPT NAME: Nagar Panchayat, Khetiya CONTACT ADDR: Chief Municipal Officer, Khetiya TELEPHONE: +91-07286-23228, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 1Nos SOURCE: PSUs LOCATION: Nagar Panchayat, Khetiya DATE OF UPDATE: 1/17/2004
ITEM: Life Jackets DESCRIPTION: Always Available	DEPT NAME: E.E., NVDA (E&M) CONTACT ADDR: B.S.S. Parhar TELEPHONE: (07290)224946, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 5Nos SOURCE: Govt LOCATION: NVDA No. 22, Barwani DATE OF UPDATE: 5/17/2004
ITEM: Life Jackets DESCRIPTION: Always Available	DEPT NAME: Central Water Commission CONTACT ADDR: O.P. Patidar TELEPHONE: (07290)224863, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 5Nos SOURCE: Govt LOCATION: Namada at Rajghat Site, Barwani DATE OF UPDATE: 5/17/2004
ITEM: Life buoy DESCRIPTION: Always Available by Road	DEPT NAME: Central Water Commission CONTACT ADDR: O.P. Patidar TELEPHONE: (07290)224863, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 2Nos SOURCE: Govt LOCATION: Namada at Rajghat Site, Barwani DATE OF UPDATE: 5/17/2004
ITEM: Life buoy DESCRIPTION: Always Available	DEPT NAME: E.E., NVDA (E&M) CONTACT ADDR: B.S.S. Parhar TELEPHONE: (07290)224946, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 2Nos SOURCE: Govt LOCATION: E.E., NVDA (E&M) DATE OF UPDATE: 5/17/2004
ITEM: Motor Boats DESCRIPTION: 40 HP OBE	DEPT NAME: E.E., NVDA (E&M) CONTACT ADDR: B.S.S. Parhar TELEPHONE: (07290)224946, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 2Nos SOURCE: Govt LOCATION: NVDA No. 22, Barwani DATE OF UPDATE: 5/17/2004
ITEM: Motor Boats DESCRIPTION: 40 HP OBE	DEPT NAME: Central Water Commission CONTACT ADDR: O.P. Patidar TELEPHONE: (07290)224863, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 2Nos SOURCE: Govt LOCATION: Namada at Rajghat Site, Barwani DATE OF UPDATE: 5/17/2004
ITEM: Pump -high pressure, portable DESCRIPTION: Attached with fire tanker	DEPT NAME: Nagar Panchayat, Khetiya CONTACT ADDR: Chief Municipal Officer, Khetiya TELEPHONE: +91-07286-23228, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 1Nos SOURCE: PSUs LOCATION: Nagar Panchayat, Khetiya DATE OF UPDATE: 1/16/2004
ITEM: Sinking kit DESCRIPTION: 2 No. 20 kv, 1 No. 30 kv, 1 625 kv	DEPT NAME: Nagar Panchayat, Khetiya CONTACT ADDR: Chief Municipal Officer, Khetiya TELEPHONE: +91-07286-23228, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 4Nos SOURCE: PSUs LOCATION: Nagar Panchayat, Khetiya DATE OF UPDATE: 1/16/2004
ITEM: Suit - fire approach DESCRIPTION: 3000 w v	DEPT NAME: Municipal Office, Barwani CONTACT ADDR: Chief Municipal Officer, Barwani TELEPHONE: +91-7290-222764,+ 91-7290- 222034 DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 1Nos SOURCE: PSUs LOCATION: Municipal Office, Barwani DATE OF UPDATE: 1/16/2004

ITEM: Vaccines DESCRIPTION: Available	DEPT NAME: Nagar Panchayat, Khetiya CONTACT ADDR: Chief Municipal Officer, Khetiya TELEPHONE: +91-07286-23228, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 1Nos SOURCE: PSUnits LOCATION: Nagar Panchayat, Khetiya DATE OF UPDATE: 1/17/2004
ITEM: Water filter DESCRIPTION: 10 Litre	DEPT NAME: Central Water Commission CONTACT ADDR: O.P. Patidar TELEPHONE: (07290)224863, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 2Nos SOURCE: Govt LOCATION: Narmada at Rajghat Site, Barwani DATE OF UPDATE: 5/17/2004
ITEM: Water tank DESCRIPTION: 1 No. 900000 Gallon	DEPT NAME: Nagar Panchayat, Khetiya CONTACT ADDR: Chief Municipal Officer, Khetiya TELEPHONE: +91-07286-23228, DIST: Barwani STATE: Madhya Pradesh	QUANTITY- 1Liter SOURCE: PSUnits LOCATION: Nagar Panchayat, Khetiya DATE OF UPDATE: 1/17/2004

B 4. Risks Assessment

B.4.1 Potential impact of applicable hazards and existing vulnerabilities

Type of hazard	Vulnerable areas	Vulnerability	Potential Impact
Flood	The blocks of Anjad, Pansemal, Barwani which are close to the banks of river Narmada.	People who live there unalarmed about the flood, also the livestock of the people there, poorly constructed houses.	Loss in life and livestock, houses can be washed out.
earthquake	Whole Barwani District is comes under Earthquake Zone-II	Lives of people and livestock, houses on the zone.	Deaths, serious injuries, loss of livestock and property.
drought	All the blocks can be affected	Loss of lives and crop.	Stark reduction in food supply and deaths due to lack of water
hailstorm	No such record.	People who are exposed to it at that time.	Loss of life and livestock.

Fire	Places close to forest areas	Lives of people who live in thatched houses, livestock and property.	Loss of lives, severe injuries, loss of livestock and property.
Industrial disaster	No such record.	People who work in the factories, people who live around the factory, 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. Loss of lives, severe injuries.
Accidents	On NH-03 or for that matter anywhere.	People travelling in the vehicles, people in the vicinity of the accident.	Loss of lives or severe impact on health.
epidemic	Rural area e.g. in Bawadiya (Chicken Guniya)	Low hygiene and People who do not observe prevention. People who live in that area.	Loss of lives and property.

* Vulnerable areas and identified safer places to be showed in the detailed maps in Annexure.

B 4.2 Risk profiling of the district

The district of Barwani is apparently “safe” in terms of disaster. One of the major reasons is the sparse population in the area as compared to other parts of the country. There are very less high rise buildings which are to be taken special care of during the situations such as earthquakes. The only disaster that is stressed upon is ‘Flood’ and a proper Flood relief cell with collaboration of NVDA is working in the district. However no special measures in terms of disasters like droughts are currently in place except reserve stock of food at fair price shops and there are water tankers for provision of water.

So, the district needs an “Integrated Disaster Management Plan’ which incorporates all the probable disasters as well as ensures a smooth co-ordination in the affected area so as to minimize the damage to human life as well as other loss. In the subsequent section, a new plan is recommended for Barwani which integrates ICS system considering all the disasters as well as abides by the guidelines of Disaster Management Act 2005.

C . DISTRICT DISASTER MANAGEMENT PLAN

C 1 District Action Plans

For efficient execution of the Barwani District Disaster Management Plan, there should be well defined work actions for stakeholders to follow to avoid any confusion and mismanagement. District actions plans have been organized as per four stages of the disaster cycle.

- **Non Disaster Stage – Mitigation:** To identify existing and potential risks and methods to be adopted to reduce their potential causalities and damage from disasters.
- **Before Disaster Stage - Preparedness:** To build the capacities of local communities and organizations 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 response.
- **After Disaster Stage – Recovery and Rehabilitation:** To build back better.

C 1.1 Mitigation Plan

The main goals for developing mitigation plans for the district is to substantially increase awareness in the local people about the potential disaster risks prevailing and to reduce damage to the society in terms of economical, social and environmental for making the region a better place to live. Since there are many hazards in the district which can have their impact on the safe living of the people and also they are vulnerable to different parts of the district, so the mitigation plan should be made accordingly and can be adopted locally. Floods, drought, earthquakes, break down of dams, violence & riots, industrial risks, stampede epidemics and road accidents are the main hazards of the district and mitigation plan should be made keeping them in mind differently. Gram, block and municipal corporation's mitigation plans should be involved as an input. DDMA with all other concerned departments will help in mitigation plan formulation and its implementation. The departments should identify a liaison officer as nodal officer for the purpose.

District is highly vulnerable to floods because of presence of many water bodies. Planting trees at the shores of the rivers, installation of water level measuring devices of the rivers, monitoring of the dams and embankments and preparation gram and village level mitigation plan against floods should be done. Primary agencies for this could be forest department, gram and Zila Panchayat, municipal corporations, irrigation department and revenue department.

District also faces drought situation in most years. Water of many seasonal rivers dries up even before coming of summers. It causes damage to the crops building scarcity in the district. Preservation of rain water, general awareness about management of water and encouraging plantation crops having less water requirement, planting trees in barren lands and maintaining inventory of food items for these times. Departments being the primary agencies for the development should be gram and Zila Panchayat, irrigation department, agriculture department, food and civil supplies department and forest department.

Dams and embankments also possess considerable risk in some areas of the district. It adds to the damages caused by floods because of being damaged in times of heavy rainfall. Irrigation department should look in the issue of proper maintenance of them and monitoring their conditions. Vulnerable

areas should be marked and additional arrangements should be done to shift them in safe regions. DDMA along with revenue department and PWD should be the active agencies for doing so.

Barwani district is situated in 3rd seismic zone for earthquakes. For so the lifeline supportive organization's building and district administrative buildings should be retrofitted at first priority and general awareness with training should be made. PWD would be the key department for this issue.

There are hundreds of industries and factories running in the district which possesses considerable amount of risk and need to be dealt with separately. There are some industries which deal with harmful and dangerous materials and so proper monitoring should be done with making sure that their storage and using techniques should be made perfectly so as to minimize any occurrence of accident from them. The infrastructure should be made strong enough to stand threats from earthquakes. New industries should be installed away from the population to possess less risk. Industries department, revenue department and land department should look into the zone.

Epidemics are also one of the major issues of concern which could be mitigated by building proper drainage system and doing waste management properly. Supply of safe drinking water and availability of good sanitation system is must. General awareness with new opening of hospitals could result into long lasting effect. Gram and Zila Panchayat along with health department would cover this responsibility.

Stampedes, road accidents and riots & violence are very often in the district. These can be dealt by developing roads, building barricades, installing cameras at risk prone zones, developing emergency health services and improvement in law and order in the district. Community awareness is also needed with their participation. Police department, gram and Zila Panchayat and health department would be the active department in resolving this issue.

C 1.1.1 Scope of Integrating Risk Reduction in Development Schemes

The development process does not necessarily reduce vulnerability to natural hazards. Instead, it can unwittingly create new forms of vulnerability or exacerbate existing ones, sometimes with tragic consequences. Mitigation efforts should be backed by proper development schemes for their efficient working. Integrating it with development schemes will be very beneficial for which vulnerability analysis and risk assessment of the areas are required and accordingly development plans should be made. Barwani district faces many risks and so their mitigation plans should be specific for each.

In Barwani district various developmental schemes are running by government like MNREGA, JNURM etc. Infrastructure development which includes Construction of rivers, dams, roads etc are also done through these schemes. Apart from these schemes various government departments also carried out developmental activities. It's necessary that all these developmental activities taken into consideration the hazards of district.

MNREGA: As Barwani district is flood prone therefore construction of dams, reservoir and Ponds and also include in it, Plantation activity is also encouraged through this scheme. It's a great source of livelihood for affected person. Diversion of flood water, Drainage Improvement Either repair or replace, Flood walls must be included in various MNREGA projects and also checks that construction

of new houses near the rivers are sufficiently above flood level. In construction work the civil engineers have to follow Bureau of Indian Standards (BIS) to construct resistant structures. Government officers, staff are also trained under disaster management, so that their skill will be helpful at the time of disaster.

JNNURM: All the developmental activities must be flood resistant. Ensure that all the installed transformers, power lines are in healthy condition, because this leads to vulnerable situation at the time of flood, Installation of new power lines, latest transformers should be included in developmental activities. And also checks that construction of new houses near the rivers is sufficiently above flood level. A proper plan for water drainage system must be prepared by Nagar Nigam of Barwani. The drains should be de silted before the onset of the rainy season by Municipal Corporation. There must be new drains in the areas. Reservoirs can be made by Municipal Corporation in the areas.

As Barwani district is under seismic zone-III, it's an earthquake prone area but precautionary measures may taken like Assessment of older buildings in regular interval, retro fittings in old buildings which are less safe like government Schools, Colleges, old community hall and especially government department's offices. New buildings must qualify standard codes and also ensure that it has less environmental impact, Eco friendly buildings (Green buildings) must be encouraged.

Sarwa Shiksha Abhiyan: The Sarva Shiksha Abhiyan is an effort to universalize Elementary Education (UEE) by community-ownership of the school system. It can play an important role in creating awareness among youth regarding disaster preparedness. The Disaster Management has been included in school curriculum at CBSE level. The Disaster Management is also made compulsory to NSS / NCC students at college level. So that during disasters they can be called upon for certain help.

Indra Awaas Yojana: Under Indira Awaas Yojana (IAY) all the houses should be advised and instructed to construct earthquake resistant. Special instruction should be provided by district administration to block level and block will guide and instruct to Gram Panchayat for the construction of houses under Indira Awaas Yojana (IAY) for earthquake resistant house construction. Three training should be provided at gram Panchayat level for construction of small earthquake resistant houses under this scheme. This vulnerability due earthquake can be reduced.

The construction work in the district should follow the building codes and incorporate earthquake resistance features. Strengthening of dams and embankments along with other protective features should be done. Vulnerable places should be marked and development of such places should be done accordingly. Retrofitting and renovations of the earlier made developments should be done, especially of the lifeline agencies. Mitigation plans should be made an integrated part of all development schemes. Public Welfare Department would be the primary agency for conducting the assessments. It will be responsibility of the departments to integrate mitigation plans in their development schemes. Zila and Gram Panchayat along with rural development department and

urban development department should make sure that these plans would be implemented. New development of areas should be located such that they would not be vulnerable to hazards. MNREGS and Sampoorna Grameen Rojgar Yojna can also be used to develop features and implementing mitigation plans. District administration with coordination with the higher level authorities should develop and encourage adoption of public safety needs. New methods of protection from these hazards should also be developed. Involvement of research institutes is preferable.

C 1.1.2 Training & Capacity Building

A series of training programmes shall be organized for specialized groups like, district DMTs, sub division and community level office bearers, teachers and principals, doctors and engineers, architects and masons and builders and contractors etc with the help of NGOs in the district.

The aim of disaster management training is to build the capacity of district staffs and volunteers to improve preparedness and response at all levels before during and after disasters and to give all components of the movement the means to work together in a coordinated manner. The focus of disaster management training is generally on improving the technical skills of the participants, but also on personnel and team management.

DDMA, NGOs and training institutes are the prime agencies to organize training activities and awareness camps. Staffs of all departments should be trained to act accordingly in emergency times. Regular mock drills should be conducted to better acknowledge them. Training to local contractors and masons are also very significant in long run because they are prime responsible for construction works. Local people should be trained to give first aid and act to physically affected people by health department because local people are the first respondents of any hazard.

C 1.1.3 Community Initiatives

Communities are always the first respondents; therefore their participation in the disaster mitigation plans would be outstanding. This will bring sustainable approach to mitigate the risks posed by the hazards. Therefore they should be provided with adequate resources and infrastructure to tackle the hazards. The local communities should be mobilized and training should be provided using various forms and channels of public awareness and education in local dialects, values and culture and partnerships of the community with various stakeholders such as community based organizations, community leaders, local government units, higher level government, NGOs, less vulnerable groups, and donors; based on their indigenous knowledge and locally available resources. Capacity building of the communities should be done by mobilizing women and men into community based organization to cope with disasters. Existence of CBOs allows rapid and effective response to emergencies. Local administrative bodies should provide assistance and maintain coordination with them. Communities experience with the hazards should be integrated in the mitigation plans to be implemented. Community based disaster management will bring individual and community ownership, commitment and concerted actions in disaster mitigation, including innovative and do-able mitigation solutions, which are cost-effective and sustainable.

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. Government of Madhya Pradesh is responsible for allocating funds in long terms for ensuring sustainable development in disaster management plans. One of the key elements in ensuring the long-term sustenance and permanency of the organisation is the manner in which funds would be generated and deployed on an ongoing basis. This is necessary in view of GoMP's focus on disaster mitigation. It is not possible for the GoMP's to bear all the costs of disasters on a sustainable basis, or provide rehabilitation on a long-term basis. The long-term approach is to move towards spreading the risks through various risk transfer mechanisms and incentivising individuals and other entities to protect their interests through insurance. However, in doing so, GoMP would seek to protect the interests of poorer sections of the society through appropriate mechanisms.

C 1.2 Preparedness Plan

Disaster Preparedness means “measures designed to organize and facilitate timely and effective rescue, relief and rehabilitation operations in cases of disaster. Measures of preparedness include among others, setting up disaster relief machinery, formulation of emergency relief plans, training of specific groups to undertake rescue and relief, stockpiling supplies and earmarking funds for relief operations”.

It is not possible to eradicate natural hazards completely but damages from natural hazards can be minimized by way of comprehensive preparedness plan. Warning systems and preparedness measures considerably reduces and modifies the impact of disasters. Disaster preparedness is increasingly evident now that a relatively smaller investment in disaster preparedness can save thousands of lives and vital economic assets as well as reduce the cost of overall relief assistance.

C.1.2.1 Preparedness before response

In times when no warnings are declared, the district disaster management authority should ensure that all departments should implement their respective preparedness plans. Sectors like training and capacity building of the task forces and local people, improvement of inventories and allocation of resources, improvement in general awareness, knowledge management, communication system, proper working of gram and village level disaster management committees, mock drills, working of warning systems and updated equipments in DEOC should be given prior care and monitoring.

Training programs of the staffs of individual department should be organized by itself; same with the task forces of various departments like police department, homeguard department and fire department. General awareness and knowledge management can be done by the DDMA with taking participations of gram and village disaster management committees. Educational department should also help in building general awareness among the people about the risks posed by various hazards. Improvement of inventories and allocation of resources should be done by the department itself and home department. Departments responsible for issuing warning should time to time check the

proper working of their warning systems. Use of multi warning system is preferable. Mock drills should provide confidence in the staffs resulting in better performance in times of emergency.

C.1.2.2 Pre-Disaster Warning, Alerts

Pre disaster warnings and alert activities are those which should be done in order to be prepared for the efficient tackling of the hazard. When there some warnings and alerts are issued, at that time the DEOC should be activated district and the immediate meeting of the DDMA members should be called for assessment of the preparation for the hazard available and DCMG should be given the responsibility to look in the issue. A team should be formed and made ready to go for assessing the damages and losses if happens. All concerning departments should be told to implement their SOPs in action. People are alerted and proper management should be done for evacuation of the affected area. State authority should be informed about the situation. Home department should be asked for any sort of help in rescue and help.

Agencies which are responsible for issuing warning are as follows:

Hazards	Agencies
Flood	Narmada valley Development Authority, Indian Meteorological Department, Irrigation Department, Central Water Commission
Drought	Indian Meteorological Department, Revenue Department
Industrial	Department of Industry, State Pollution Control Board
Violence/Riots	Police Department
Stampede	Police Department
Epidemics	Health Department, Animal Husbandry Department
Fire	Fire Brigade, Forest Department, Police Department
Earthquakes	Geological Survey of India
Road accidents	Police Department

C.1.2.3 Evacuation stage

Evacuation should be done accordingly to the level of the hazard predicted and warned. The nodal officer appointed by the District Disaster Management Committee will be the commanding officer to proceed for evacuation of the place. For that purpose, safe route for shifting and shelter should be marked earlier which could be used under the emergency. Gram Panchayats, public welfare department and transport department are responsible for this issue. Police department and homeguards department task forces should work for the evacuation purpose with involving the help of the community local leader, gram Panchayats and gram disaster management committee. One team from health department should be send there for solving any health issue. The finalized report of the evacuated place and the people shifted should be send to the district collector with the list of availability of resources and additional needs required. Home department plays crucial role in the all department participatory involvement.

C 1.3 Response Plan

Response is the process of combating a disaster and providing assistance to people affected by a disaster. The aim of response operations is to save lives, protect property and make an affected area safe. This is done by a number of organizations, including Local Government Counter Disaster Committees, State Emergency Service units, Police, Fire, Ambulance and Defence. The Disaster Management System ensures support and assistance are available as required by disaster stricken communities.

The response phase includes the mobilization of the necessary emergency services and first responders in the disaster area. This is likely to include a first wave of core emergency services, such as firefighters, police and ambulance crews. Response phase is the first stage of disaster which has occurred immediately that includes events like setting up control rooms, putting the contingency plan in action, issue warning, action for evacuation, taking people to safer shelters, providing medical aid to the affected people and coordination, communication, situation assessment and resources mobilization are the key factors. Response includes three phases i.e., pre, during and post response phase. Pre disaster response plan intended to reduce the impact of disaster on the life and property of the society by setting up control room, evacuation of people etc. Response phase during disaster is to ensure that steps are being taken to alleviate and minimize the loss of life and property while post response phase is to achieve rapid, durable and sustainable recovery

The District Emergency operation Center (DEOC) will be hub of all the activities related with disaster response in the district. The primary function of the DEOC is to implement the District Disaster Management Plan which includes coordination, data collection, operation management, record keeping, public information and resource management.

For the effective management of resources, disaster supplies and other response activities, focal points or centers will have to be established. These points will have to be well networked starting from the State to the District and finally leading to the disaster site. Emergency Operations Centers at the State (SEOC) and the District (DEOC) and Incident Command Post (ICP) at the disaster site are the designated focal points that will coordinate overall activities and the flow of relief supplies from the State.

The District Emergency Operations Centre (DEOC) will be maintained and run round the clock, which will expand to undertake and coordinate activities during a disaster. Once a warning or a First Information Report is received, the DEOC will become fully operational.

During a disaster situation, the DEOC will be under direct command of the Deputy Commissioner or the designated person by him as the Chief of Operations, And during non disaster times, the District Emergency Operations Centre stays operational through-out the year in preparedness mode, working during day time in order to take care of the extended preparedness activities of data management, staff awareness and training, which is essential for the smooth functioning of the DEOC during crisis situations and handling of emergency Toll Free Contact Lines . During an emergency, the DEOC will get upgraded and will have all emergency stakeholders manning it round the clock.

C 1.3.1 Disaster Emergency Response Force

The District Administration is expected to create response capabilities from its existing resources by equipping and training at least one battalion equivalent force for effective management of disasters and necessary training arrangement aligned with disaster management skills in consultation with the National and State Disaster Response Force. The District Commandants, Home Guards will be in charge of the force at the district level.

C 1.3.2 Incident Command System (ICS)

There is no ICS system in place for the district currently, however the following plan is proposed:

Incident Command System (ICS) is, "a set of personnel, policies, procedures, facilities, and equipment, integrated into a common organizational structure designed to improve emergency response operations of all types and complexities." ICS is based upon a flexible, scalable response organization providing a common framework within which people can work together effectively. These people may be drawn from multiple agencies that do not routinely work together, and ICS is designed to give standard response and operation procedures to reduce the problems and potential for miscommunication on such incidents. ICS has been summarized as a "first-on-scene" structure, where the first responder of a scene has charge of the scene until the incident has been declared resolved, a superior-ranking responder arrives on scene and seizes command, or the Incident Commander appoints another individual Incident Commander.

All 5 major command functions (mentioned below) in Incident command system, to be followed:

- a) Incident command

- b) Planning section
- c) Operations section
- d) Logistics section
- e) Finance/ Admin section

C 1.3.3 Functions of ICS

- To create and integrate communication flow during emergency period
- To manage incident scene, and report through integrated and coordinated command plan
- To facilitate procedures and protocols according to concern Departments within in the District.
- To put the communication system in place to receive, record, acknowledge incoming and outgoing information of any form during the disaster
- To mänge resources as per their availability such as– distribution of relief material with Nodal agencies required during emergency etc.
- Monitoring functional areas during and post disaster phase.

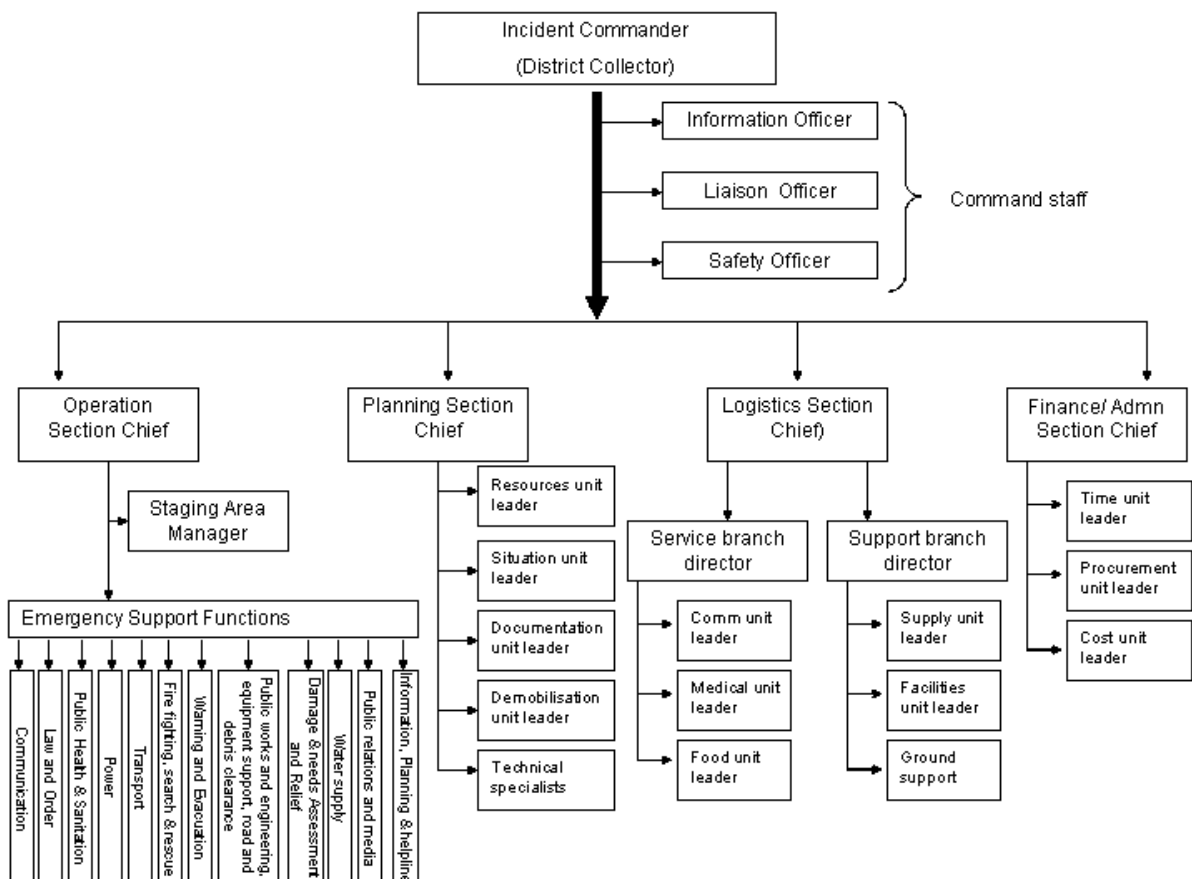


Figure 1: Conceptual Layout of Incident command system

C 1.3.4 Operational direction & coordination

The Operations Section will ensure smooth and planned functioning of the DEOC. It will fulfill the following functions:

- handle requests for emergency personnel, equipment and other resources
- designate responsibilities and duties for management of the DEOC
- manage storage, handling and set-up of incoming equipment and personnel
- ensure medical care, feeding and housing for DEOC personnel
- maintain documentation of resource inventories, allocation and availability.
- manage finances for DEOC operations

C 1.3.5 EMERGENCY SUPPORT FUNCTIONS (ESF)

Emergency Support functions assist and support the National, State and District Administration at the time of emergency for restoring the damaged public services and facilities of the affected area. The State level Departments and supporting agencies are responsible to respond for recovery and mitigation purposes during a disaster. The ESF (emergency support function) is an organized system of District level departments and agencies that are to be worked under a structured pattern for response and recovery according to National Disaster Response Plan (NDRP).

The Standard Operating Procedure (SOPs) explains about the basic concept of operations and responsibilities of leading and supporting agencies that are to be involved in the ESF system. The document also outlines the purpose and scope for each function of operation that is to be followed by the respective ESF agencies when the Incident Commander activates the response plan during emergency period.

ESF Structure:

Function	Nodal Agency/Team Leader	Participating functionaries / agencies
Coordination (Incident –Commander)	District Administration (District Collector)	SP, DFO, ADM, ADC, RDO, DMO, Tahshildars, Municipal corporation, NCC and other related agencies.
Communication	Bharat Sanchar Nigam Limited	Existing wireless operators (Police, Fire) Telecom Dept., mobile operators, FM Radio, Signals, Ham Radio, satellite communication, Community Radio.
Law and Order	Police Dept.	Civil Defence and Home guards.
Search and Rescue	Police Department and Home Guards.	Police Department, Fire and Rescue Department, Department of Revenue,

		Directorate of Health Services, Quick Response Team, Army.
Evacuation	Revenue Divisional Office	Police, Home Guards, Department of Revenue, Directorate of Health Service, Civil Defence, Fire Service, Army.
Relief (Food, Damage Assessment, Donation, Shelter)	District Administration	Department of Food and Civil Supplies, NGOs, Religious Organizations, PHE, Municipal Corporation, Electricity Board, Health dept, Education dept, PWD, BSNL, Animal Husbandry, Agriculture. NCC, Blood Bank, Red Cross, NSS, Corporate Bodies and local clubs, Qualified Medical Practitioners Association, Nurses Association.
Emergency Medical Response and Trauma Counseling	Department of Health (DMO/CMHO)	Dispensaries, Mobile Dispensaries, Hospitals, Ambulance Service, Blood Bank, NSS, Rotary Club, Lions Club, Private medical association, Medicine Stockiest, Indian Red Cross, Home Guards, Fire Service, NGOs, CBOs etc.
Public Works Equipment support, debris and road clearance.	PWD	Municipal Corporations, Water Authority, MPEB, PHE PWD, Builders Association, Fire force.
Relief -Shelter	Revenue Department (ADM/RDO)	Municipality, Local Civil Suppliers. PWD, Developmental Authorities, NGO representatives.
Cattle Resource Recovery and Care	Animal Husbandry (District Animal Husbandry Officer)	Animal medicine stockiest, Poultry Corporation NGOs, CBOs and religious organizations.
Logistics (Electricity-Water)	Electricity – MPEB Water - PHE	DC Office, Electricity Board, Transport Department, PHE, Municipal Corporation, Private Road Ways, PWD, National Highway, Fire Force Dept, Police services, NGOs
Transport	Motor Vehicle (RTO)	MPSRTC, PWD, MP Police, Municipality, Private Bus Owner's organization, Scout, NCC etc.
Public Information and Help lines - Warning & Dissemination	Public Relations Department	Media (print/audio-visual), Local Cable Operators, Reporters, NIC, Scouts & Guides, Education Dept., Department of Information and Publicity, BSNL, AIR etc.

C 1.3.6 Rapid damage assessment & reporting

Table C 1.3.6

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 1.3.7 Distt. Search & rescue Team

Search and Rescue operations are one of the primary activities taken up in a post disaster situation. The promptness in these operations can make a remarkable difference in the amount of loss of life and property.

Situation Assumptions

- Local community task forces will initiate search and rescue at residential level
- Spontaneous volunteers will require coordination
- Access to affected areas will be limited.
- Some sites may be accessible only through air routes only

Nodal Agency: Home Guard Department

Support agency: Police Department, Fire and Safety Department, Department of Revenue, Directorate of Health Services, Quick Response Team, Army.

C 1.3.8 Medical response

Medical Response and Trauma Counseling will look after emergency treatment for the injured people immediate after the disaster take place.

Situation Assumptions

- Emergency Medical services will be required by affected population
- Likely outbreaks of epidemic diseases after the disaster.
- Hospital services would be affected

Nodal Agency: Department of Health (CMHO)

Support Agencies: Dispensaries, Mobile Dispensaries, Hospitals, Ambulance Service, Blood Bank, NSS, Rotary Club, Lions Club and other Privet Citizen Clubs. Private medical association, Medicine Stockiest, Indian Red Cross, Home Guards, Fire Service, NGOs, CBOs etc.

Table C.1.3.8

S.No.	Designation Office Contact	Office Contact
1	Chief Medical and Health Officer	-

2	Civil Surgeon	-
3	District Leprosy Officer	-
4	District Vaccination Officer	-
5	District Tuberculosis officer	-
6	District Malaria Officer	-

C 1.3.9 Transport and Logistic arrangements

The ESF on Transport should ensure smooth transportation links at state and district level. Within the disaster context, quick and safe movement of material and humans are a priority. It should coordinate the use of transportation resources to support the needs of emergency support forces requiring transport capacity to perform their emergency response, recovery and assistance missions. Logistic section Provides resources and all other services needed to support the organization. It Respond to reinforcement needs including manpower and deployment of interdepartmental and inter-district resources as per information received from the DEOC.

Ensuring receipt, safe storage, and transport of relief Supplies and materials from airport, railways and road and handling of the required formalities Direct supplies distributed by NGOs and other organisations including private donors to DEOC Ensure proper maintenance of vehicles and equipment at the District Emergency Operations Centre, During field operations Transport and Logistic section coordinating with Different ESFs and Departments.

Situation assumptions

- The District civil transportation infrastructure will sustain damage, limiting access to the disaster area.
- Access will improve as routes are cleared and repaired.
- The movement of relief supplies will create congestion in the transportation services.

Nodal Agency: RTO Barwani

Support Agencies: MPSRTC, PWD, MP Police, Municipal Corporation, Civil Defence, home guard, Private Bus Owners, Scout, NCC etc.

C 1.3.10 Communications

Availability of Telephones, fax, VSAT connection, PC, Mobiles, Wireless in communication room.

Pl get in touch with District EOC / Control Room / DC Office/ District Information Officer to get more update on the above element.

The communication ESF is primarily responsible for restoration of communication facilities. The ESF on Communication should ensure the smooth flow of information that can cater to the outreach in a time-sensitive manner at state level in response efforts.

Situation Assumptions

- There would be a congestion in the network because of increased calls to control rooms due to panic created in the community.
- The initial reports on damage may not give a clear picture of the extent of damage to communication network.
- The affected site may cut off from the state and district control rooms and the officials on site and find difficulty in communicating to the District EOC.

Nodal Agency: Bharat Sanchar Nigam Limited

Support Agencies: Existing wireless operators (Police, Fire) Telecom Dept., mobile operators, FM Radio, Signals Regiment – , Ham Radio, satellite communication, Community Radio

- Identify a Team Leader from BSNL
- Identify Nodal Officers from Supporting Agencies.
- Follow the SOP of Post disaster time.

C 1.3.11 Temporary shelter management

Table C 1.3.11

S.No.	Name of Block	Name and address of safe shelters
1	Barwani	High lying Areas, Gov. Building like Schools and Colleges, Community buildings.
2	Pati	High lying Areas, Gov. Building like Schools and Colleges, Community buildings.
3	Thikari	High lying Areas, Gov. Building like Schools and Colleges, Community buildings.
4	Rajpur	High lying Areas, Gov. Building like Schools and Colleges, Community buildings.
5	Sendhawa	High lying Areas, Gov. Building like Schools and Colleges, Community buildings.
6	Niwali	High lying Areas, Gov. Building like Schools and Colleges, Community buildings.

7	Pansemal	High lying Areas, Gov. Building like Schools and Colleges, Community buildings.
---	----------	---

The purpose of ESF on Shelter is to meet the physical needs of individuals, families and communities for safe secure and comfortable living space. The ESF should also be able to meet primary social needs of incorporating self management in the process.

To meet the physical needs of individuals, families and communities for safe, Secure and comfortable living space. To meet primary social needs incorporating self management in the process.

Safe shelters need to be marked for each Gram Panchayat, Block and Urban areas. Safe routes and safe shelters needs to be marked in relation to specific hazards, as in case of floods shelters at higher elevations are a must, but for earthquakes even the shelters in lower lying areas will do.

Situation Assumptions:

- Most of the existing structures will be severely damaged.
- The offices of local authorities may also be affected adversely.
- A large number of people may be rendered homeless.

Nodal Agency: Revenue Department and District Administration

Support Agencies: Department of Relief, PWD, PHE, Department of Education, Department of Rural and urban Development, Police Department.

C 1.3.12 Law & order

Maintaining law & order is major responsibility of Police, apart from this other stakeholders are also involved in it. This section will throw light on the coordination amongst the key functionaries and the necessary arrangements to be made at the district level, for maintaining the law & order.

The ESF on Law and Order maintains the law and protects the property and valuable commodities. It is mainly responsible to control crowd and avoid riots situations.

Situation Assumptions

- There would be panic and people will gather at a place.
- The crowds may go out of control.
- Riots may also take place.

Functions of ESF:

- Quick assessment of law and order situation in affected areas
- Support and coordinate with Local Administration
- Prepare updates on the law and order situation every 4-6 hours and brief the authorities
- Controlling situations like rioting and looting, and cordon off sensitive areas
- QRTs will guide property and valuables in affected areas.
- Control and monitor traffic movement.

- QRTs will provide diversion of traffic on alternate routes as and when it is necessary.
- The QRTs will also provide information about traffic flow along various corridors, especially heavy traffic or congested roads.
- QRTs will communicate to police control rooms, details on the field activities including deployment and reinforcement of staff and resources and communicate nature of additional requirements.

Nodal Agency: Police Department

Support Agencies: Civil Defence and Home guards, central paramilitary forces, CISF, CRPF, Defence Service Core.

C 1.3.13 Public grievances/missing persons search/media management

To collect, process and disseminate information about the welfare of citizens of the affected area and managing the tremendous flow of information. The speed with which information is received with which it changes requires that assistance be developed to ensure accuracy as well as easy and appropriate access. The help lines will be responsible for providing, directing, and coordinating, logistical resource operations.

The ESF on help lines and warning dissemination should process and circulate information about the welfare of citizens of affected area and managing the tremendous flow of information. The help lines will be responsible for providing, directing and coordinating logistical operations and also provide assistance in locating missing persons, setting information center, maintaining IN-message and OUT-message register.

Nodal agency: Public Relations Department

Support Agencies: BSNL, Dooradarsan, Press Trust of India, Cable net works, NGOs, Media (print/audio-visual), Scouts & Guides, Education Dept., Department of Information and Publicity, AIR etc

This section will basically address the constitution of district level committee under the DM / DC. It will address the grievances of the public, including the missing persons issue, search & rescue team role etc.

C 1.3.14 Animal care

Under this, the major function will be of Animal & Husbandry department, to treat the cattle, disposal of carcass, with a view to restore public life, and arranging necessary equipments in the affected areas. Take measures for disease surveillance and to prevent spread of cattle epidemics.

Nodal Agency: Animal Husbandry Department

Support Agencies: Animal medicine stockiest, Poultry Corporation NGOs, CBOs and religious organizations.

C 1.3.15 Management of deceased

Management of the dead is one of the most difficult aspects of disaster response, and natural disasters, in particular, can cause a large number of deaths. Although the humanitarian community has been aware of these challenges for over 20 years, the massive loss of life following the South Asian tsunami in 2004 highlighted limitations in our current capacity to respond. Several large natural disasters in 2005, including Hurricane Katrina in the United States, Hurricane Stan in Central America, and the earthquake in Northern Pakistan and India, further reveal the need for practical guidance. Natural disasters frequently overwhelm local systems that care for the deceased. Consequently, the responsibility for the immediate response falls on local organizations and communities. The absence of specialist advice or mass fatality planning amplifies the problems, often resulting in the mismanagement of human remains. This is significant because the way victims are treated has a profound and long-lasting effect on the mental health of survivors and communities. In addition, correct identification of the dead has legal significance for inheritance and insurance that can impact on families and relatives for many years after a disaster.

Nodal Agency: Department of Health (CMHO)

Support Agencies: District Administration, Municipality, Transport, NGOs and CBOs etc.

Taking coordinated multi-agency planning and pre-paredness measures for the management and recording of fatalities specifically addressing each of the following four stages involved in management of dead bodies:

- Body recovery
- Storage of bodies: as local custom permits, in refrigeration, cold storage or by other means until identification and handing over to family members.
- Victim identification: using fingerprints, dental records, DNA records, photo identification depending on local resources and baseline identification records.
- Disposal which should reflect ethnic and religious sensitivities where possible and appropriate.

C 1.3.16 NGOs & Voluntary organizations

The role of NGOs and voluntary organizations, in response situation, will be mentioned here.

NGOs often also have the ability to respond more quickly than government forces can, or, in the case of local NGOs, respond even more quickly than international NGOs. With local knowledge and expertise, they have the advantage in being able to carry out disaster reduction and relief projects that fit the needs of the people and often with far more reaching and sustainable impact.

NGOs can also act as important channels for raising awareness and education. In particular with smaller disasters, where they can play a role in the early warning system, local and grassroots oriented NGOs are uniquely placed to recognize the early signs of conflict, the deteriorating social conditions or the beginnings of a natural disaster.

Apart from local NGOs at the time of after disaster there are several national as well as international NGOs come forward for Relief and funds.

Table C 1.3.16

S.No.	Name and address of NGO	Contact nos. of person concerned
1	Asha Gram Trust, Barwani	9425087473, 07290-222186
2	Kasturaba Vanvasi Ashram, Niwali	9406677364
3	Karun Hospital and Trust, Sendhawa	07282-222645
4	Shrikanta Sewa Trust, Niwali	-
5	Sardar sarovar nav nirman samiti	07284-253326
6	NCHSC	0755-2463731

C 1.3.17 Relief management planning

Relief management planning will clearly specify and address the issues of relief, while serving the people in disaster hit areas. This will include the functions of infrastructure desk, logistics, health, operations, communication and information.

In the event of a disaster there would be a need of disbursing relief materials due to massive destruction of life and property taken place. The ESF on Relief should ensure coordination of activities involving with the emergency provisions of temporary shelters, emergency mass feeding and bulk distribution of relief supplies to the disaster victims as also the disaster managers and relief workers.

Situation Assumptions

- Probability of shortage of critical resources

- Immediate assistance to the community at the time of resource shortage particularly when affected area is larger.

Nodal Agency: District Administration

Support Agencies: Department of Rescue and Relief, Department of Food and Civil Supplies, NGOs, Religious Organizations, PHE, Municipal Corporation, Electricity Board, Health dept, Education dept, PWD, BSNL, Animal Husbandry, Agriculture, NCC, Red Cross, NSS, Corporate Bodies and local clubs, Qualified Medical Practitioners Association.

Functions:

- ESFs will be responsible to management and distribute relief items to the affected victims
- QRT's will be responsible for reporting the progress on action taken by the team to the EOC.
- QRTs will provide information to their TL about the need of additional resources.
- Assist local authorities to set up important telecom and other service related facilities
- Initiate, direct and market procurement of food available from different inventories and ensuring food supplies to the affected population.
- Preparing take-home food packets for the families.
- Ensuring distribution of relief material to the all the people including vulnerable groups of the target area such as women with infants, pregnant women, children, aged people and handicapped.
- Ensuring support to Local Administration.

C 1.3.18 Media Management

Provide strategy for managing mass media such as newspapers and television in terms of dissemination of information at the wake of disasters. Clear guidelines would help the administration in avoiding communication of wrong information and creating panic.

Media plays a vital role in educating the public about disasters; warning of hazards; gathering and transmitting information about affected areas; alerting government officials, relief organizations, and the public to specific needs; and facilitating discussions about the management. Information about hazards at right time can help in minimizing the losses of life and economy of people, likewise improper communication can bring havoc in public. So media management is very necessary in the disaster management.

C 1.3.19 Fire Services

The Department of Fire Services is one of the crucial responders to disasters. The staff of Fire Services will be trained, retrained in disaster management skills, and will be further upgraded to acquire

multi-hazard rescue capability, in order to tackle any emergency related to fire or the allied substances. Due to increase in the complexities and number of hazard occurrence, involvement of fire department in disaster management has become eminent. They have their inventory which could be used during disasters for minimizing the human, environment and economical losses.

C 1.4 Recovery and Reconstruction Plan

Recovery is the process by which an affected community is assisted in regaining a proper level of functioning following a disaster. It comprises initial recovery, which satisfies personal and community needs and restores services to the level where Local Government and the normal responsible agencies can manage the continuing process. It also includes long term recovery, reconstruction and rehabilitation measures. We can receive funds from the central government and other donor agencies from outside country to alleviating the financial burden associated with the provision of natural disaster relief payments and infrastructure restoration.

Recovery is defined “as assisting of persons and communities affected by emergencies to achieve a proper and effective level of functioning.” In the immediate aftermath of an emergency, and over the longer term, recovery is concerned with:

- The social, financial and psychological aspects of personal, family and community functioning.
- The physical aspects of restoration and reconstruction of damaged community infrastructure and private housing.
- The economic aspect of restoration of productive activity and local employment.

C 1.4.1 Restoration of basic infrastructure

Damages caused to the basic infrastructure (water, electricity, roads, communication, etc) due to the disaster are assessed immediately by their concerned department to plan the restoration programs immediately. For the restoration of basic infrastructure in the disaster hit areas, the concerned department should use the funds of their department. If more funds are required then state government is asked for the grant of fund. For the works of rural areas, the funds of rural development board can also be used. PWD, gram Panchayats, municipal corporations and urban development department also plays crucial role in the restoration of the basic infrastructure in the affected region.

C 1.4.2 Reconstruction of damaged buildings/social infrastructure

Reconstruction of damaged buildings will be addressed and supported through the advance tools like Insurance, Short-term Loans, and by any other important means, which are affordable.

Houses should be reconstructed in the disaster hit areas according to the following instructions.

- Owner Driven Reconstruction

- Public Private Partnership Program (PPPP)
- Under the PPPP the houses are reconstructed by the NGOs for the beneficiaries to be registered in the joint names of the husband and wife.
- All the houses should be insured.
- Owner Driven Reconstruction
- Financial, technical and material assistance provided by the government.
- The designs for seismic reconstruction of houses provided by the government.
- The material assistance provided through material banks at subsidized rates.
- Design of 20 model houses provided to the public to choose from with an option to have one's own design.

C 1.4.3 Restoration of livelihoods

Restoring employment and income generating opportunities to disaster affected communities is a vital component of post-disaster reconstruction. Livelihood opportunities are severely disrupted by the destruction or loss of essential assets; with the result that people are unable to engage in normal income generating activities; become demoralized and dependent on humanitarian aid. District government should take steps towards restoring their livelihood with participation of all the departments. People can be employed in relief operations itself. Providing loans at low rates, joining them with reconstruction programs till they get self sustained. Participation of NGOs and CBOs are also very crucial in providing livelihood to the victims. Grants of various incentives, providing assistance & aids and integration of restoration of livelihood in the relief funds programs would be very beneficial in bringing back the affected population to normal.

C 1.4.4 Psycho-social interventions

Psycho social needs of the affected victims, including women and children will be taken care by special teams in the health department. The provision of trauma handling and social rehabilitation is very necessary from the point of view of restoration to normal life and should be specifically given priority in the after disaster recovery plan. Some stress relieving functions or camps should be organized by Health departments. Psychosocial assistance should be integrated in the district disaster plan and it should be done keeping peoples culture into account.

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.

C 1.5.2 Needs of the Special vulnerability Groups

Special needs of highly vulnerable groups including differently able persons, aged, children and women, will be taken care of, while addressing the preparedness and relief requirements of the disaster victims. A specific strategy for addressing the risk reduction needs of these vulnerable groups will be developed by every line department in the district. This includes

- **Disabled persons**
 - Artificial limbs fitted to affected persons.
 - Modern wheelchairs, supportive devices provided.
- **Children**
 - Orphaned children are fostered.
 - Day centres set up
 - Orphanages established.
 - Child help lines established.
- **Paraplegics**
 - Pension scheme introduced for paraplegics.
 - Physiotherapy under continuous supervision of doctors.
- **Old Persons**
 - Aged persons given pensions.
 - Old Age Homes established.
- **Women**
 - Pension schemes.
 - Women's Livelihood Restoration Project should start.
 - Self-employment Schemes for Women.

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. Barwani district is the perfect fit of culture and climate, which reflects in agricultural cycle. Already a drought prone area, the Barwani district suffers from severe water scarcity from January to June every year. Global climate change seems to have caught up with this forgotten land as the dry spell seems to grow longer and more intense every year.

C 2 Standard Operating Procedures (and Checklists)

Standard Operating Procedures will be prepared with objective of making the concerned agencies / persons understand their duties and responsibilities regarding disaster management at all levels. All concerned departments, divisions and agencies shall prepare their own action plans in respect of their responsibilities. Emergency response teams will be kept ready by each department so that they can move to disaster site/affected area on short notice. The Standard operating procedure shall be followed during normal times (Non Disaster Stage), warning stage (Before Disaster Stage), disaster stage (During Disaster Stage) and post disaster stage (After Disaster Stage).

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

C 2.1 SOPs for all concerned Line Departments

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

Standard Operating Procedures for all relevant departments are following

Table C 2.1

SOP of Health Department

Non Disaster Time
<ul style="list-style-type: none"> • Designate one Liaison Officer in the Department as the Disaster Management Focal Point. • Perform risk assessment and analysis of the any concerned factors that may or can lead to health issues for the people. • Develop a plan to meet the preparedness and response for any emergency situation if happens in the health sector of the district. • Develop an early warning system for better course of action and to minimize the losses. • Train local peoples to act in such conditions as they are the first respondents. • Make adequate availability of emergency kits in all the blocks accordingly to their risk assessment. • Build a 24*7 running emergency call centre for proper response in time of emergency.
Warning Time
<ul style="list-style-type: none"> • Keep continuous contact with all the health centers and check the availability of emergency kits. • Check proper availability of health facilities to tackle the crisis in the required areas. • Make early arrangement for sending any additional requirement to the areas accordingly. • Make a team for proper assessment of the situation in the affected area according to the situation. • Keep contact with district administration for further planning.
During Disaster
<ul style="list-style-type: none"> • Arrange availability of any required items or facility to the affected area. • Send the team of doctor formed to the area. • Provide medical assistance to the people. • Send a team for assessment of the situation in the affected area. • Send the report to the district administration for further planning.
After Disaster
<ul style="list-style-type: none"> • Be preventive to avoid occurrence of any epidemic in the region affected as it happens often. • Prepare a detailed report of the crisis for further planning.

SOP of Education Department

Non Disaster Time
<ul style="list-style-type: none"> • Designate one Liaison Officer in the Department as the Disaster Management Focal Point. • Develop and implement disaster management plan for the department. • Arrange training programmes for teachers and students for responding during emergency. • Ensuring availability of emergency kits in each school.
Warning Time
<ul style="list-style-type: none"> • Proper communication is to be made continuously with the institutions and district administration for latest reports. • Prepare a list of educational institutions where shelter can be provided as much near to the affected area and the facilities available there. • Keep in contact with the students and teachers for assistance if emergency comes.
During Disaster
<ul style="list-style-type: none"> • Prepare list of unaffected educational institutions in the region which can be used for shelter to people. • Provide the adequate number of educational institutes for shelter to the people • Call educational staffs, teachers and students for voluntary help in managing the crisis. • Prepare a report about the facilities available and required for district administration for further action.
After Disaster
<ul style="list-style-type: none"> • Determine the losses of educational institutes in the disaster and make a report on it. • Work for the rehabilitation of the institutes and managing to minimize the loss of education of the students and livelihood of the teachers and staffs of damaged institutions.

SOP of Welfare of Women and Children Department

Non Disaster Time
<ul style="list-style-type: none"> • Form a crisis management group which would look into the issues of disaster management and building general awareness among women and children about disaster management. • Monthly meeting of the members to review the growth and discuss the actions. • Sensitize the gender issue in disaster management of the district and their safety in

<p>emergency times.</p> <ul style="list-style-type: none"> • Arrange training programmes for women and children to act in times of emergency. • Organize health camps for regular checkups of them. • Prepare a list of nursing women and ill & not healthy women and children and update it regularly. • Form a group of women who can help them in emergency in each block.
Warning Time
<ul style="list-style-type: none"> • Keep in continuous communication with district administration and the group of women which are formed. • Form a team for assessment of their condition in the affected area. • Keep in consultation with the health department for in case of pregnant women and ill children & women.
During Disaster
<ul style="list-style-type: none"> • Send the team formed for assessment and the women groups to the affected region. • Involve district administration for separate arrangements of sanitation, shelter and other necessities which are gender sensitive. • Involve police department to provide safety to women and children. • Keep in consultation with the health department. • Prepare a report about the facilities available and required for district administration for further action.
After Disaster
<ul style="list-style-type: none"> • Prepare a detailed report about the disaster for further planning. • Organize programmes to support them emotionally and socially. • Arrange vocational training programmes and working for providing livelihood to them.

SOP of Electricity Department

Non Disaster Time
<ul style="list-style-type: none"> • Designate one Liaison Officer in the Department as the Disaster Management Focal Point. • Develop and implement disaster management plan for the department. • Assessment of risk prone areas and measures should be taken to minimize the damage to the flow of electricity during emergency. • Alternate sources of power supply should be made available like DG sets. • Arranging trainings to the staffs to deal in times of disasters with mock drills.
Warning Time
<ul style="list-style-type: none"> • Continuous in contact with district administration for updated reports. • Build a team to be sent to the affected area to make report on the actual situation in the area.

<ul style="list-style-type: none"> • Making alternate sources available ready to be sent to the affected areas.
During Disaster
<ul style="list-style-type: none"> • Sending the team to the affected area to get the actual ground conditions of the substations and the transmission systems in the area. • Provide alternate sources of electricity if needed. • Cutting down the supply of power through proper mechanism wherever necessary to avoid loss of life.
After Disaster
<ul style="list-style-type: none"> • Rehabilitation of the damaged stations and transmission lines.. • Preparing a detailed report on the losses to the electricity department occurred due to the disaster and course of actions for further planning.

SOP of Industrial Departments

Non Disaster Time
<ul style="list-style-type: none"> • Designate one Liaison Officer in the Department as the Disaster Management Focal Point. • Develop and implement disaster management plan for the department. • Assessment of risk profiling industries with hazardous substances made or stored and proper care should be taken on their vigilance. • Safety of manpower working there, machines, stocked materials, factories, etc. should be ensured. • Making compulsory for the industries for building a disaster management committee to look for the safety of the people and its environment & within the common interest of the industry. • Arranging training programmes for the staffs of the industries to how to act in times of emergency.
Warning Time
<ul style="list-style-type: none"> • Vacating the manpower working and shifting hazardous material to safe place if required according to the situation. • Keep in continuous communication with the district administration and all the industries especially of higher hazardous industries. • Making fire fighters and water tanks ready for any course of action if needed. • Forming a group to be sent for assessment of damage. • Alarming local people for being alert of that industrial area. • Keep in contact with the transport and health department for any required help.
During Disaster
<ul style="list-style-type: none"> • Send the team for accurate assessment of the losses and send the report to the district administration for further action.

<ul style="list-style-type: none"> • Send fire fighting teams to the affected area if needed. • Evacuate the area with the help of transport department provided vehicles and vehicles provided by other industries in the area. • Shifting of hazardous and dangerous material to safe place if required.
After Disaster
<ul style="list-style-type: none"> • Prepare a detailed report on the losses and course of action performed for further analysis and planning. • Rehabilitation of the area.

SOP of Department of Food, civil supplies and consumer affairs

Non Disaster Time
<ul style="list-style-type: none"> • Develop a disaster management plan for the department that will ensure timely distribution of food to the affected people and update it annually. • Implement department's mitigation plans developed. • Maintain a stock of food and other relief items for emergency.
Warning Time
<ul style="list-style-type: none"> • Catalogue of available resources. • Keep in continuous communication with the district administration for latest updates on the emergency situation.
During Disaster
<ul style="list-style-type: none"> • Determine the requirement of food and other civil supplies to the affected people with the coordination of DDMA, local authorities and emergency staff forces. • Mobilize the resources and coordinate with DDMA and emergency staff forces for distribution of food and other civil supplies. • Ensure special care to the distribution to special vulnerable groups. • Ensure quality and quantities of food distributed and monitor the distribution.
After Disaster
<ul style="list-style-type: none"> • Establishment of PDS points as per the changed scenario/resettlements. • Issuing of duplicate ration cards to whom that lost it during disaster. • Prepare a detailed report on the experience in the disaster for further analysis and planning.

SOP of Transport Department

Non Disaster Time
<ul style="list-style-type: none"> • Designate one Liaison Officer in the Department as the Disaster Management Focal Point. • Develop and implement disaster management plan for the department. • Carry out survey of conditions of the transportation roads and highways and prepare a list of vehicles that can be used.
Warning Time
<ul style="list-style-type: none"> • Identify and make inventory of transport vehicles, and ensure that they are all in good working condition. • Ensure availability of fuel, recovery vehicles and equipment. • Take steps for arrangement of vehicles for possible evacuation of people. • Keep in continuous communication with the district administration for latest updates on the emergency situation.
During Disaster
<ul style="list-style-type: none"> • Take steps for transportation of relief personnel and material to affected areas. • Take steps for movement of affected population to safer areas. • Collate and disseminate information regarding 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 vehicles. • Take steps to ensure speedy repair and restoration of transport facilities. • Prepare a detailed report on the experience in the disaster for further analysis and planning.

SOP of Finance Department

Non Disaster Time
<ul style="list-style-type: none"> • Designate one Liaison Officer in the Department as the Disaster Preparedness Focal Point. • Arrange for the necessary funds as per decision of the State Government and DDMA. • Promote awareness programs for departmental personnel for disaster management.
Warning Time
<ul style="list-style-type: none"> • Build contact with the State Government and district administration about the emergency. • Mobilize the funds which could be needed in times of emergency.
During Disaster
<ul style="list-style-type: none"> • Allocate funds for response activities. • Controls the account under the responsibility of government. • Mobilize the resources for recovery and relief purposes.
After Disaster
<ul style="list-style-type: none"> • Damages should be assessed and a report on the overall experience is made for analysis and future planning.

- To monitor loans and aid assistance to the district.
- To allocate and monitor expenditure towards relief and rehabilitation of Disaster affected areas.

SOP of Public Works Department

<p>Non Disaster Time</p>
<ul style="list-style-type: none"> • Designate one Liaison Officer in the Department as the Disaster Preparedness Focal Point. • Develop and implement disaster management plan for the department. • Advise the district disaster management authority on structural mitigation measures for the district. • 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. • 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 landslides, road accidents etc. • 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. • Emergency tool kits should be assembled for each division.
<p>Warning Time</p>
<ul style="list-style-type: none"> • Keep in continuous communication with the district administration for latest updates on the emergency situation. • 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

<p>important are the roads to hospitals and main trunk routes.</p> <ul style="list-style-type: none"> • 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.
<p>During Disaster</p> <ul style="list-style-type: none"> • 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 labourers to work with experienced staff and divide into work-gangs. • Mobilize community assistance for road clearing by contacting community organizations and gram Panchayat 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 directions of district administration, undertake construction of temporary structures required, for organizing relief work and construction of relief camps, feeding centres, medical facilities, cattle camps and Incident Command Posts. • If possible, a review of the extent of damage 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 centres and quantity of construction materials and inform district administration accordingly. • Take steps to clear debris and assist search and rescue teams. • Provide sites for rehabilitation of affected population.
<p>After Disaster</p> <ul style="list-style-type: none"> • Carry out detailed technical assessment of damage to public works. • Assist in construction of temporary shelters. • Organise repairs of buildings damaged in the disaster • Prepare detailed programmes for rehabilitation of damaged public works. • Arrange technical assistance and supervision for reconstruction works as per request. • Assess damage to transportation infrastructure. • Take steps to ensure speedy repair and restoration of transport links. • Prepare a detailed report on the experience in the disaster for further analysis and planning.

SOP of Irrigation Department

Non Disaster Time
<ul style="list-style-type: none"> • Designate one Liaison Officer in the Department as the Disaster Preparedness Focal Point. • Develop and implement disaster management plan for the department. • Promote Watershed Development Programs. • Ensure efficient management of flood forecasting and warning centres and improve procedure of flood forecasts and intimation to appropriate authorities. • Operate Flood Information Centre in the flood season every year. • Collect all the information on weather forecast, water level of all principal rivers flowing through the district. • Inform all concerned about daily weather news and issue regular press bulletins. • Take steps for strengthening of flood protection works and canals before the flood season.
Warning Time
<ul style="list-style-type: none"> • Alert District Disaster Management Committee and keep in continuous contact with them for further instructions. • Since flash floods get triggered within short time-spans, take steps to alert all through telephone and wireless according to needs. • Mount watch on flood protection works and canal systems.
During Disaster
<ul style="list-style-type: none"> • Transportation of water with minimum wastage (in coordination with the transport department). • Locate drinking water facilities separate from sewer and drainage facilities • Ensure that remaining or unaffected sources of water do not get contaminated and the distribution of water is equal to all victims in the area. • Identify and mark damaged water pipelines and contaminated water bodies and inform disaster victims against using them. • Construct temporary toilets in relief camps and mobile toilet facilities for affected areas. • Ensure hygiene and sanitation of the relief camps and affected areas through disasters.
After Disaster
<ul style="list-style-type: none"> • Take up sustained programs for rehabilitation of flood protection works and canals. • Restore drinking water supplies for the affected areas. • Make a report on the overall experience on the emergency period for further analysis and planning.

SOP of Department of Social Justice and Empowerment

Non Disaster Time
<ul style="list-style-type: none"> • Designate one Liaison Officer in the Department as the Disaster Preparedness Focal Point. • Develop and implement disaster management plan for the department. • Carry out the structural and non-structural assessment of the institutions in the district governed by the department and implement measures as per findings. • Ensure that all the welfare institutions running have prepared their disaster management plans. • Prepare a database of all differently able persons within the district and share the data at the Block and DDMA level and improve their capacity by proper training. • Appropriate warning and alert systems to be installed in all the institutes governed by the department with special arrangements for institutions dealing with persons with disabilities. • Ensure that all the institutions under the department conduct regular mock drills to practice their disaster response plans.
Warning Time
<ul style="list-style-type: none"> • As soon as the department receives the alert or warning regarding impending disasters, it will ensure that all its institutions are informed about it and necessary steps are taken. • The liaison officer of the department to keep constant contact with DEOC and keep the institutes under the department updated about the situation. • If needed, institutes dealing with highly vulnerable groups to be evacuated to safer places.
During Disaster
<ul style="list-style-type: none"> • Ensure that a department representative is present at the DEOC and works along other ESF's to ensure that the special needs of the highly vulnerable groups like Children, old age and differently able persons are taken care of while planning for different response activities. • Department representatives are present in the ICP teams to care of the differently able persons and other highly vulnerable groups. • Ensure that the relief materials include supplies for the highly vulnerable groups. • Share the details of the highly vulnerable groups and institutes present in the disaster affected area with the DEOC and ensure their proper search and rescue. • Ensure availability of required specially trained personnel in the relief camps to communicate with the differently able affected persons.
After Disaster
<ul style="list-style-type: none"> • Make assessment of the damage to the institutions under the department and share the report with the department's state headquarter along with the DDMA.

SOP of Veterinary Department

Non Disaster Time
<ul style="list-style-type: none"> • Designate one Liaison Officer in the Department as the Disaster Preparedness Focal Point. • Develop and implement disaster management plan for the department. • Select places for use as shelter for livestock during disasters. • Programme for vaccination for protection against contagious diseases. • Establish inventory against fodder shortage during disasters.
Warning Time
<ul style="list-style-type: none"> • Keep in contact with district administration for latest updates on the disaster. • Assessment of damages that could happen. • Checking the inventory for the supplies that could be needed during disaster and proper packaging of them. • Preparing the shelter if the livestock is needed to be shifted for safe place. • Forming a group of veterinary doctors for checking the health of the livestock to be sent to the affected area.
During Disaster
<ul style="list-style-type: none"> • During floods assist ESF for operations relating to the rescue and shifting of standard livestock and poultry. • Send the team for examining the health of the animals and treatment. • During floods arrange for the quick vaccination and treatment of livestock and poultry at shelter places. • During prolonged droughts arrange for sustainability of livestock population.
After Disaster
<ul style="list-style-type: none"> • Damages should be assessed and a report on the overall experience is made for analysis and future planning. • Arrange a rapid survey to assess the loss. • Form and dispatch Veterinary Teams with appropriate equipment and medicines to aid affected livestock. • Arrange for disposal of dead bodies of animals. • Implement all schemes for rehabilitation of livestock.

SOP of Forest Department

Non Disaster Time
<ul style="list-style-type: none"> • Designate one Liaison Officer in the Department as the Disaster Preparedness Focal Point.

<ul style="list-style-type: none"> • Develop and implement disaster management plan for the department. • Organise community awareness programs. • Train the Gram Panchayat disaster management committees in forest fire prevention, protection and control, especially in those Gram Panchayats which are located at the fringes of forest areas. • Forest Fire prone areas should be identified and extra vigilance be ensured in such cases. Every year pre-fire season meetings should be organized to take the stock of the preparedness at Range level.
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. • Fire fighters and water tanks are made ready for emergency. • Inform DEOC about the situation.
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"> • Damages should be assessed and a report on the overall experience is made for analysis and future planning. • Follow the instructions of District Liaison Officer • Send task forces with vehicles, tree cutters, ropes, flood light, generator in case of closure of roads due to felling of trees. • Take actions to provide electricity, water and latrine to the temporary shelters in the forest areas. • Carry out the duty assigned for search and rescue work. • Engage the resources and manpower available to manage the disaster, prepares a primary report of damage for the affected areas.

SOP of Agriculture Department

Non Disaster Time
<ul style="list-style-type: none"> • Designate one Liaison Officer in the Department as the Disaster Preparedness Focal Point. • Develop and implement disaster management plan for the department. • Identify areas likely to be affected. • Organise distribution of seeds, seedlings, fertilizer and implements to the affected people under loan/grant. • 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.
Warning Time
<ul style="list-style-type: none"> • Provide timely warning to DEOC/DDMA about droughts.

<ul style="list-style-type: none"> • Check available stocks of equipments and materials which are likely to be most needed after the disaster. • 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"> • Inform DEOC about the damages and keep in consultation with the district administration. • Monitor damage to crops and identify steps for early recovery. • Estimate the requirement of Seeds Fertilizers Pesticides, and Labour. • Organise 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"> • Damages should be assessed and a report on the overall experience is made for analysis and future planning. • Quantify the loss and damage within the quickest possible time and finalizes 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.

SOP of Police Department

Non Disaster Time
<ul style="list-style-type: none"> • Designate one Liaison Officer in the Department as the Disaster Preparedness Focal Point. • Develop and implement disaster management plan for the department. • Organize training to the members of Police Force in first aid, evacuation, rescue and relief operations. • Identify the 'High Risk' and 'Risk' areas for different disasters and instruct the existing police installations located in those areas for keeping themselves in readiness for undertaking emergency rescue, evacuation relief operations. • Coordinate proper information flow system among the concerned departments of the district. • Train volunteers from among citizens, voluntary organisations.
Warning Time
<ul style="list-style-type: none"> • Establish the Disaster Control Room at District level. • Arrange drills for fire extinguishing, rescue, evacuation and transportation of injured

<p>persons and prepare coordinated Action Plans in cooperation with concerned local agencies.</p> <ul style="list-style-type: none"> • Maintain communications with the police installations in the areas likely to be affected by disaster. • Instruct all concerned to accord priority to disaster related wireless messages if required by appropriate officials. • On receipt of directives from the District Administration for evacuation, organise personnel and equipment for evacuation and undertake evacuation operations.
<p>During Disaster</p> <ul style="list-style-type: none"> • Carry out search & rescue operations. • Set up emergency evacuation shelters, and transport affected people to the shelters • Carry out relief operations • Maintain law and order, especially during relief distribution. • Keep close watch for any criminal and anti-state activity in the area.
<p>After Disaster</p> <ul style="list-style-type: none"> • Arrange security of government property and installations damaged in a disaster. • Participate in damage and need assessment. • Coordinate with other offices of Ministry of Interior for traffic management in and around damaged areas. • Assist the local administration in putting a stop to theft and misuse in relief operation. • Report on the overall experience is made for analysis and future planning.

SOP of Homeguard Department

<p>Non Disaster Time</p> <ul style="list-style-type: none"> • Designate one Liaison Officer in the Department as the Disaster Preparedness Focal Point. • Develop and implement disaster management plan for the department. • Prepare operational Plan for responding to the call of the district administration during disaster. • Hold mock drills on disaster preparedness and response.
<p>Warning Time</p> <ul style="list-style-type: none"> • Establish the Disaster Control Room. • Issue cautionary instructions to all concerned. • Organise task forces for working of disaster control units. • Earmark a reserve task force, if needed. • Move task forces to the convenient positions, if needed.
<p>During Disaster</p> <ul style="list-style-type: none"> • Distribute emergency relief material to the affected people. • Keep direct contact with different officers. • Dispatch situation reports to the DEOC.

<ul style="list-style-type: none"> • Send task forces to disaster affected areas.
After Disaster
<ul style="list-style-type: none"> • Conduct survey in affected areas and assess requirements of relief and rehabilitation. • Assist local administration in removing the dead bodies and debris in affected areas. • Participate in reconstruction and rehabilitation operation if requested. • Report on the overall experience is made for analysis and future planning.

C 2.2 Hazard specific SOPs for designated Departments and Teams

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

C 3 Financial Provisions for Disaster Management

(According to ACT No. 53 of 2005 – the Disaster Management Act, 2005, Chapter IX, Finance, Account and Audit.)

The following Funds are recommended to be established for fulfilling the needs during disasters:

Establishment of funds by the State Government

The State Government shall immediately after notifications issued for constituting the State Authority and the District Authorities establish for the purposes of this Act the following funds, namely:-

- a) The fund to be called the District Disaster Response Fund;
- b) The fund to be called the District Disaster Mitigation Fund;

apart from it NGOs have very flexible means of mobilizing resources and a number of them specialize in just and fair resource mobilization to able to fund the activities of other NGOs working in the field of disasters.

Also the Development funds from all the schemes of central and state governments can be used for mitigation cum Development and disaster respond fund.

Emergency procurement and accounting

Where by reason of any threatening disaster situation or disaster, the National Authority or the District Authority is satisfied that immediate procurement of provisions or materials or the immediate application of resources are necessary for rescue or relief, -

- a) It may authorize the concerned department or authority to make the emergency procurement and in such case, the standard procedure requiring inviting of tenders shall be deemed to be waived.

b) A certificate about utilization of provisions or materials by the controlling officer authorized by the National Authority, State Authority or District Authority, as the case may be, shall be deemed to be a valid document or voucher for the purpose of accounting of emergency, procurement of such provisions or materials.

C 4 Coordination mechanisms with other stakeholders

C 4.1 Mapping of stakeholders in the District

Disasters affect everyone alike although the nature of impact varies from region to region and sector to sector with the coping capacity of an individual sector being the differentiating factor. Efficient management of disasters needs mutual participation of all his stakeholders. It is the responsibility of the district administration to bring all its stakeholders under one roof and define their roles and responsibilities for better effectiveness of the district disaster management plan.

The following Stakeholders for the disaster management plan have been outlined:

- Private and Public Sectors
- Non Governmental Organizations and Community Based Organisations
- Religious Institutions
- Academic Institutions
- International Humanitarian organizations

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. Dhar district is a big industrial zone with hundreds of industries running currently. They have their onsite and offsite disaster management plans with high inventory which can be coordinated and used during need. Public sector also has many facilities and equipments which can be used during emergency like using public transports for evacuation purpose and using mass media for proper dissemination of information and alarming. Schools and colleges can be used as shelter options. Cable operators, telephone exchanges, tent house owners, medical stores, etc are some more examples whose coordination and help can be

beneficial in disaster management. Private security guards and rescue teams of industrial units can be involved in responding to the hazards. They can also play significant role in rehabilitation and recovering from the emergency period.

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.

Role of Non-Governmental Organisations

The Non-governmental Organisations (NGOs) are the most effective means of achieving an efficient Communication link between the disaster management agencies and the affected community. There are different types of NGOs working at the advocacy as well as the grass roots levels. In typical disaster situations, they could be of help in preparedness, relief and rescue, rehabilitation and reconstruction, and also in monitoring and feedback.

NGOs with Dedicated field Operations and Resource Backup

These are large organizations, such as the International Red Cross Society. They have specific areas in which they carry out field operations. They have access to a large resource base, and have the capability to extend material, financial as well as technical support to disaster-affected sites. In emergencies, their role is laudable as they garner support and resources from all over the world and come to the rescue of the affected population almost immediately.

Interest Group/Voluntary Groups

These are also NGOs, which are multi-purpose in nature having varied interests, such as the Rotary Club. However, such interest groups are very active, and have come forward to help disaster victims in the times of need. They could pay a major role in resource mobilization for relief aid and rehabilitation purpose.

Association of Local Occupation groups

Such associations are formed on the basis of common occupational backgrounds, and could include groups such doctors' association, traders' association and Army wives' associations etc. such groups, just like other interest groups, could play a major role in resource mobilization, and provision of specialized services to the victims in any emergency situation.

Local Residents' Associations

These Residents' Welfare Associations (RWAs) are formed by the local residents to look into the interests of those living in their area. These associations are extremely concerned about the welfare of the local community and need to external motivation or resource backup to take active part in

disaster reduction. Thus, they could act as a very useful tool for getting across the message of community participation at the ground level.

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. Religious bodies are one of the most important NGO groups that come to the immediate rescue and relief of the disaster victims. These bodies have a large and dedicated following in their communities. They also have control over the local places of worship, which are usually built on high and safe ground, and can serve as ideal shelters for the disaster victims. Besides, they often have infrastructure and resources to feed mass gathering, which facilitate disaster relief work. Gayatri Pariwar, Bohra samaj are some religious groups which arrange blood donation camps and can help during disaster.

C 4.1.4 Academic Institutions:

Academic institutions within the district and also outside the district could help with subject specific expertise for disaster management planning such as National Institute of Disaster Management (NIDM) The NIDM, in partnership with other research institutions has to do for capacity development as one of its major responsibilities, along with training, research, documentation and development of a national level information base. It will network with other knowledge-based institutions and function within the broad policies and guidelines laid down by the NDMA. It will organize training of trainers, DM officials and other stakeholders. The NIDM will strive to emerge as a 'Centre of Excellence' in the field of Disaster Management.

The other education institutions such as schools and colleges play an important role in disaster management. Their prime responsibility is to spread awareness on natural disasters, provide preventive action needed to minimize damage due to disasters as well as ensure immediate relief and rescue. Besides, these institutions have large buildings at local level, which could be used as shelters for the victims in the times of disaster.

C 4.1.5 International Humanitarian Organizations:

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

C 4.2 Responsibilities of the stakeholders

Major responsibilities of all stakeholders include:

- Participation in building disaster management plan.
- Participation in implementing the disaster management plan in block, gram and village level.
- Mobilizing community participation.
- Generating awareness and building capacity of the community.
- Organizing training programs.
- Participating in responding activities in emergency times.
- Dissemination of information.
- Participation in recovery and rehabilitation.
- Documentation.

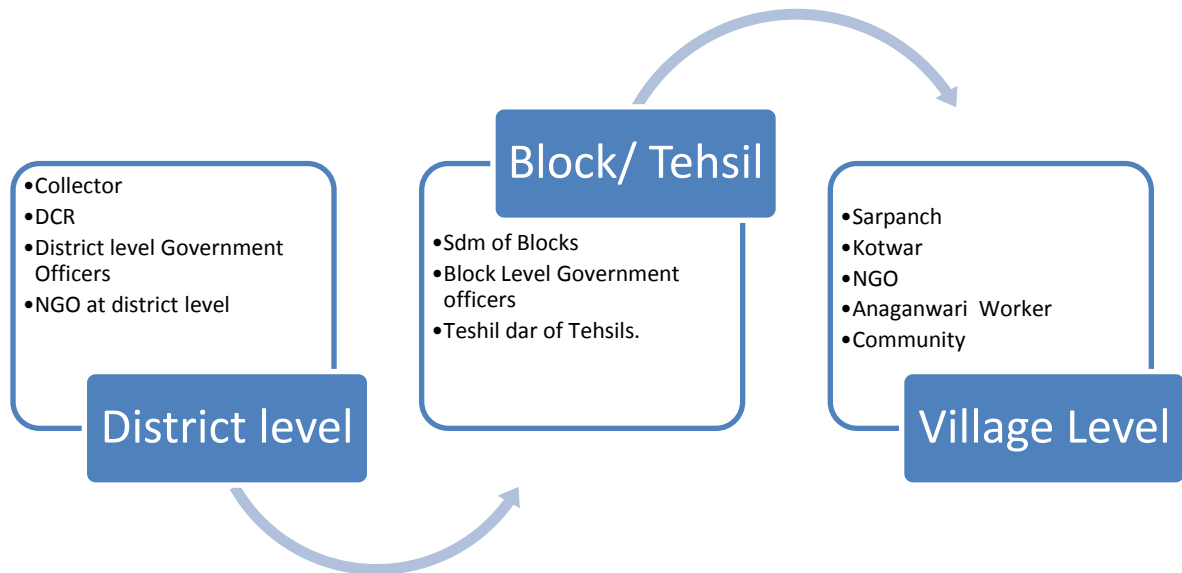
C 5 Inter-District Coordination Mechanisms –[Standard Operating Procedures]

During emergencies district may require support from other adjoining districts, which are not affected by disasters. For this the District EOC head can seek help from other districts through Divisional Commissioner or State EOC. This will be ensured at the disaster management plan formation stage itself by comparing the resource inventories and the vulnerability of the area. The DDMA's of adjoining districts or of all the districts in one subdivision should later integrate their disaster plans so as to have a joint approach when dealing with disasters. Inter-district coordination is play a very important role when dealing with situations like floods and dam overflow when excess water is released from dam with prior warning to the downstream areas so that they can prepare before flood situation.

At the time of disaster the deficiency of resource Inventories is fulfilled from adjacent Districts. Some time it may happens that they are also suffering from Disaster than it will

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

The recommended “integrated disaster management plan” follows ‘Top to Bottom’ approach i.e the communities are the first one to response. Then there are disaster management committees on gram Panchayat level and block level up to the district level. On each stage, the nodal contact people are appointed who will ensure the adequacy of resources in dealing with disasters.



The roles and responsibilities of various officers are clearly mentioned upon activation of the ICS in the Response planning section. The entire concern departments coordinate with each other and there should be unity of command and unity of direction by Different officers for the wellbeing of community.

C 7 Dissemination of DM Plan

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

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

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

The content of the plan should be explained through well designed and focused awareness programmes. The awareness programmes should be prepared in the local language to ensure widespread dissemination.

Media should be extensively used for public awareness programs. These will include

- Newspapers, TV
- Local cable networks
- Radio
- Publicity material
- Schools, colleges and other public institutions should be specifically targeted.

C 7.1 Plan Evaluation

The purpose of monitoring & evaluation of DDMP is to determine the adequacy of resources, co-ordination between various agencies, community participation, partnership with NGOs and other entities, Post-disaster evaluation mechanism, Periodic uploading of plans at India Disaster Knowledge Network (IDKN) and resources on India Disaster Resource Network (IDRN), Conducting periodic mock drills, Checking whether all the personnel involved in execution of DDMP are trained and updated on the latest skills necessary in line with updated plans. The district disaster management plan will be evaluated for any shortcomings in organizational structures, available technology, response mechanism following reports on drills or exercises and after every big disaster to assess the adequacy of the plan's procedure and approach to effectively deal the emergency situations. The evaluation will be done by district disaster management advisory committee under the aegis of DDMA.

C 7.2 Plan Update

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

DDMA will update the district disaster management plan every year with inputs from all the updated block disaster management plans and also from the plans of line departments of the district. The plan will be updated for the resource requirements, updates on human resources, technology to be used and coordination issues. A system would be in place to update the plan on an annual basis to ensure that the items requiring updating are considered and are current. This will involve:

- Submission of annually updated disaster management plans by all the block disaster management committees and urban disaster management committees to DDMA.
- Copies of the received updated plans from the block disaster management committees and urban disaster management committees to be given to the Technical committees, which will be formed as sub-committees of the DDMA and District Disaster Management Advisory Committee for review and suggestions.
- Final annual meeting to be organized by the DDMA, which will be participated by DDMA members and district disaster management advisory committee.

- The updated plan will be placed before SDMA for approval.
- When an amendment is made to a plan, the amendment date would be noted on the updated page of the plan.
- Copies of the amendments made & approved by the SDMA needs to be circulated to all the concerned government departments, block & urban bodies disaster management committees & other relevant agencies.
- All the disaster management liaison officials in every agency would be designated to ensure that all plan-holders are notified of changes as soon as possible.

C 8 Annexure

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

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

C 8.1 District profile

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

No. of PDS in Barwani

S.N.	Block	Urban	Rural	Total
1	Thikari	8	40	48
2	Rajpur	8	47	55
3	Sendhawa	23	65	88
4	Pansemal	15	26	41
5	Niwali	--	21	21
6	Barwani	14	35	49
7	Pati	--	27	27
Total		68	261	331

List of Veterinary Hospitals in Barwani:

Sr. No.	Name of Veterinary Hospitals	Name of Block
1	Barwani	Barwani

2	Silawad	Barwani
3	Kajalmata	Barwani
4	Borlaye	Barwani
5	Piplaj	Barwani
6	Bhawati	Barwani
7	Balkuan	Barwani
8	Talwara Bujurg	Barwani
9	Menimata	Barwani
10	Barwani	Barwani
11	Rajpur	Rajpur
12	Palood	Rajpur
13	Indrapur	Rajpur
14	Upala	Rajpur
15	Bhagsur	Rajpur
16	Ojhar	Rajpur
17	Nagalwari	Rajpur
18	Julwaniya	Rajpur
19	Thikri	Thikri
20	Anjar	Thikri
21	Talwara Deb	Thikri
22	Mandwara	Thikri
23	Brahman Gaon	Thikri
24	Baruphatak	Thikri
25	Khurampura	Thikri
26	Bilwa Deb	Thikri
27	Pati	Pati
28	Bokrata	Pati
29	Gandhawal	Pati
30	Rosar	Pati
31	Sendhwa	Sendhwa
32	Dhanora	Sendhwa
33	Warla	Sendhwa
34	Ajgariya	Sendhwa
35	Babdar	Sendhwa
36	Dhawli	Sendhwa
37	Chachriya	Sendhwa
38	Jhopali	Sendhwa
39	Sendhwa	Sendhwa
40	Pansemal	Pansemal
41	Khetiya	Pansemal
42	Moyda	Pansemal
43	Rakhibujurg	Pansemal
44	Moratlayi	Pansemal

45	Niwali	Niwali
46	Kunjri	Niwali

List of petrol pumps In Barwani:

Sr. No.	Name of firm	Name of company
1	Dayabhai Punamchand Barwani	HPCL
2	Subham Petroleum Barwani	BPCL
3	Hinglaj filling station Barwani	ESSAR
4	Shivani filling station Barwani	IOCL
5	Maganlal Nathulal Anjad	IOCL
6	Siddhi Vinayak Rajpur	BPCL
7	Sahu auto services Julwaniya	IOCL
8	V. M.Modi and sons Sendhwa	IOCL
9	Rajpal and company Sendhwa	BPCL
10	Suresh Kumar Mishrilal Jain Gawadi	BPCL
11	Manit fill and fly station Gawadi, Sendhwa	BPCL
12	Arjena auto center Gawadi, Sendhwa	HPCL
13	Raghuwanshi transport company Kharkiya, Sendhwa	IOCL
14	Sai auto services Kharkiya, Sendhwa	HPCL
15	Chandrabhaga Kirade and company	IOCL
16	Talib Hussein sons Julwaniya	HPCL
17	Auto filling station Baljhiri, Pansemal	IOCL
18	Adarsh filling station, Khetiya	IOCL
19	Sai Krupa IBP Filling Station, Pansemal	IOCL
20	Jaideep Cargo Movers, Sendhawa	BPL
21	Sharma Kisan Seva Kendra, Sendhawa	IOCL
22	Sendhawa Filling Station, Sendhawa	HPCL
23	3 star friends carrier, Sendhawa	IOCL
24	Balaji Filling Station, Rajpur	IOCL
25	Sai Fuel Center, Dawana	HPCL
26	Danish Fule, Julwaniya	BPCL
27	Maa Beejasan Filling station, Julwaniya	HPCL

C 8.2 Resources

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

Hazard specific industries

S.No.	Name of Industry	Location
1	Suman organics and chemicals	Pansema
2	Suman phosphate	Pansema
3	Godavari Phosphate	A.B. Road, Rajpur
4	Mantram Techno feb	A.B. Road, Sendhawa

C 8.3 Media and information management

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

C 8.4 Important Contact numbers

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

Collectorate Contacts

Name	Telephone Number		E-Mail
	Office	Residence	
Collector & District Magistrate	07290-224001	07290-224002	dmbawani@nic.in
Additional Collector	07290-223301	07290-223302	-
Joint Collector	-	-	-
Deputy Collector	-	-	-
Office Superintendent Collectorate	07290-222600	-	-
Superintendent of Land Records	07290-224180	-	-
Superintendent of General Elections	07290-222606	-	-

Sub-Divisions & Tehsils

Sub-Divisions			Tehsils		
Name	Phone	E-Mail	Name	Phone	E-Mail
1. Barwani	07290-222028	-	1. Barwani	07290-222066	tehbarwanimp@mp.gov.in
			2. Pati	07290-	-
2. Sendhwa	07281-224094	-	1. Sendhwa	07281-222094	tehsenbarmp@mp.gov.in
			2. Niwali	07286-283390	tehniwbarmp@mp.gov.in
			3. Pansemal	07286-241642	tehpanbarmp@mp.gov.in
			4. Warla	07281-	-
3. Rajpur	07284-	-	1. Rajpur	07284-256244	tehrajbarmp@mp.gov.in
			2. Anjad	07284-	tehthibarmp@mp.gov.in
			3. Thikri	07284-267283	-

Police Contacts

Name	Telephone Number		E-Mail
	Office	Residence	
Superintendent of Police	07290-222561	07290-222527	spobar@mp.nic.in
Additional Superintendent of Police	07290-223345	07290-223351	-
Police Computer Cell	07290-223350	-	spbarwani@mppolice.gov.in

Police Stations

Name of Police Station	Telephone Number	E-Mail
Barwani	07290-222044	-
Warla	07281-261527	-
Khetiya	07286-232233	-
Nagalwadi	07281-275228	-
Niwali	07286-273246	-
Pansemal	07286-241368	-
Pati	07290-232262	-
Rajpur	07284-256230	-
Sendhwa City	07281-222023	-
Sendhwa Rural	07281-223320	-
Silawad	07290-236248	-
Thikri	07284-267224	-
Anjad	07284-251023	-

Outposts		
Name of Outpost	Telephone Number	E-Mail
Palsud	07281-269268	-
Julwania	07281-266243	-

Nagar Palikas & Nagar Panchayats					
Nagar Palikas			Nagar Panchayats		
Name	Phone	E-Mail	Name	Phone	E-Mail
1. Barwani	07290-222034	-	1. Anjad	07284-251054	-
2. Sendhwa	07281-222101	-	2. Rajpur	07284-256223	-
			3. Khetiya	07286-232223	-
			4. Pansemal	07286-241262	-
			5. Palsud		-

Development Blocks				
Name of Block	Contact (CEO)	E-Mail	Total Gram-Panchayats	Total Villages
Barwani	07290-222054	jpbarwani@mp.gov.in	52	98
Pati	07290-232324	jppatbar@mp.gov.in	45	106
Thikri	07284-267244	jpthibar@mp.gov.in	58	103
Rajpur	07284-256227	jprijbar@mp.gov.in	67	99
Pansemal	07286-241378	jppanbar@mp.gov.in	39	83
Niwali	07286-273233	jpniwbar@mp.gov.in	42	72
Sendhwa	07281-222134	jpsenbar@mp.gov.in	114	154

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

Do's and Don'ts

EARTHQUAKES

What to Do Before an Earthquake

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

Have a disaster emergency kit ready

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

Develop an emergency communication plan

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

Help your community get ready

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

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

What to Do during an Earthquake

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

If indoors

- DROP to the ground; take COVER by getting under a sturdy table or other piece of furniture; and HOLD ON until the shaking stops. If there isn't a table or desk near you, cover your face and head with your arms and crouch in an inside corner of the building.
- Protect yourself by staying under the lintel of an inner door, in the corner of a room, under a table or even under a bed.
- Stay away from glass, windows, outside doors and walls, and anything that could fall, such as lighting fixtures or furniture.
- Stay in bed if you are there when the earthquake strikes. Hold on and protect your head with a pillow, unless you are under a heavy light fixture that could fall. In that case, move to the nearest safe place.
- Use a doorway for shelter only if it is in close proximity to you and if you know it is a strongly supported, loadbearing doorway.
- Stay inside until the shaking stops and it is safe to go outside. Research has shown that most injuries occur when people inside buildings attempt to move to a different location inside the building or try to leave.
- Be aware that the electricity may go out or the sprinkler systems or fire alarms may turn on.
- DO NOT use the elevators.

If outdoors

- Stay there.
- Move away from buildings, trees, streetlights, and utility wires.

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

If in a moving vehicle

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

If trapped under debris

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

After an earthquake

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

Flood

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

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

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

- Listen to the radio or television for information.

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

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

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

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

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

Driving Flood Facts

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

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

After a Flood

The following are guidelines for the period following a flood:

- Listen for news reports to learn whether the community's water supply is safe to drink.
- Avoid floodwaters; water may be contaminated by oil, gasoline, or raw sewage. Water may also be electrically charged from underground or downed power lines.
- Avoid moving water.
- Be aware of areas where floodwaters have receded. Roads may have weakened and could collapse under the weight of a vehicle.
- Stay away from downed power lines, and report them to the power company.
- Return home only when authorities indicate it is safe.
- Stay out of any building if it is surrounded by floodwaters.
- Use extreme caution when entering buildings; there may be hidden damage, particularly in foundations.
- Service damaged septic tanks, cesspools, pits, and leaching systems as soon as possible. Damaged sewage systems are serious health hazards.
- Clean and disinfect everything that got wet. Mud left from floodwater can contain sewage and chemicals.

Flood: Know Your Terms

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

- **Flood Watch:** Flooding is possible. Tune in to Local Radio for Weather Services, commercial radio, or television for information.
- **Flash Flood Watch:** Flash flooding is possible. Be prepared to move to higher ground; listen to Local Radio for Weather Services, commercial radio, or television for information.

- **Flood Warning:** Flooding is occurring or will occur soon; if advised to evacuate, do so immediately.
- **Flash Flood Warning:** A flash flood is occurring; seek higher ground on foot immediately.

You and Your Family

Dos

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

Don'ts

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

Your Place of Work

Dos

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

Dos

During Transit

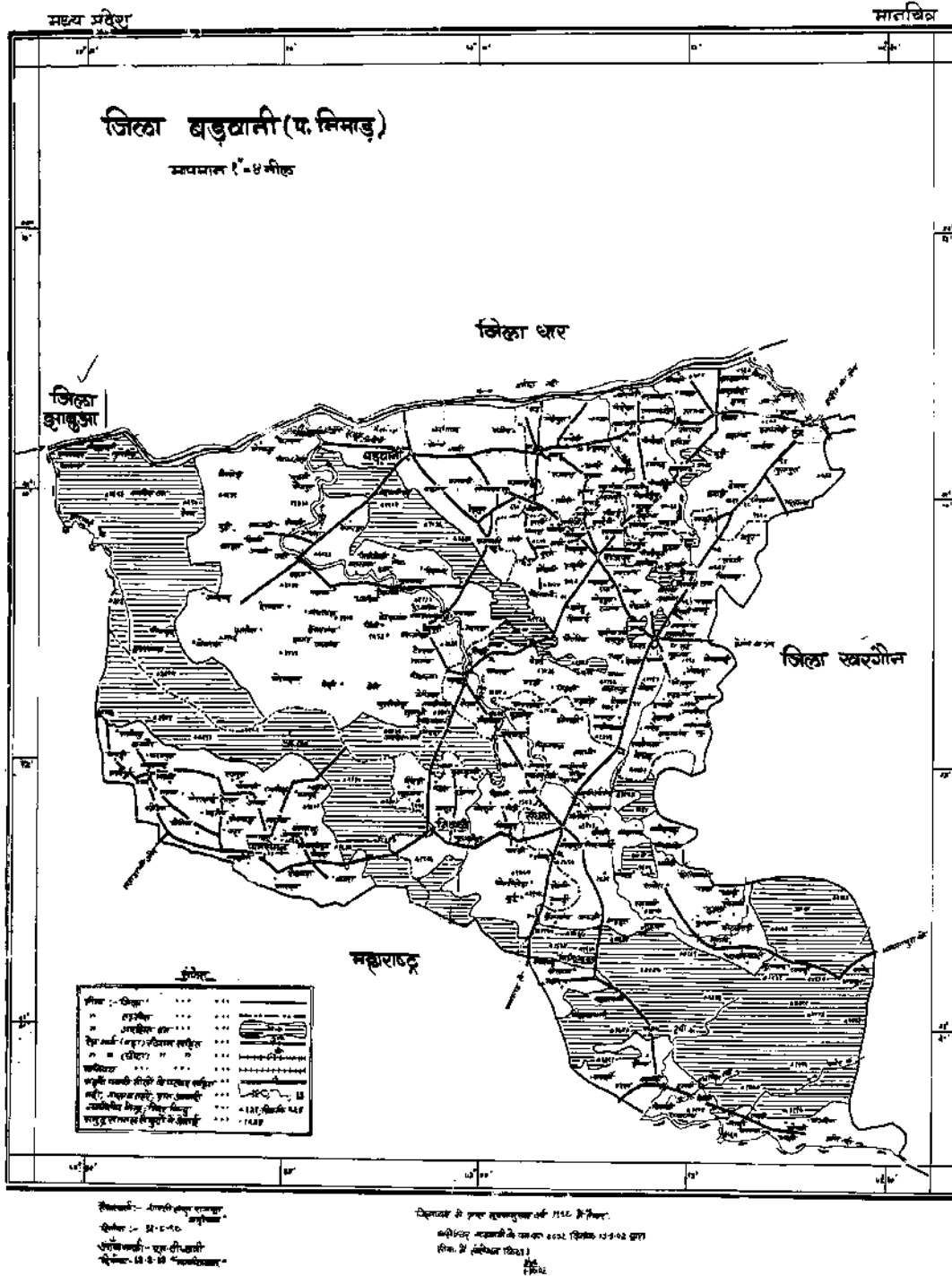
- Be concerned and develop habit of surveillance when out of our house. Check your seat in cinema hall, train, bus and air. Have you observed a bird, she jumped around and looks in all directions before selecting a spot on a tree for her security. Do we learn anything from this bird instinct?
- Look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

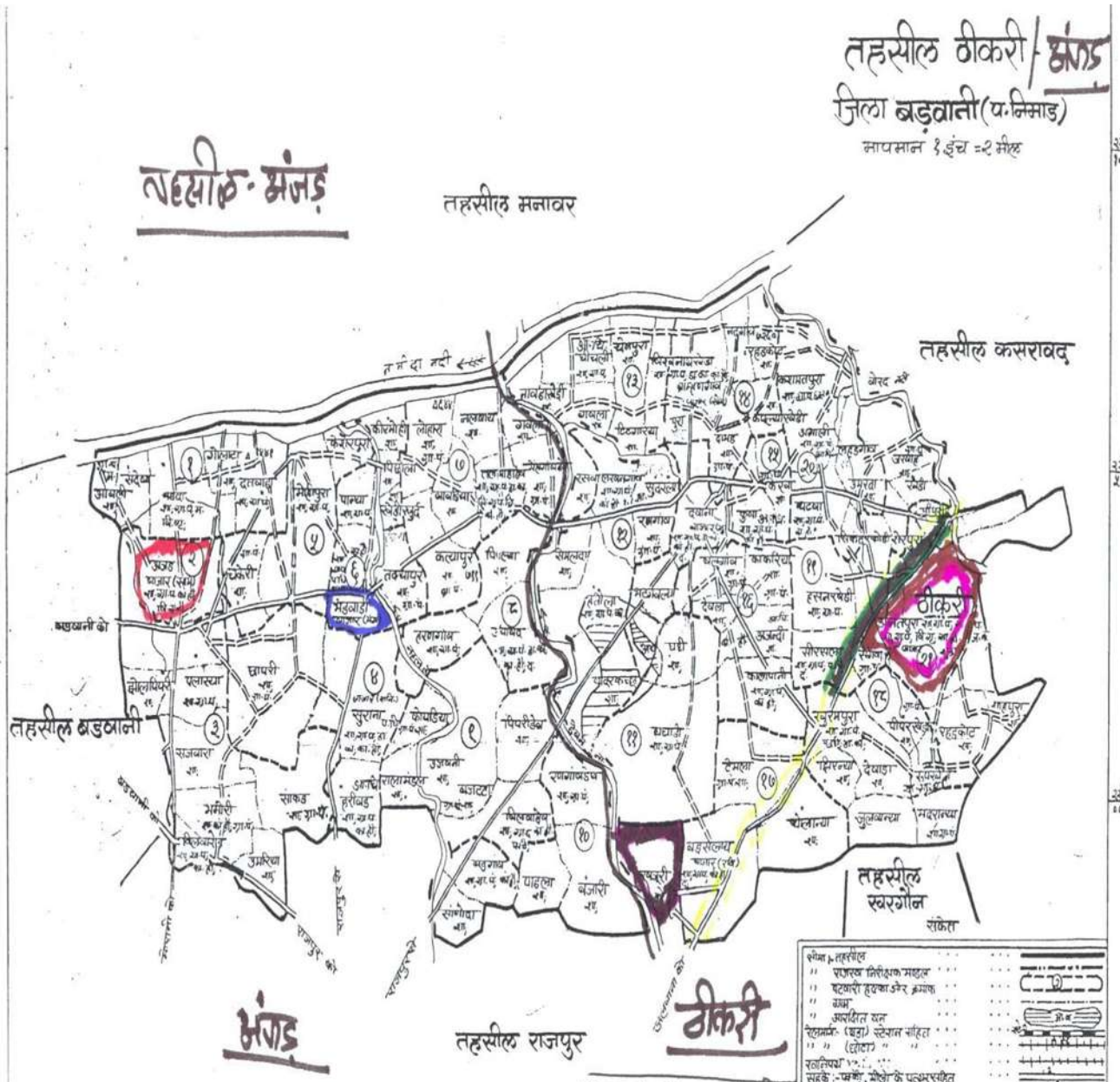
Don'ts

- Do not touch any suspicious object. Report to concerned people.
- Do not crowd the object.
- Passengers should not accept parcels from unknown persons in hurry while boarding train or bus.

C 8.6 Detailed Maps

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





तहसील-भंजड़

तहसील मनावर

तहसील ठीकरी/भंजड़
जिला बड़वाती (य.निमाड)
भापमान १ इंच = २ मील

तहसील बड़वाती

तहसील कसरावडा

भंजड़

तहसील राजपुर

ठीकरी

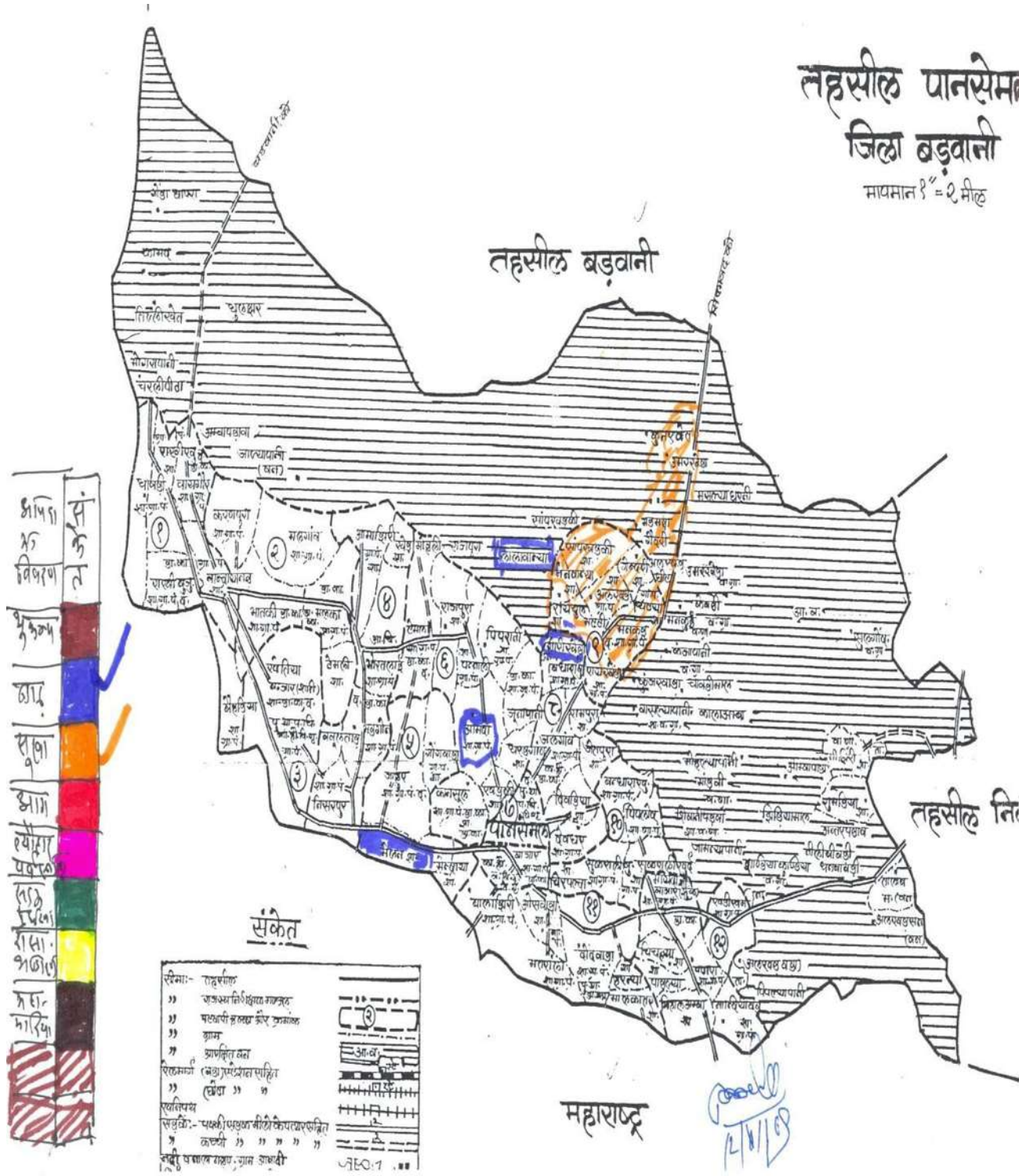
शुपदा का विकरण	संकेत
झांग	✓ (Red)
फाटक जीमिंगे ७	✓ (Blue)
ठा 6	✓ (Blue)

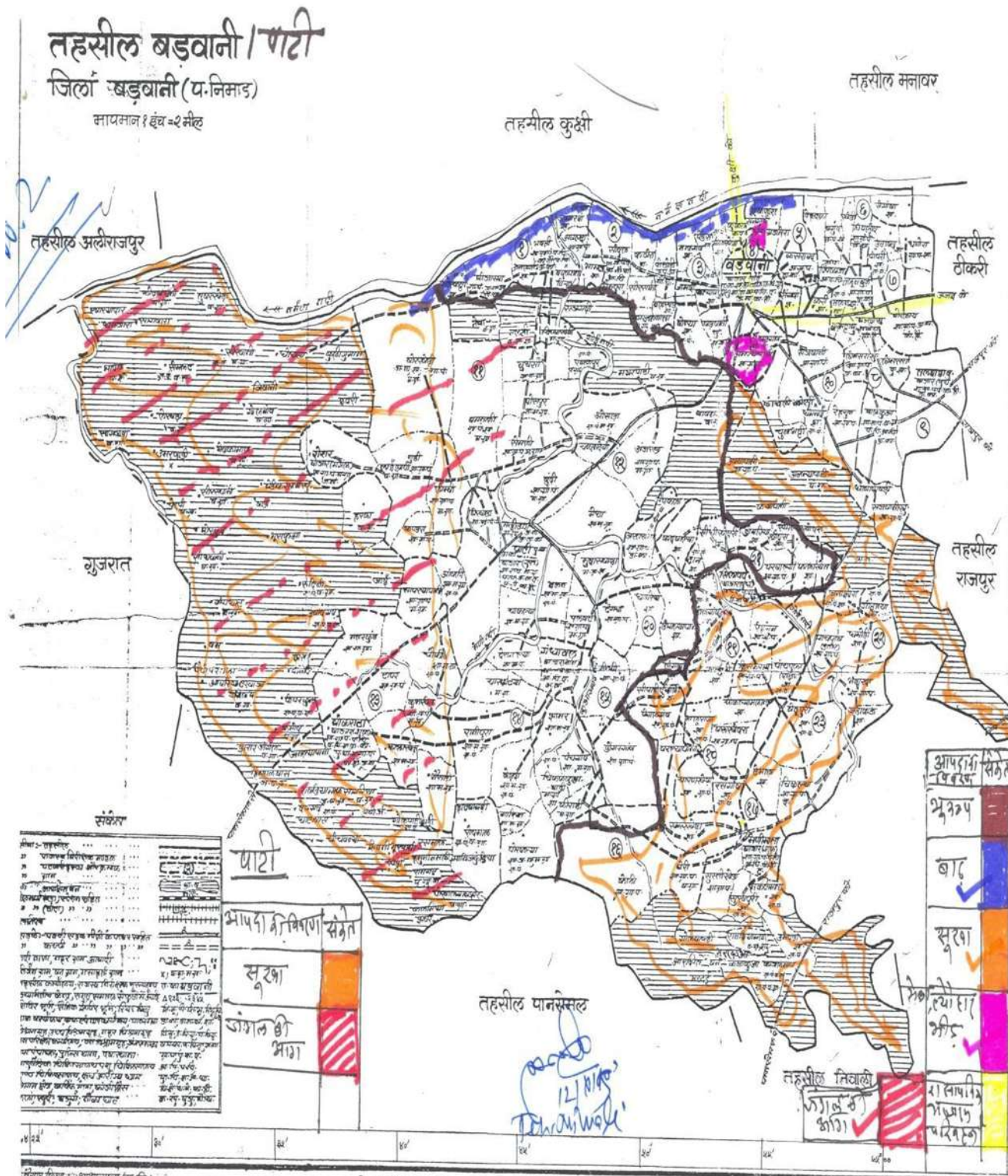
Handwritten signature and date:
12/11/09
Neh Nimelli

शुपदा	विवरण	संकेत
भूकम्प		Red
मेछा-ल्योहार भूड		Pink
सख्त कुडीला		Green
रासायनिक आडरण परपटक		Yellow

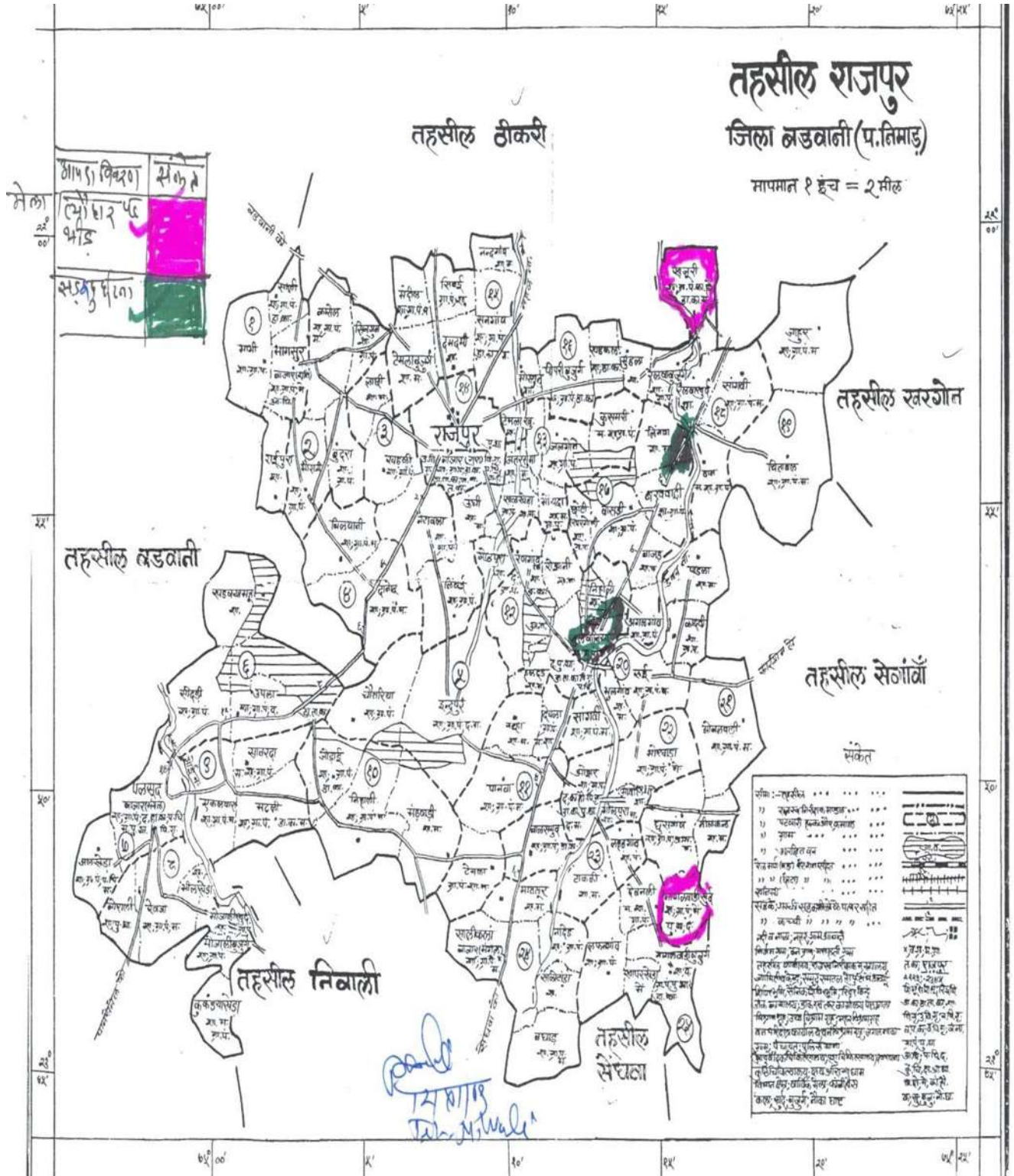
संकेत	विवरण
1	तहसील
2	पञ्चाल तहसीलक मण्डल
3	ठिकरी हुका डेपर क्रमक
4	बसा
5	अपराहित खन
6	रालमक (बडा) ल्देवत नहित
7	(लुटा)
8	रालमक
9	सडके - खक, मोला के पल्लभ परहित
10	कडी
11	मरिय नडा, नहर खान असादी
12	मिजम बमम डन गाम मरवादी नोमम
13	तहसील कयालाड राजपुर तहसीलक मरवालाड
14	उखमिवा के नद, सपुदु सललर से पुलीम उखी
15	सिबेर मरि-सोनाक पिबिडर मरि रिम-सिबेर
16	डाक कार्यालय, डाक एल लार कयालाड पादियाला
17	पेठाम गृह, उख मिशामगृह नहर मिशाम गृह
18	खन परितोल कयालाड, खन मिशामगृह अललर नडा
19	गाम पञ्चाल, पुरिते थाना वकलरगाम
20	आयुषीक मरि-सोनाक मरि-सोनाक वाम
21	कुडु पाकिलगुणव परा पिबिडर लुख
22	मिजम लोन वारिधम मरि-सोनाक मरि-सोनाक
23	कला-सुदु सुगुम नोकाखट

तहसील पानसेमठ
जिल्हा बडवानी
मापमान 1" = 2 मील





सिंचन विभाग - 400000 नुपुरा (म.नि.)
जिला पंचायत से प्राप्त सूचना अनुसार तम 28/5/18 के तैयार
दिनांक - 23.10.18



आपदा विकल्प	संकेत
लूट/घोर पीडा	
संपत्ति हानि	

तहसील राजपुर
जिला बड़वानी (प.नि.माड)

मापमान १ इंच = २ मील

तहसील ठीकरी

तहसील खरजौत

तहसील बड़वानी

तहसील सेनावाँ

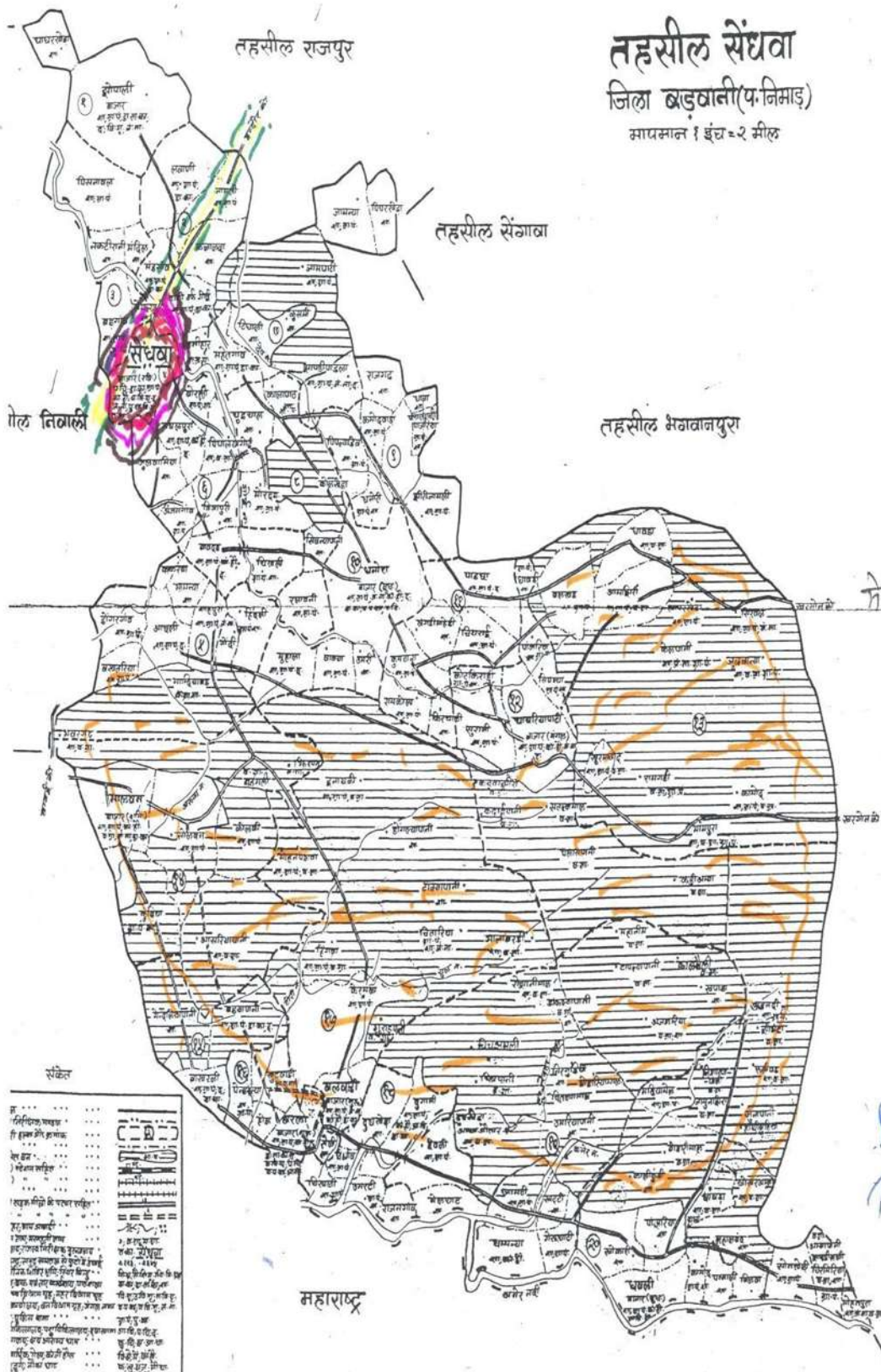
तहसील निवाली

तहसील सेंचला

संकेत

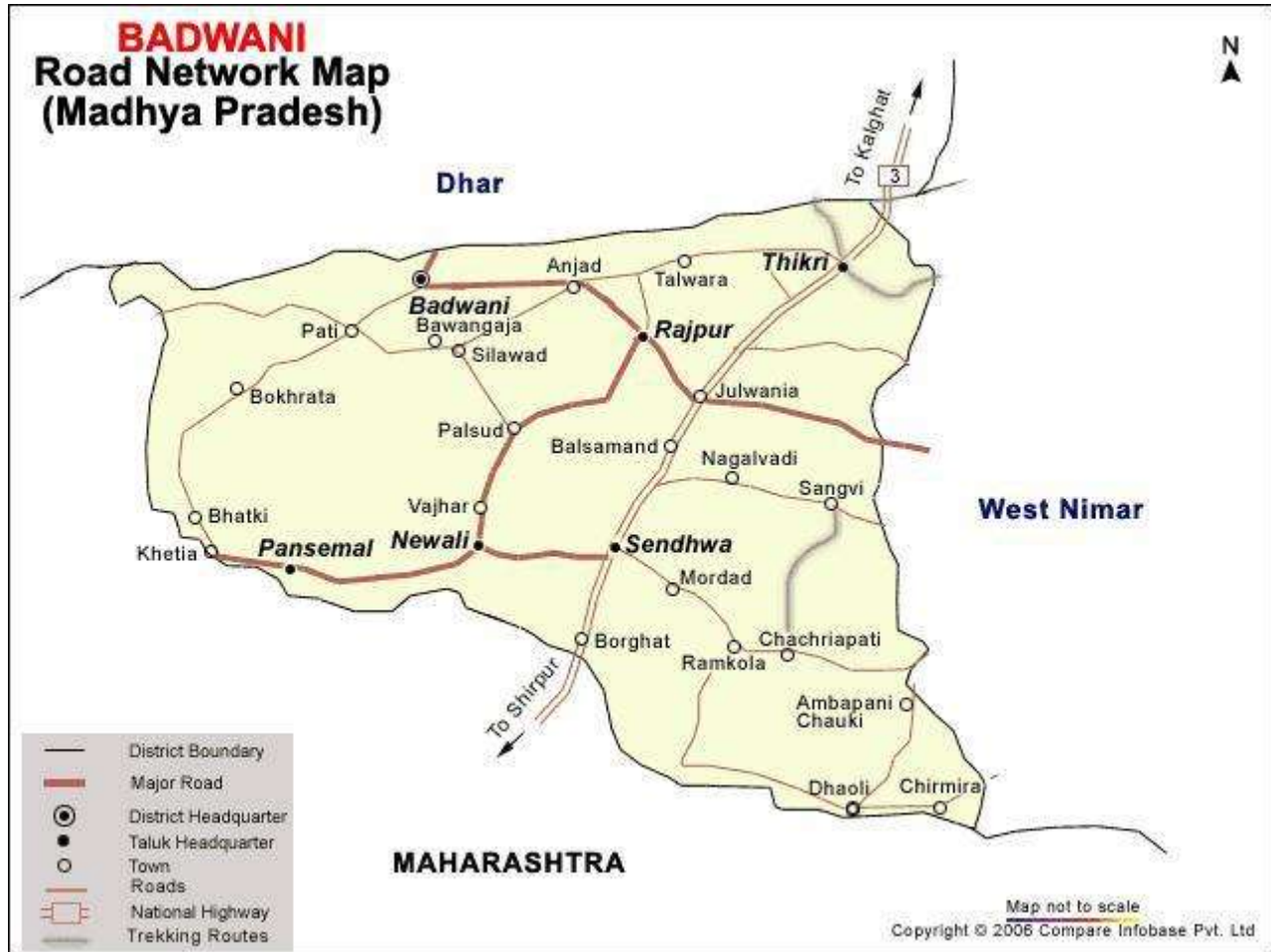
१) तहसील	
२) पोस्टमन	
३) पोस्टमन	
४) ग्राम	
५) अश्विज वन	
६) तहसील	
७) तहसील	
८) तहसील	
९) तहसील	
१०) तहसील	
११) तहसील	
१२) तहसील	
१३) तहसील	
१४) तहसील	
१५) तहसील	
१६) तहसील	
१७) तहसील	
१८) तहसील	
१९) तहसील	
२०) तहसील	
२१) तहसील	
२२) तहसील	
२३) तहसील	
२४) तहसील	
२५) तहसील	
२६) तहसील	
२७) तहसील	
२८) तहसील	
२९) तहसील	
३०) तहसील	

12/11/18
Tal. Nivali

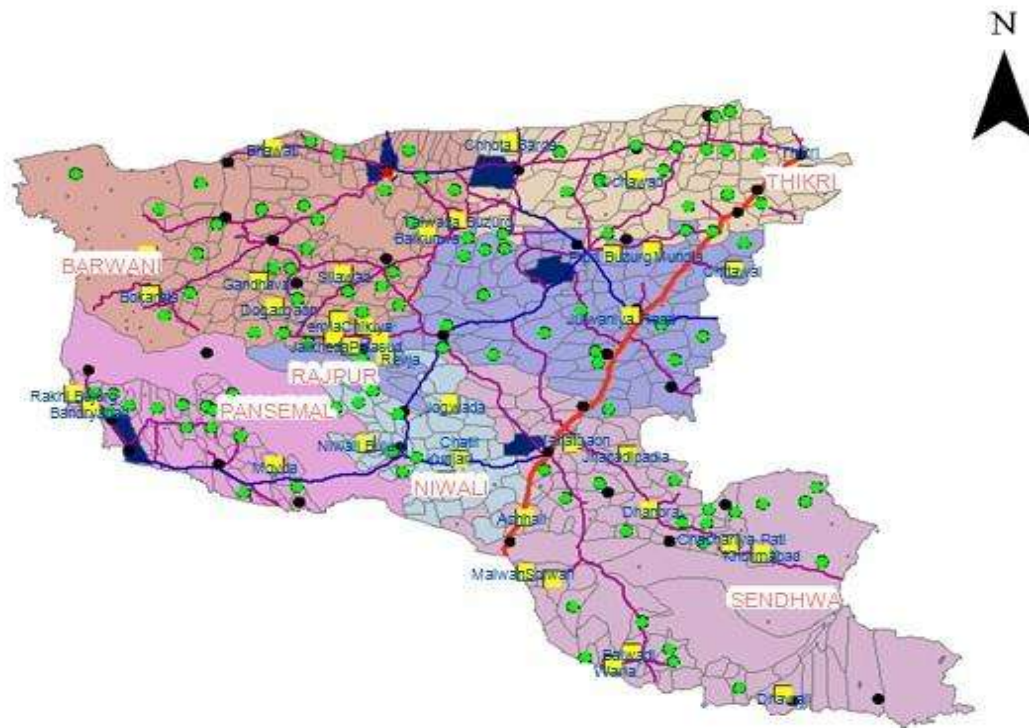


मापदा क्र. विवरण	सेक्रेट
मूकता	Red
बाढ	Blue
सुखा	Orange
झाडा	Red
पेढा (पेढा) के पेढा पेढा इयथार	Pink
सडक दुपडी	Green
शासयागत्र भण्डारण सारबद	Yellow
गडामा/गडामा के बलातर	Brown
गडामा/गडामा के बलातर	Brown
सुखा	Hatched

Handwritten signature/initials
 Mr. N. N. N.



Health Facilities in District Barwani, M.P.



Legend

-  District Hq
-  Towns
-  National Highway
-  District Roads
-  Other Roads
-  Urban Area
-  PHC's
-  Sub Centres

0 5 10 20 Kilometers
