

District Disaster Management Plan Alirajpur

Prepared by:

Mayank Saxena
Indian Institute of Technology, Roorkee

In Consultation with:

District Administration, Alirajpur
Technical Consultant: SEEDS Technical Services, New Delhi
Administrative Assistance: School of Good Governance & Policy
Analysis, Government of Madhya Pradesh, Bhopal

ACKNOWLEDGEMENTS

I express my sincere and heartfelt gratitude to School of Good Governance & Policy Analysis, Bhopal, for giving the opportunity to take this unique experience of developing the District Disaster Management Plan for the district of *Alirajpur*. This was a big learning experience for me in both personal and professional front.

I am extremely grateful to Shri Rajendra Singh (IAS), District Collector, *Alirajpur* for providing administrative help and supporting this project. I am also grateful to Shri Santosh Loharia, District Planning Officer for regular guidance and providing me inputs for the plan. Invaluable inputs in the making of Plan were provided by Shri H S Safdari (Addition CEO, Zila Panchayat), Shri Sitaram Satya (ASP), Shri L M Damor (CEO Janpad Panchayat), Dr. Baria and Shri J S Bagel(SDM) who shared their knowledge and guided me. My understanding and analysis of the whole plan would have been incomplete without them to say the least. I am grateful to the entire District Administration, *Alirajpur* for their unrelenting support and understanding extended to me.

Special thanks to Shri Sumat Jain, District Commandant, *Jhabua* for extending support during my stay in the district.

Above all, I want to acknowledge debt I owe to the specialists and experts of SEEDS Technical Services in addressing my various concerns related to Disaster Management. I am grateful to the senior administrators from State Government and School of Good Governance and Policy Analysis(SGGPA), Bhopal (An Autonomous Institution of Government of Madhya Pradesh) for contributing to DDMP. I am grateful to Shri Akhilesh Argal, Director (Governance) SGGPA, Dr. S. M. Haider Rizvi, Director (Policy Analysis) SGGPA, Shri Gaurav Khare, Knowledge Management Officer SGGPA, Shri Amit Tuteja, Consultant SEEDS Technical Services, Shri Sunish Jose, Consultant SEEDS Technical Services and other officers and staff of SGPA, Bhopal and Collector Office, *Alirajpur* for their whole-hearted support in finalizing the District Disaster Management Plan.

Many colleagues and friends provided help during data collection and helped me in understanding various aspects of Disaster Management Plan.

Lastly, I thank State Disaster Management Authority, Madhya Pradesh for all the administrative assistance.

PREFACE

Disasters causes extensive damage to life and property and have adversely impacted economic development. The Government of Madhya Pradesh ('GoMP') recognizes the need to have a proactive, comprehensive, and sustained approach to disaster management to reduce the detrimental effects of disasters on overall socio-economic development of the state.

The objectives of the DM policy or any sectoral policy should sub-serve the overall goals of the state relating to economic and social development. Hence, policies on sustainable development should seek to reduce possible losses from disasters, as a matter of course. Pre-disaster planning is critical for ensuring an efficient response at the time of a disaster. A well-planned and well-rehearsed response system can deal with the exigencies of calamities and also put up a resilient coping mechanism. Optimal utilization of scarce and valuable resources for rescue, relief and rehabilitation during times of crisis is possible only with detailed planning and preparation and timely execution.

In the present structure of India, the district administration is bestowed with the nodal responsibility of implementing a major portion of all disaster management activities. The increasingly shifting paradigm from a reactive response orientation to a proactive prevention mechanism has put the pressure to build a full-proof as well as fail-proof system, including, within its ambit, the components of prevention, mitigation, rescue, relief and rehabilitation. Keeping in mind the nodal role of the district administration in disaster management, preparation of District Disaster Management Plans (DDMP) is imperative. District Disaster Management Plan is one of the most important tools for Disaster Risk Reduction. DDMP, *Alirajpur* is according to guidelines laid in DM Act, 2005 and is prepared based on the vulnerability of the *Alirajpur* district to various disasters and the resources available in the district.

The available Flood Control Working Plan, 2011 and Crisis Management Document, 2011 were critically examined and a final DDMP is developed. The Document is comprehensive District Disaster Management Plan for *Alirajpur* District and supplemented with district specific issues. It includes District Profile, Institutional arrangements available, Hazard Vulnerability Resource Capacity analysis and district level planning for four phases – Mitigation, Preparedness, Response, and Recovery and rehabilitation.

It is suggested that the District level officials of different department will carefully go through the plan and provide suggestions & comments which can be included in the next edition. This document might be helpful to the district authorities to plan for future disasters for a Disaster Free Alirajpur.

ABBREVIATIONS

- APL:** Above Poverty Line
- ASHA:** Accredited Social Health Activists
- BPL:** Below Poverty Line
- BRGF:** Backward Region Grant Fund
- CHC:** Community Health Centre
- CMHO:** Chief Medical & Health Officer
- DCR:** District Control Room
- DDMA:** District Disaster Management Authority
- DDMC:** District Disaster Management Committee
- DDMO:** District Disaster Management Officer
- DDMP:** District Disaster Management Plan
- DM:** Disaster Management
- DRR:** Disaster Risk Reduction
- EOC:** Emergency Operation Centre
- ESF:** Emergency Support Function
- GoMP:** Government of Madhya Pradesh
- GP:** Gram Panchayat
- GPDMC:** Gram Panchayat Disaster Management Committee
- IAY:** Indira Awaas Yojana
- ICS:** Incident Command System
- IDSP:** Integrated Disease Surveillance Project
- NREGS:** National Rural Employment Guarantee Scheme
- NRHM:** National Rural Health Mission
- NVDA:** Narmada Valley Development Authority
- PHC:** Primary Health Centre
- PWD:** Public Work Department
- SSA:** Sarva Shiksha Abhiyaan
- RD:** Rural Development
- SDMA:** State Disaster Management Authority, MP
- SOP:** Standard Operating Procedure
- UADMC:** Urban Area Disaster Management Committee
- UD:** Urban Development

List of Tables

Table 1: Location and administrative divisions	11
Table 2: Geography and Topography	12
Table 3: Demographic and socio economics.....	13
Table 4: Climate and weather	14
Table 5: Health (Medical)	15
Table 6: Education	16
Table 7: Agriculture and Land use.....	17
Table 8: Housing Pattern.....	18
Table 9: Industrial setups	20
Table 10: Transport and communication network	20
Table 11: Power station and electricity installations.....	21
Table 12: Major historical, religious places, tourist spots.....	21
Table 13: District Disaster Management Authority	25
Table 14: District Disaster Management Committee	25
Table 15: District Control Room.....	27
Table 16: Urban Area Disaster Management Committee	30
Table 17: Block Level Disaster Management Committee	30
Table 18: Gram Panchayat Disaster Management Committee	31
Table 19: Village Disaster Management Committee	32
Table 20: Major applicable hazards	34
Table 21: History of past disasters (last 30 years / as many years of data as possible)	35
Table 22: Seasonality of hazards.....	37
Table 23: Block wise vulnerability	38
Table 24: Resource inventory, Block wise	41
Table 25: Potential impact of applicable hazards and existing vulnerabilities	45
Table 26: Prediction agency for various disaster	55
Table 27: Initial Assessment Report	69
Table 28: District Search & rescue Team	71
Table 29: Temporary Shelter for Flood	75
Table 30: NGO and Voluntary Organisation	80
Table 31: SOP Revenue Department	87
Table 32: Irrigation and Public Health Engineering	88
Table 33: Power Department	89
Table 34: Transport Department	90
Table 35: Health Department	91
Table 36: Police Department.....	92

Table 37: Public Works Department.....	92
Table 38: Fire Service Department	94
Table 39: Forest Department.....	94
Table 40: Panchayat Raj Department.....	95
Table 41: Information & Public Relation Department.....	96
Table 42: Public Distribution Department	97
Table 43: Home Department.....	97
Table 44: Agriculture Department	99
Table 45: Tribal Welfare Department	99
Table 46: Power Department	100
Table 47: Indian Red Cross and NGOs.....	101
Table 48: SOP - Flood	103
Table 49: SOP - Flood	103
Table 50: SOP - Earthquake.....	104
Table 51: SOP - Epidemic.....	104
Table 52: SOP - Road and Other Accidents.....	105
Table 53: SOP - Petrol Bunk Owners and Operators.....	105
Table 54: SOP - Restaurant owners and shop selling inflammable material	106
Table 55: Rainfall Data	114
Table 56: Health Facility.....	Ошибка! Закладка не определена.
Table 57: List of NGOs.....	115
Table 58: Departmental Contacts.....	118
Table 59: Police Department Contacts.....	119
Table 60: Contacts - District Hospital, Alirajpur	120
Table 61: Medical Store Details.....	120

Contents

LIST OF TABLES.....	5
STRUCTURE OF DISTRICT DISASTER MANAGEMENT PLAN (DDMP).....	11
A. GENERAL	11
A 1 OVERVIEW	11
A 1.1 District Profile	11
A 1.1.1 Location and administrative divisions	11
A 1.1.2 Geography and Topography	12
A 1.1.3 Demographic and socio economics.....	13
A 1.1.4 Climate and weather	14
A 1.1.5 Health (Medical).....	15
A 1.1.6 Education	16
A 1.1.7 Agriculture and Land use.....	17
A 1.1.8 Housing Pattern:	18
A 1.1.9 Industrial set ups	19
A 1.1.10 Transport and communication network	20
A 1.1.11 Power stations and electricity installations	21
A 1.1.12 Major historical, religious places, tourist spots.....	21
A 1.2 Scope and Ownership of District Disaster Management Plan.....	22
A 1.2.1 Authority of the Plan.....	22
A 1.2.2 Responsibility & Accountability of the Plan	22
A 1.3 Purpose of the Plan.....	22
A 1.4 Key Objectives.....	22
A 1.5 District Plan Approach.....	23
A 2. INSTITUTIONAL ARRANGEMENTS.....	24
A 2.1 District Disaster Management Authority (DDMA)	25

A 2.2 District Disaster Management Committee (DDMC).....	25
A 2.3 District Control Room (DCR)	27
A 2.4 District Disaster Information Management System	29
A 2.5 Urban Area Disaster Management Committee.....	29
A 2.6 Block Level Disaster Management Committee	30
A 2.7 Gram Panchayat Disaster Management Committee	31
A 2.8 Village Disaster Management Committee.....	32
B. HAZARD, VULNERABILITY ASSESSMENT AND RISK PROFILING (HVRC)	32
B 1. HAZARD ASSESSMENT	33
B 2 VULNERABILITY ANALYSIS.....	37
B 3. CAPACITY ANALYSIS	41
B 4. RISKS ASSESSMENT	45
B.4.1 Potential impact of applicable hazards and existing vulnerabilities	45
B 4.2 Risk profiling of the district	46
C . DISTRICT LEVEL DISASTER MANAGEMENT PLANNING.....	48
C 1 DISTRICT ACTION PLANS.....	48
C 1.1 Mitigation Plan.....	48
C 1.1.1 Scope of Integrating Risk Reduction in Development Schemes	48
C 1.1.2 Training & Capacity Building	51
C 1.1.3 Community Initiatives.....	51
C 1.1.4 Risk Management Funding	52
C 1.2 Preparedness Plan.....	52
C.1.2.1 Preparedness before response.....	53
C.1.2.2 Pre-Disaster Warning, Alerts	54
C.1.2.3 Evacuation preparedness	56
C.1.2.3 Organizing mock drills.....	57
C 1.3 Response Plan	57

C 1.3.1	Disaster Emergency Response Force	58
C 1.3.2	Crisis management direction & coordination	58
C 1.3.3	Incident Command System (ICS) or Incident Response System (IRS).....	59
C 1.3.4	Rapid damage assessment & reporting.....	69
C 1.3.5	District Search & rescue Team.....	71
C 1.3.6	Medical response.....	71
C 1.3.7	Logistic arrangements	74
C 1.3.8	Communications	75
C 1.3.9	Temporary shelter management	75
C 1.3.10	Water and Sanitation (WATSAN)	76
C 1.3.11	Law & order	77
C 1.3.12	Public grievances/missing persons search/media management.....	77
C 1.3.13	Animal care	77
C 1.3.14	Management of deceased	79
C 1.3.15	Civil Defense and Home Guards.....	79
C 1.3.16	Role of Private Security	80
C 1.3.17	NGOs & Voluntary organizations	80
C 1.3.18	Relief management planning.....	81
C 1.3.19	Media Management.....	82
C 1.3.20	Fire Services.....	82
C 1.4	Recovery and Reconstruction Plan.....	83
C 1.4.1	Restoration of basic infrastructure	83
C 1.4.2	Reconstruction of damaged buildings/social infrastructure	83
C 1.4.3	Restoration of livelihoods	84
C 1.4.4	Psycho-social interventions.....	84
C 1.5	Cross cutting elements	84
C 1.5.1	Community Based Disaster Management	84
C 1.5.2	Needs of the Special vulnerability Groups	85
C 1.5.3	Addressing climate induced anthropogenic issues	86
C2	STANDARD OPERATING PROCEDURES (AND CHECKLISTS).....	87
C 2.1	SOPs for all concerned Line Departments	87
C 2.2	Hazard specific SOPs for designated Departments and Teams	103
C3	FINANCIAL PROVISIONS FOR DISASTER MANAGEMENT.....	107
C 3.1	District Disaster Response Fund.....	107
C 3.2	District Disaster Mitigation Fund.....	107
C4	COORDINATION MECHANISMS WITH OTHER STAKEHOLDERS	107

C 4.1	Mapping of stakeholders in the District	107
C 4.1.1	Private and Public Sectors.....	107
C 4.1.2	Non Governmental Organizations and Community Based Organisations	107
C 4.1.3	Religious Institutions.....	108
C 4.1.4	Academic Institutions.....	108
C 4.1.5	International Humanitarian Organizations	109
C 4.2	Responsibilities of the stakeholders	109
C5	INTER-DISASTER COORDINATION MECHANISMS – [STANDARD OPERATING PROCEDURES / PROTOCOLS].....	109
C6	INTRA-DISTRICT COORDINATION MECHANISMS – [WITH BLOCK HEADQUATERS].....	111
C7	DISSEMINATION OF DM PLAN.....	112
C 7.1	Plan Evaluation.....	113
C 7.2	Plan Update.....	113
C8	ANNEXURE.....	114
C 8.1	District profile.....	114
C 8.2	Resources	116
C 8.3	Media and information management	117
C 8.4	Important Contact numbers.....	118
C 8.5	Do’s and don’ts of all possible hazards.....	121
C 8.6	Detailed Maps	129

Structure of District Disaster Management Plan (DDMP)

A. GENERAL

A 1 Overview

A 1.1 District Profile

Alirajpur district was carved out from the former *Jhabua* district by merging Alirajpur, Jobat and Bhabhra tehsils on 17th May, 2008. *Alirajpur* town is the administrative headquarters and the municipality of the district. Presently, there are two Madhya Pradesh Vidhan Sabha constituencies in this district: Alirajpur and Jobat. Both of these are part of Ratlam Lok Sabha constituency. *Alirajpur* comes under *Indore* Administrative Division.

Alirajpur lies on the south-west corner of MP, adjoining the border of Gujarat and Maharashtra and is situated in the Malwa region. The place is hilly and many of the inhabitants are the aboriginal. Tribes can be classified into 3 groups – Bhil, Bhilala and Patlya. At least 55% of the total population of the district is Bhilala, Patlya are 21%, 15% is Bhil with the remaining 9% is made up of diverse groups. According to 2011 census, 87% people belong to ST, 4% people belong to SC and 9% belongs to others. Ministry of Panchayati Raj named *Alirajpur* one of the country's 250 most backward districts (out of a total of 640) and thus receives funds from the Backward Regions Grant Fund Programme (BRGF).

Formerly, *Alirajpur* State was a princely state, under the Bhopawar Agency in Central part of India. Recently, Bhabhra has been rechristened as ChandraShekhar Azad Nagar.

A 1.1.1 Location and administrative divisions

The total area of the present district is 2689.58 Sq. Kms. It has a total of 551 villages, of which 546 villages are inhabited and the remaining are uninhabited. There are 5 tehsils and 6 community development blocks. It is located at a distance of 235 Kms from *Indore* and 430 Kms from *Bhopal*.

It is bounded by Narmada on the south, beyond which lie the *Nandurbur* district of Maharashtra and *Barwani* of MP, *Dhar* on the east, *Jhabua* to the north and *Vadodara* district of Gujarat on the west. Sardar Sarovar Project on the Narmada is located just beyond the southwest corner of *Alirajpur*.

Table 1: Location and administrative divisions

Location (in degrees) -	
	Latitude – 22° 19' 00"N Longitude – 74° 21' 17"E
District Area (in sq. kms.) -	2689.58
Administrative information-	

No. of sub divisions:	2 (Alirajpur, Jobat)
No. of Tehsils:	5 (Alirajpur, Jobat, ChandraShekhar Azad Nagar(Bhabhra), Katthiwada, Sondwa)
No. of Municipal Boards	3(Alirajpur, Jobat, ChandraShekhar Azad (Bhabhra)
No. of Blocks:	6 (Alirajpur, Jobat, ChandraShekhar Azad Nagar (Bhabhra), Katthiwada, Sondwa, Udaygarh)
No. of Gram Panchayats:	288
No. of Villages:	551(Total), 546 (Populated)
No. of Police Stations,	12
Police Chowkees	11
No. of Post Offices	No Head Post office, Branch Office – 62, Sub Post Office - 7
Year of district formation:	17th May, 2008
Name of adjacent districts:	Jhabua on the North, Dhar on the East, Vadodara(Gujarat) on the West, Barwani & Nandurbar(Maharashtra) on the South

Source: www.alirajpur.nic.in, SP Office 2012, Sub Post Office Alirajpur 2012

A 1.1.2 Geography and Topography

Alirajpur district is surrounded by the Vindhyas in the south and the Malwa plateau in the north. District is entirely hilly. Highest peaks lie around Mathwad region. Some of the peaks rise to above 800m. Man Mandar in Katthiwada rises to 780m and Aman Kuwa in Bhabhra is another high peak. Elevation ranges from 381 feet at Kakarana to 1197 feet above sea level at Udaygarh. Undulating landscape is the most distinctive feature of the topography of *Alirajpur*.

There are number of seasonal rivers which carry water from July to January. Narmada is the only river which carries water throughout the year. There are 6 forest ranges in the district and most of the forest area comes under 'Reserve' forest. Katthiwada ranges are classified as dense, Alirajpur and Bhabhra as moderately dense and Jobat, Umrli and Mathwad as open forest.

Table 2: Geography and Topography

Name of rivers and lakes:	234 Lakes; Rivers: Seasonal- Ankhar(Alirajpur), Chitva(Sondwa, Katthiwada), Heran(Sondwa), Ur(Sondwa, Katthiwada), Dohi(Jobat), Tukkari(Katthiwada), Hatni(Bhabhra, Jobat), Sukar(Alirajpur), Kara(Katthiwada); Whole year - Narmada(Sondwa)
No. of dams, embankments:	107 Minor Tanks (Alirajpur - 25, Jobat - 18, Bhabhra - 18,

	Katthiwada - 13, Sondwa - 12, Udaygarh - 21)
Name of existing mountains:	Katthiwada Kadwal(Satpura Range), Man Mandar
Highest elevation (in meters):	780
Forest cover in the district:	Notified area-131102 hectare , Digitised area-93911 hectare

Source: Irrigation Department 2012, Forest Department, Land Record Dept. 2012, Resource Atlas of Jhabua by MP Council of Science and Technology, 2008

A 1.1.3 Demographic and socio economics

Alirajpur district has a population of 728,677 which gives it a ranking of 498th in India (out of a total of 640). It constitutes 1.00 percent of total Madhya Pradesh population. 92.17% of the population resides in rural areas and 7.88% comprised as urban. *Alirajpur* has a sex ratio of 1009 females for every 1000 males. Its population growth rate over 2001-2011 was 19.40 percent. Its economy depends primarily on agriculture (rain-fed). After the farming season, most of the farmers migrate to Gujarat as manual laborers to work in construction and industry.

Alirajpur is a predominantly Adivasi district, and suffers from high rates of illiteracy and poverty. Almost half of the population lives below the poverty line. Languages spoken include Bareli Rathwi, a Bhil language, written in the Devanagari script and Bhilali.

Table 3: Demographic and socio economics

Total household:(2011 Data)	126753
Total population:	728677
Male:	362748
Female:	365929
Population density:	229 per sq. km
Income - Total APL, BPL families: (2003, Latest figures not available)	BPL – 56826 (Alirajpur - 10055, Jobat - 7878, Chandra Shekhar Azad Nagar - 8268, Katthiwada - 10243, Sondwa - 14553, Udaygarh - 5829)
Occupation - Main occupation of people: Secondary occupation of people:	Agriculture Labor(Agriculture, construction)

Source: Census 2011 Data (Provisional), Zila Panchayat, Dept of Planning 2012

A 1.1.4 Climate and weather

Alirajpur has a sub-tropical climate with hot summers from late March to late June, the humid monsoon season from late June to early October and a cool dry winter from early November to late February. The highest temperature reaches in the month of June and lowest in the month of January. The region is prone to water scarcity and droughts.

Table 4: Climate and weather

Rainfall- Total annual rainfall of last year: (in mm)	(Alirajpur – 524.7, Jobat - 721, Chandra Shekhar Azad Nagar – 825.1, Katthiwada – 2551.3, Sondwa – 450.2, Udaygarh – 742.8)
Average rainfall (last 10 years):	879.7mm
Temperature- Average Maximum Temperature: Average Minimum Temperature:	42.4°C 6.4°C
Demarcation of crucial seasons-	
Months of excess rainfall, leading to flood situation:	July, August
Months of water scarcity, leading to drought situation:	April, May, June

Source: Land record Department, 2012

Rainfall pattern in district

Block	2009-2010	2010-2011	2011-2012
Alirajpur	569.4	711	584.7
Jobat	666.6	783.4	721
Bhabhra	623	850	825.1
District Average for the year*	629.8	780.6	710.2
Udaygarh	636.8	862	742.8
Sondwa	475	980.6	450.2
Katthiwada	890	1583	2551.3

*Till 2011, district Average was calculated based on rainfall in Alirajpur, Jobat and Bhabhar Tehsil. From 2012 all blocks will be considered for calculating average rainfall.

Source: Land Record, 2012

A 1.1.5 Health (Medical)

The District has 1 District Hospitals, 16 Primary Health Centers, 5 Community Health Centers and 1 Private Hospitals with basic medical facilities. There is single blood bank in the district. Presently, there is *no Trauma Center* available in the district. Trauma Center has been sanctioned for the District Hospital, Alirajpur and would be constructed in near future.

Table 5: Health (Medical)

Block name	Alirajpur	ChandraShekhar Azad Nagar	Jobat	Katthiwada	Sondwa	Udaygarh	TOTAL
No of Health Facilities	36	27	25	34	36	21	179
No of Allopathic hospitals	1	0	1	0	0	0	2
No. of Primary Health Centers (PHCs)	2	3	2	3	4	2	16
No. of mini hospitals	33	23	21	30	31	18	156
No of Certified Medical Practitioners	15	3	4	4	4	2	32
No. of Community Health Centers (CHCs)	0	1	1	1	1	1	5
No of Beds	102	48	42	48	48	42	330
No of Blood Bank	1	0	0	0	0	0	1
No of Ambulance	3	1	1	1	1	1	8

Source: CHMO Office 2012

Block	Ambulance Facility		
	Govt.	Red Cross	NVDA
Alirajpur	03	01	00
Sondwa	01	00	01
Bhabra	01	01	00
Katthiwada	01	01	00
Jobat	01	01	00
Udaygarh	01	01	00

See Annexure C 8.1.1 for block level details.

A 1.1.6 Education

Alirajpur with a literacy rate of 37.22% is amongst the *least literate district in India*. Urban literacy stands at 81.05% and rural literacy stands at 33.22%.

Table 6: Education

Literacy rate:	37.22%																																
Total Male:	126261(43.53%)																																
Total Female:	91363(30.97%)																																
No. of Secondary schools:	(Govt. entities)																																
No. of High/Middle schools:	<table border="1"> <thead> <tr> <th>Block</th> <th>Primary</th> <th>Secondary</th> <th>High</th> </tr> </thead> <tbody> <tr> <td>Alirajpur</td> <td>363</td> <td>83</td> <td>18</td> </tr> <tr> <td>Chandra Shekhar Azad Nagar</td> <td>235</td> <td>49</td> <td>12</td> </tr> <tr> <td>Jobat</td> <td>311</td> <td>52</td> <td>7</td> </tr> <tr> <td>Katthiwada</td> <td>297</td> <td>46</td> <td>11</td> </tr> <tr> <td>Sondwa</td> <td>378</td> <td>61</td> <td>12</td> </tr> <tr> <td>Udaygarh</td> <td>273</td> <td>49</td> <td>9</td> </tr> <tr> <td>Total</td> <td>1857</td> <td>340</td> <td>69</td> </tr> </tbody> </table>	Block	Primary	Secondary	High	Alirajpur	363	83	18	Chandra Shekhar Azad Nagar	235	49	12	Jobat	311	52	7	Katthiwada	297	46	11	Sondwa	378	61	12	Udaygarh	273	49	9	Total	1857	340	69
Block	Primary	Secondary	High																														
Alirajpur	363	83	18																														
Chandra Shekhar Azad Nagar	235	49	12																														
Jobat	311	52	7																														
Katthiwada	297	46	11																														
Sondwa	378	61	12																														
Udaygarh	273	49	9																														
Total	1857	340	69																														
No. of Primary schools:																																	
No. of Anganwaris:	1121(Alirajpur-202, Jobat-146, Bhabhra-134, Katthiwada-191, Sondwa-321, Udaygarh-127)																																
No. of ITI/ training centers:	2(Alirajpur, Jobat)																																
No. of Engineering colleges:	NIL																																
No. of Medical colleges:	NIL																																
No. of Other colleges:	3(Govt. PG College, Alirajpur; Govt. College, Jobat; Govt. College, Bhabhra)																																

Total (Aprox.) Students Strength in all the educational institutions:	184720
Total (Aprox.) Staff Strength in all the educational institutions:	4449

Source: Census 2011 Data(Provisional), Tribal Development Dept. 2012

A 1.1.7 Agriculture and Land use

Agriculture is the primary occupation of the people in the district. District has primarily two kinds of soil – red soil and black soil. The soil in the region is sandy due to which water runs down and is not suitable for agriculture. Due to land and soil irrigability problems in the district, land cannot be put to sustained use under irrigation, and thus rain-fed agriculture is the prevalent in the district. *Alirajpur* is famous for the cultivation of mangos.

Table 7: Agriculture and Land use

Cropping pattern -																													
Type of major crops:	Kharif(Maize, Soyabean, Urad, Bajara, groundnut), Rabi(Wheat, Gram)																												
Cropping seasons:	Kharif(June/July-Oct/Nov) Rabi(Nov/Dec- March)																												
Land classifications-																													
Forest land: (in hectare)	93911; Ranges(Alirajpur – 19994, Jobat-12851, Umrli – 12169, Bhabhra – 10416, Katthiwada – 14106, Mathwad – 24375)																												
Barren & Uncultivated land: (in hectare)																													
Cultivated land: (in hectare)																													
Pasture land: (in hectare)																													
	<table border="1"> <thead> <tr> <th>Block</th> <th>Barren & Uncultivated land</th> <th>Cultivated Land</th> <th>Pasture Land</th> </tr> </thead> <tbody> <tr> <td>Alirajpur</td> <td>453</td> <td>408</td> <td>847</td> </tr> <tr> <td>Chandra Shekhar Azad Nagar</td> <td>213</td> <td>21668</td> <td>447</td> </tr> <tr> <td>Jobat</td> <td>298</td> <td>24811</td> <td>509</td> </tr> <tr> <td>Katthiwada</td> <td>161</td> <td>22747</td> <td>477</td> </tr> <tr> <td>Sondwa</td> <td>385</td> <td>32966</td> <td>685</td> </tr> <tr> <td>Udaygarh</td> <td>482</td> <td>24485</td> <td>499</td> </tr> </tbody> </table>	Block	Barren & Uncultivated land	Cultivated Land	Pasture Land	Alirajpur	453	408	847	Chandra Shekhar Azad Nagar	213	21668	447	Jobat	298	24811	509	Katthiwada	161	22747	477	Sondwa	385	32966	685	Udaygarh	482	24485	499
Block	Barren & Uncultivated land	Cultivated Land	Pasture Land																										
Alirajpur	453	408	847																										
Chandra Shekhar Azad Nagar	213	21668	447																										
Jobat	298	24811	509																										
Katthiwada	161	22747	477																										
Sondwa	385	32966	685																										
Udaygarh	482	24485	499																										

	Total	1992	167475	3464
Soil classifications				
Saline:	Yes (PH - 8)			
Water logging:	No			
Recurrent flood hit area:	No			
Drought hit area:	No			

Source: Land Record Dept, Forest Dept. 2012

A 1.1.8 Housing Pattern:

Most of the houses built in the district are of flat roofs as the rains are not heavy, in heavy rainfall areas, slopping roofs are found so as to drain off water. In rural areas, mostly the houses are of mud or brick walls and have thatched, tin or earthen tiles as roof. Some pucca houses are also built in rural areas. Houses more than 3 floors are not common in the district. Most of the houses are upto G+1 floor. Approximately 63% of houses in the district are Kuccha houses and remaining 37% are pucca houses.

Table 8: Housing Pattern

Housing pattern-		
Type of housing construction:	Kuccha/ pucca houses(Both Available in ALL BLOCKS)	
	Type	Numbers
	Kuccha	92383
	Puccha	53599
Type of material used:	RCC / Brick/ any other (Available in ALL BLOCKS)	
	Material of Wall	Number
	Grass/thatch/bamboo	10657
	Plastic/Polythene	583
	Mud/Unburned bricks	75614
	Wood	4873
	Stone not packed with mortar	701

<p>Flooring types: (Ground and above)</p>	Stone packed with mortar	3049																				
	G.I/metal/asbestos sheet	116																				
	Burnt brick	49850																				
	Concrete	432																				
	Other Material	152																				
	<table border="1"> <thead> <tr> <th>Material of Roof</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Grass/Thatch/Bamboo/mud/wood</td> <td>20162</td> </tr> <tr> <td>Plastic/Polythene</td> <td>817</td> </tr> <tr> <td>Hand-made tiles</td> <td>98665</td> </tr> <tr> <td>Machine made tile</td> <td>3697</td> </tr> <tr> <td>Burnt brick</td> <td>126</td> </tr> <tr> <td>Stone/slate</td> <td>1198</td> </tr> <tr> <td>GI/metal/asbestos sheet</td> <td>5305</td> </tr> <tr> <td>Concrete</td> <td>15882</td> </tr> <tr> <td>Other material</td> <td>120</td> </tr> </tbody> </table>		Material of Roof	Number	Grass/Thatch/Bamboo/mud/wood	20162	Plastic/Polythene	817	Hand-made tiles	98665	Machine made tile	3697	Burnt brick	126	Stone/slate	1198	GI/metal/asbestos sheet	5305	Concrete	15882	Other material	120
	Material of Roof	Number																				
	Grass/Thatch/Bamboo/mud/wood	20162																				
	Plastic/Polythene	817																				
	Hand-made tiles	98665																				
	Machine made tile	3697																				
	Burnt brick	126																				
	Stone/slate	1198																				
	GI/metal/asbestos sheet	5305																				
	Concrete	15882																				
	Other material	120																				
	G, G+1, G+2, G+3, etc(Houses till 3rd floor available in all blocks)																					
	<table border="1"> <thead> <tr> <th>Material of Floor</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Mud</td> <td>123401</td> </tr> <tr> <td>Wood /bamboo</td> <td>400</td> </tr> <tr> <td>Burnt brick</td> <td>347</td> </tr> <tr> <td>Stone</td> <td>1196</td> </tr> <tr> <td>Cement</td> <td>16480</td> </tr> <tr> <td>Mosaic/floor tiles</td> <td>4124</td> </tr> <tr> <td>Other Material</td> <td>34</td> </tr> </tbody> </table>		Material of Floor	Number	Mud	123401	Wood /bamboo	400	Burnt brick	347	Stone	1196	Cement	16480	Mosaic/floor tiles	4124	Other Material	34				
	Material of Floor	Number																				
	Mud	123401																				
Wood /bamboo	400																					
Burnt brick	347																					
Stone	1196																					
Cement	16480																					
Mosaic/floor tiles	4124																					
Other Material	34																					

Source: Planning Dept., Census 2011 data

A 1.1.9 Industrial set ups

There are no major industries in the area. There are few Dolomite grinding firms in the *Alirajpur*. The industries available are micro level and are not prone to any kind of industrial or environmental hazard. There is *No Major Accident Hazard Units in Alirajpur*.

Table 9: Industrial setups

Total no. of industries (Govt., Semi Govt. and Pvt), Block wise	Private – 20(Alirajpur-19, Udaygarh-1); Type: Dolomite - 15, Stone Chips-5
a) No. of Major Accident Hazard Units/ Polluting industries/ Industrial Areas:	NIL. No Accident reported. Industries running under guidance of pollution control board.
Total workforce involved in these industrial units:	Not Applicable
b) No. of Medium and small scale industries :	20 Micro level Industries
Total manpower involved in these units:	247
Any major accident occurred in any of the industrial units (Loss of life >10, or Financial loss > 1 Crore).	No loss of life reported.

Source: Industries Department, Jhabua 2012

A 1.1.10 Transport and Communication Network

State highway connects the district to adjacent districts. Blocks are connected to each other and all the Gram Panchayats are connected. Dahod Railway Station in Gujarat is the nearest Railway Station to *Alirajpur* District. However, on February 8, 2008, the foundation for the Vadodara-Dhar broad-gauge rail line was laid, promising complete rail connectivity of the district to the others. Presently, there is ***no rail connectivity*** for *Alirajpur* district.

Wireless stations are available in all police station and police chowkees. Telephone and mobile service is available in all blocks and many of the villages have mobile services. Internet service is only available at block level and there is ***no HAM radio station*** in the district.

Table 10: Transport and communication network

1) Transport Connectivity of each block w.r.t. following networks:	
a) By Road	SH-26(Kukshi- Vadodara, Gujarat link), SH-39(Dhar - Jhabua link)
b) By Rail	No Connectivity, nearest station Dahod(Gujarat)

c) By Air	Nearest Airport – Indore
d) Waterways	No Connectivity
2) Communication network	
i) No. of wireless stations in the respective blocks	23(in all police station and police chowkees)
ii) Availability of telephone, mobile services in each block	Available in ALL blocks
iii) Availability of internet facility in the blocks	Available in ALL blocks

Source: Planning Dept., Police Dept. 2012

A 1.1.11 Power Stations and Electricity Installations

There is no power generating station in the *Alirajpur* district. 33 Villages are Solar electrified due to absence of any other source of power.

Table 11: Power station and electricity installations

List of power stations in the district:	15(132/33 kV – 1, 33/11 kV – 14) (Alirajpur-3, Bhabhra-2, Jobat-3, Katthiwada-1, Sondwa-4, Udaygarh-2) No Generating Station.
Electricity outreach in the district:	91.28% area covered
Available sources of electricity in district, like DG sets etc:	Solar Panels in 33 Villages

Source: Power Dept. 2012

A 1.1.12 Major historical, religious places, tourist spots

Tourism is not well developed in the district and it does not attract people from outside. There are few Jain temples; The Lakshmani Teerth houses the idol of Padma Prabhu Swami as its main deity. It is located some 8 kilometers from the main headquarter town.

Table 12: Major historical, religious places, tourist spots

List of religious centers in the district: 1. Lakshmani – Jain Teerthsthal	Average presence of visitors per day during peak season / festival season Average 60 per day during major festival
--	---

Source: Planning Dept 2012

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.

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.

A 1.2.1 Authority of the Plan

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).

A 1.2.2 Responsibility & Accountability of the Plan

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 1.3 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 1.4 Key Objectives

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

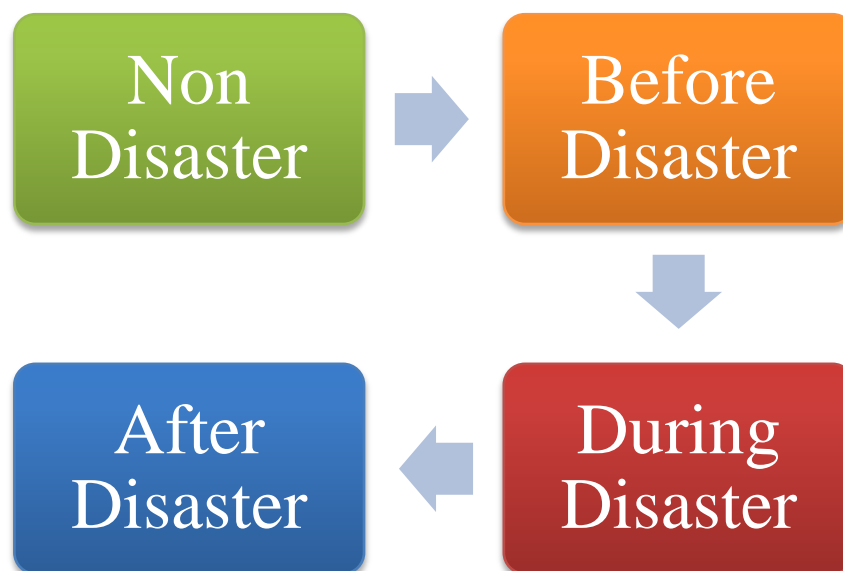
- Assess all risks and vulnerabilities associated with various disasters in the district
- Promoting prevention and preparedness by ensuring that Disaster Management (DM) receives the highest priority at all levels in the district.
- Prevention and minimization of loss of human lives and property by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

A 1.5 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

The institutions/individuals responsible for implementing disaster management activities must have the necessary legal sanction and validity with requisite powers for managing emergency situations. The Government of Madhya Pradesh will adopt the legal framework provided under the National Disaster Management Act, 2005 that incorporates the roles of all relevant institutions responsible for managing disasters. Following institutional arrangements would help in better management of disaster.

A 2.1 District Disaster Management Authority (DDMA)

As per the subsection (1) of section 25 of Disaster Management Act, 2005 the District Disaster Management Authority has to be constituted for every district in the state with such name as may be specified in the notification.

Alirajpur District came into existence in the year 2008 after the notification by MPSDMA which constituted the authority and notified via no. F 35-115-2006-C-1 dated September 5, 2007. Instructions are being issued by District Collector for the formation of the DDMA on 30th June 2012.

Table 13: District Disaster Management Authority

Date of inception of DDMA	Not yet formed	
Members of DDMA, their name, along with actual designations, and current position in DDMA like Chairman, Secretary or Member etc	Designation	Position in DDMA
	District Collector	Chairman
	Chairperson, Zila Panchayat	Co-Chairman
	Superintendent of Police	Member
	Additional Collector	Member
	C.M.H.O	Member
	CEO, Zila Panchayat	Member
	Executive Engineer, PWD	Member
Roles and responsibilities of DDMA	<ul style="list-style-type: none"> • To act as the district planning, coordinating and implementing body for DM in accordance with the guidelines laid down by NDMA and SDMA. • Prepare district disaster management including response plan. • Coordinate implementation of national policies, state policies, national plan, state plan and district plan. • Take measures for prevention of disaster and mitigation of its effects through departments at district level and local authorities. • Examine construction standards; ensure communication systems; involve NGOs and take all operational measures. 	

A 2.2 District Disaster Management Committee (DDMC)

The District Disaster Management Committee (DDMC) is formed to manage, mitigate, respond, control and provide relief during natural disaster. It comprises of the following members.

Table 14: District Disaster Management Committee

Functionaries	Designation	Address	Office contact	Residence contact
District Collector	Chairman, DDMC	Office of District Collector, Alirajpur	07394-234400	07394-234500
Superintendent of Police	Co-Chairman, DDMC	Office of Superintendent of Police, Alirajpur	07394-233350	07394-233450
District forest officer	Member, DDMC	Office of Zila Panchyat, Alirajpur	07394-233530	-
CEO, Zila Panchayat	Member, DDMC	Office of Zila Panchyat, Alirajpur	07394-234405	07394-234035
Chief Medical and Health Officer	Member, DDMC	Office of CMHO, District Hospital, Alirajpur	07394-233704	-
Executive Engineer, PWD	Member, DDMC	Office of PWD, Alirajpur	07394-233548	-
President, Trade and Industry	Member, DDMC	Office of Trade and Industry, Jhabua	07392-243659	07394-233530
Deputy Collector	Member, DDMC	Office of Deputy Collector, Alirajpur	-	07394-234648
Commandant, Home Guards	Member, DDMC	Office of District Commandant, Jhabua	07392-294305	07392-2490080
Deputy Director, Veterinary Hospital	Member, DDMC	Office of Veterinary Hospital, Alirajpur	-	9425485987
Deputy Director, Agriculture	Member, DDMC	Agricultural Department, Alirajpur	07394-234144	-
District Program Office, Women and Child Development	Member, DDMC	Office of Women and Child Development, Alirajpur	07394-234350	-
District Revenue Officer	Member, DDMC	Office of Revenue Officer, Alirajpur	-	-
Executive Engg. (Irrigation)	Member, DDMC	Office of Irrigation, Alirajpur	-	-

Executive Engg., RES	Member, DDMC	Office of RES, Alirajpur	07394-234275	07394-234175
District Food Officer	Member, DDMC	Office of Food Officer, Alirajpur	07394-233115	-
District Transport Officer	Member, DDMC	Office of Transport Officer, Jhabua	07392-243557	-
Executive Engg., Water Works dept	Member, DDMC	Office of Water Works dept, Alirajpur	07394-233531	-
President, Life Insurance Corporation	Member, DDMC	-	-	-
Red Cross Society	Member, DDMC	-	-	-
Chairman, Rotary Club	Member, DDMC	-	-	-
Chairman, Lions Club	Member, DDMC	-	-	-
Chairman, Leo Club	Member, DDMC	-	-	-

Source: Crisis Management document, Alirajpur; 2011

A 2.3 District Control Room (DCR)

The District Emergency Operation Centre (DEOC) will be hub of all the activities related with disaster response in the District. During non disaster times, the DEOC will work under the supervision of Deputy Collector and as designated by the DDMA and during the emergencies, DEOC will come under the direct control of Collector or a person designated by him as Chief of Operations.

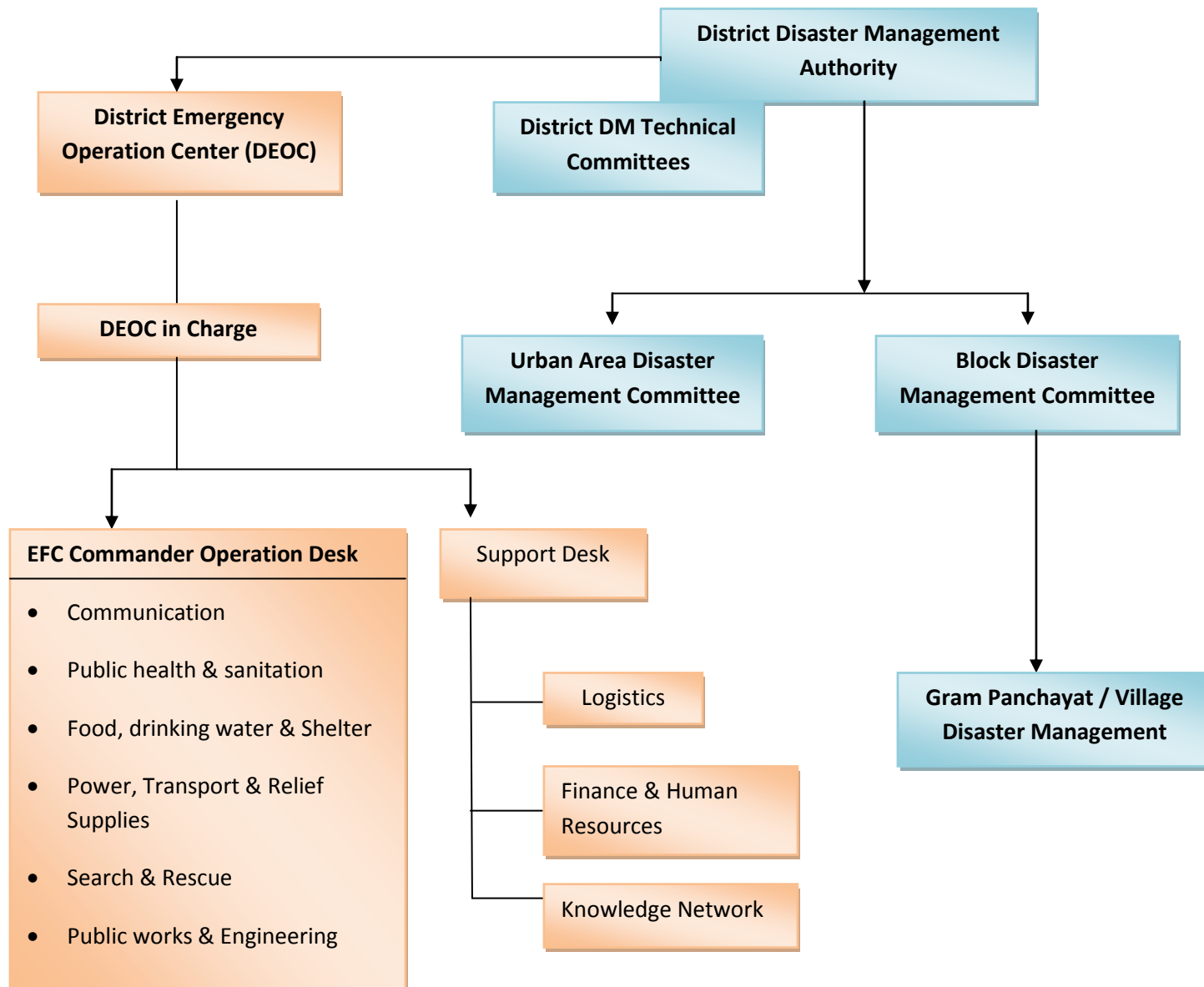
Table 15: District Control Room

Location of the DEOC / DCR:	Flood Control Room, Collectorate Alirajpur Police Control Room, Alirajpur Police Control Room, Jobat Flood Control Room remain effective from 01.07.2012 to 30.10.2012(24 hours)		
Involved agencies in DEOC / DCR, Roles and responsibilities of the	Agencies	Roles & responsibility	Contact No.

officials / nodal persons (phase wise):	Flood Control Room	Communicate to Flood response team	07394-233848
	Police Control Room	Communication to various department	07394-243333 07393-288273
	Reserve Inspector	Respond to situation, communicate to relevant authorities	9424860065
	Shri Laxman Singh Solanki, Nodal Officer	Coordinate	9479993362
	Revenue	Identify affected areas	-
	PWD, NVDA, Kukshi	Temporary Shelter	-
	PWD	Identify vulnerable roads, bridges and take preventive action, clear the roads, affected area	07394-233548
	Health	Treatment of affected people, check on spread of epidemic	07394-233704
	Veterinary	Vaccination, treatment of animals	9425485987
Equipments installed (software and hardware):	Telephone, static set		

Source: Flood Management Document, 2011

A 2.4 District Disaster Information Management System



A 2.5 Urban Area Disaster Management Committee

As per GoMP framework of operation, Urban Area agencies play significant role in disaster management. Presently, *no committee* exists for Urban Areas. Below mentioned can be taken as *guidelines/suggestions* for preparation of Urban Area Disaster Management Committee

Table 16: Urban Area Disaster Management Committee

Date of inception of Urban DDMC, Location	Not yet formed	
Members of Urban DDMC, their name, along with actual designations, and current position in DDMC like Chairman, Secretary or Member etc	Designation	Position in UADMC
	Municipality Chairman	Chairperson
	Chief Municipal Officer	Co-Chairperson
	Sub Divisional Officer, Revenue	Member
	Sub Divisional Police Officer	Member
	Anganwadi	Member
	Block Medical Officer	Member
	Assistant/Sub-Assistant Engineer, Electricity	Member
	Assistant Engineer, PWD	Member
Roles and responsibilities of Urban DDMC	<ul style="list-style-type: none"> • Development and implementation of their respective urban area disaster management plans • Ensuring uninterrupted information flow to and from the control rooms to the higher authorities. • Controlling, coordinating and managing the relief team. 	

A 2.6 Block Level Disaster Management Committee

As per GoMP framework of operation, Block level agencies play significant role in disaster management. Presently, *no committee* exists at Block level. Below mentioned can be taken as *guidelines/suggestions* for preparation of Block Level Disaster Management Committee

Table 17: Block Level Disaster Management Committee

Date of inception of Block level DMC, Location	Not yet formed	
Members of Block level DDMC, their name, along with the actual designations, and current position in Block DMC like Chairman, Secretary or Member etc	Designation	Position in BLDMC
	Block Development Officer	Chairperson
	SHO (town inspector), Police Station Member	Member
	Chairperson, Panchayat	Member

	Samiti-Block	
	Medical Officer In charge	Member
	Assistant Engineer/ Sub engineer, I&PH	Member
	Assistant/Sub-Assistant Engineer, Electricity	Member
	Assistant Engineer, PWD	Member
	Inspector, Food & Supplies	Member
	Platoon Commander, Home Guards	Member
	2 NGO	Member
Roles and responsibilities of Block level DMC	<ul style="list-style-type: none"> • Development and implementation of their respective block disaster management plans • Identification of Vulnerable areas at blocks level and create awareness among community. • Prepare operating procedure for various hazards present in block and update it once a year. • Ensuring uninterrupted information flow to and from the control rooms to the higher authorities. • Controlling, coordinating and managing the relief team. 	

A 2.7 Gram Panchayat Disaster Management Committee

As per interaction with CEO, Janpad Panchayat Alirajpur, *no committee* exists at Gram Panchayat level. Below mentioned can be taken as *guidelines/suggestions* for preparation of Gram Panchayat Disaster Management Committee

Table 18: Gram Panchayat Disaster Management Committee

Date of inception of Gram Panchayat level DMC, Location	Not yet formed	
Members of Gram Panchayat level DMC, their name, along with actual designations, and current position in GP level DMC like Chairman, Secretary or Member etc	Designation	Position in GPDMC
	Gram Sarpanch	Chairman
	Secretary, Panchayat	Secretary
	Registrar of Village Land (Patwari)	Member

	ANM/MPW/Anganwadi	Member
	Head Master, Secondary School	Member
	2 Gram Panchayat Members from most sensitive Wards (Nominated by Sarpanch)	Member
	Gram Kotwar	Member
Roles and responsibilities of Gram Panchayat DDMC	<ul style="list-style-type: none"> • Organizing Resources and maintain resource inventory. • Creating Awareness • Training and Capacity Building • Relief Preparation • Updating District authorities and DDMA 	

A 2.8 Village Disaster Management Committee

Local people are the first ones to respond to disaster in terms of rescue and relief. Thus, initiatives and awareness at ground level is must. Village Disaster management committee serves that purpose by efficiently managing and planning for the situation. Presently, *no committee* exists at Village level. Below mentioned can be taken as guidelines/suggestions for preparation of Village Disaster Management Committee in the sensitive villages.

Table 19: Village Disaster Management Committee

Date of inception of Village level DMC, Location	Not yet formed
Members of Village level DMC	Interested young people, women
Roles and responsibilities of Village DDMC	<ul style="list-style-type: none"> • Identifying vulnerable areas in the village • Search and rescue operation • First Aid • Awareness • Temporary Shelter management

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

Considering the history of past 26 years for the region of *Alirajpur*(under *Jhabua* till 2008), the region has faced flood conditions 9-12 times. Affected area lies in the southern part of *Alirajpur* in the *Sondwa Block* which is affected due to *Sardar Sarovar Dam* on *Narmada River*. Every year flood

conditions are created due to excess release from the Dam. Jobat Project on the Hatni River also causes concern for the authorities during the monsoon season.

Also, the district is regularly affected by the drought. Major drought occurred in the 1999-2001, when the district received very less rainfall.

B 1. Hazard Assessment

A hazard becomes a disaster only when it affects human settlements and causes loss of life and damage to property and such conditions are often created in the district of *Alirajpur*. Major Applicable hazards in the district are:

Flood: Flood is one of the regular occurrences in the district which requires intervention. Flood arises due to Sardar Sarovar Dam, which lies on the south-west part of the district on the Narmada River and Jobat Project which is built on Hatni near Fata in *Alirajpur* tehsil.

Affected regions due to flooding in Narmada: **404 families in 26 Villages of 11GPs in Sondwa Block** (details mentioned in table below)

Affected regions due to Jobat Project: **22 Villages in Alirajpur Block.**

Earthquake: *Alirajpur* is situated in Seismic Zone III. Some of the region is more vulnerable to earthquake like Jobat, Bhabhra, Udaygarh, southern part of Sondwa, western part of Alirajpur and northern part of Katthiwada(*refer to map in annexure*). There is no previous record of earthquake in the region. Minor shocks were felt due to earthquake in nearby regions (*Khandwa*).

Drought: Most parts of the district are highly vulnerable and whole district was affected during the drought of 2000. Drought is regular occurrence since 2008. As the Alirajpur district's main occupation is based on *rain-fed agriculture*, the problem is compounded. **86 Villages in Alirajpur block** are more vulnerable compared to other villages.

Forest Fire: The district is covered by forests. Katthiwada and Maaua region is covered by thick forest. Hence, forest fire can be considered as a hazard which affects the ecology, environment and forest resources. Forest range across Alirajpur, Katthiwada, Mathwad comes under vulnerable zones during the months of March – May.

Fire: City areas and petrol bunks are vulnerable to fire. Petrol Bunks are vulnerable due to carelessness while emptying the fuel tankers. Also, public distribution shops dealing with inflammable substance and restaurants using charcoal and *bhatti* can be hazardous. Petrol bunks are located in Alirajpur, Jobat, ChandraShekhar Azad Nagar and Sondwa.

Road Accidents: All blocks are vulnerable due to excessive overloading of passengers on the roof and bonnet of Jeeps, buses and vans. Curved roads and blind turns increases vulnerability. Alirajpur block is more vulnerable due to heavy traffic compared to other blocks.

Year	No of Injured	No of dead
2009	344	63

2010	346	76
2011	326	80

Source: SP Office, 2012

Epidemic: Epidemics may follow the disasters like floods and earthquakes. Hence all the flood prone areas and earthquake zones in the district are vulnerable to the spread of epidemics in case of any disaster. There are high number of malaria cases in Jobat and Ambua during 2010 and 2011. *No epidemic has been declared till now.*

Table 20: Major applicable hazards

Type of applicable hazards	Hazard prone blocks
Flood	Vulnerable by dam(Sardar Sarovar Pariyojna) 26 Affected Villages(Sondwa Block): Kakrana, kulwat, Temla, Bhitada, Sugat, Jhandana, Kukariya, Mahalgaon, Chameli, Roligaon, Kuklat, Tikhola, Baharawa, Sirkhadichoti, Chilkada, Jalsindi, Kakansala, Aambabada, Sakraja, Anjanwara, Ankariya, Dubkhand
Earthquake	All Blocks. Alirajpur Block: Most part lies in Zone II, with some part in Zone III ChandraShekhar Azad Block: Falls under Zone III Jobat Block: Falls under Zone III Katthiwada Block: Northern region lies in Zone III, with some Southern region in Zone III Sondwa Block: Southern region lies in Zone III, with some Northern region in Zone II Udaygarh Block: Falls under Zone III
Drought	Alirajpur(86 villages in 49 GPs)
Forest Fire	Alirajpur range, Katthiwada range, Mathwad range
Road accidents	State Highways and village roads.
Epidemic(Malaria)	Ambua, Jobat

Figure 1: Hazard profile of each block in Alirajpur district

	Alirajpur	ChandraShekhar Azad Nagar	Jobat	Katthiwada	Sondwa	Udaygarh
Flood						
Earthquake						
Drought						
Epidemic						
Fire						
Road accidents						
Forest Fire						

Table 21: 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	Livelihood	Livestock	Hazard prone zone in district
Drought	1999-2001	Alirajpur, Jobat, Bhabhra Tehsils	No Loss of life; Water, food and fodder shortage	Loss of livelihood due to major dependence on rain fed agriculture	No loss reported	Alirajpur, Jobat, Udaygarh, Bhabhra block
	2008,2009	Alirajpur				Alirajpur, Sondwa, Kattiwada block
	2010-11(April to June)	Alirajpur Tehsil(Pan chayat & Grammen Vikas Letter No 5120)				Alirajpur, Sondwa, Kattiwada block
	2011-12(April to June)	Alirajpur Tehsil(Pan chayat & Grammen Vikas Letter No 6944)				Alirajpur, Sondwa, Kattiwada block
	2012-	Alirajpur(P				Alirajpur

	13(April to June)	anchayat & Grammen Vikas Letter No 4971)				block
Flood	Every year since 1991	Sondwa	No loss of life(Around 404 families were affected in 26 Villages in 2011)	Crops are affected in the flood prone area. Economic impact as agriculture is main occupation	Livestock is affected in flood prone disease.	26 Villages in southern part of Sondwa, near to Narmada river(See details in table below)
Accident	2004	Bhabhra	105 Injured, 3 dead	Economic Impact	Not Applicable	Accident can happen anywhere in the district
Forest Fire	Every Year	Forest ranges in the district	Environmental degradation	No loss	Wild life affected in few areas	Katthiwada, Mathwad, Alirajpur, Bhabhra ranges(See details in table below)

Sources:http://www.mpkrishi.org/krishinet/Compendium/othermissl_districtaffected.asp, Gram Panchayat, CHMO Office, Flood Control Document 2011, <http://www.mpforest.org/intranet/fire2009/>

Flood affected areas in 2011

Gram Panchyat	Number of villages	Affected Villages	Affected Families
Ankariya	3	Ankariya, Chilkada, Jalsindi	24
Sakraja	6	Sakraja, Aambabada, Dubkhand, Sirkhadichoti, Kakansala, Anjanwara	72
Temla	1	Temla	6
Gulwat	1	Bhitada	32
Kukariya	2	Kukariya, Roligaon	83
Beedgaon	1	Baharawa	30
Tikhola	1	Tikhola, Kuklat	0
Kulwat	1	Kulwat	35
Semlani	1	Mahalgaon	21
Kakrana	1	Kakrana	69

Jhandana	3	Sugat, Jhandana, Chameli	32
----------	---	--------------------------	----

See Annexure for the mapping of flood affected villages.

In the last 10 years from 2002 to 2012, there are 94 cases of forest fire in Alirajpur district forest ranges.

Ranges	No of instance in last 10 yrs	Frequently Affected areas
Alirajpur	27	Dokarwani(11),Bordabara(4)
Bhabhra	10	-
Jobat	4	-
Katthiwada	31	Kotharmaduda(7)
Mathwad	19	Jalsiri(5)
Umrali	3	-

Table 22: Seasonality of hazards

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

B 2 Vulnerability Analysis

Vulnerability analysis is essential for developing mitigation strategies in hazard prone areas and this analysis needs to be periodically updated from the ground level to understand the locale specific situation. The gram Panchayat, block level and urban bodies' disaster management plans will help in getting this information.

Physical vulnerability: Alirajpur district is vulnerable due to inadequate medical facilities in the district. Hospitals are under staffed and there is no Trauma center and only one blood bank in the district. Only basic medical facilities are available in district and there are not many private Doctors practicing in the district. Rural connectivity is available only to gram panchayat and houses in the villages are not connected by road. Transportation systems possess vulnerability due to overcrowded jeeps and buses. Jeeps are overloaded with passengers on the roof, 3 sides and bonnet. All blocks are equally vulnerable in all these aspects with Alirajpur and Jobat being slightly better in terms of medical facilities and Alirajpur, Jobat and Bhabhra are better in terms of availability of resources.

Social Vulnerability: Majority of population in the district is tribal and thus not included with mainstream society and is not much aware of the advanced technology in agriculture, housing, healthcare etc. Education level is very low in the district so disaster management and its effect are not very well understood by the populace. Alcoholism is a major problem in the district and is

rampant in all blocks. Alcoholism is part of tribal culture and many people are drunk from morning. This could lead to road hazard. These vulnerabilities are present in all the blocks, with *Alirajpur* being better off as compared to other blocks.

Economic vulnerability: Most regions in the district are dependent on rain-fed agriculture. So a delay in rainfall or flood during monsoon can have serious impact on the livelihood of the people. Agriculture is the major occupation and any disaster which affects crop can have serious implication on the income of farmers. Due to low per capita income from the occupations available in district most of the farmers migrate to neighboring Gujarat during non-farming season for their livelihood and work in construction. There are instances of serious health hazard where labors contracted *silicosis* while working in quartz crushing factories in *Balasinore, Gujarat*. Economic vulnerability is more in Alirajpur and Sondwa due to frequent droughts and less rainfall.

Environmental/natural vulnerability: Undulating landscapes along with sandy soil makes the land unsuitable for sustained use under irrigation. Also, many parts of the region are prone to less rainfall, which may lead to drought situation. Villages under Sondwa are vulnerable to floods during monsoon due to excess water from Sardar Sarovar Dam. Villages in Alirajpur near Fata are vulnerable due to Jobat Project. Thick forest areas in Kattiwada are vulnerable to forest fires which affects flora and fauna. Loss of forest cover can have serious environmental implication.

Institutional vulnerability: Institutional vulnerability exist dues to absence of few departments in the district and under staffing in operational departments. Many of the departments are working with minimal infrastructure and equipments. Fire Services are not available in 3 blocks(*Katthiwada, Sondwa, and Udaygarh*) and hospital facilities are not adequate to cope up with any major disaster. Absence of Disaster Management committees at various levels will affect the effectiveness of mitigation and preparedness strategies to deal with disasters. 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.

Table 23: Block wise vulnerability

Name of Block	Physical/Infrastructural Vulnerability	Environmental/ Natural vulnerability	Social vulnerability	Economic vulnerability	Institutional vulnerability
Alirajpur	Public Transport is major problem due to unregulated traffic rules. Floods due to Jobat Project pose a severe threat to the bridges and roads that are prone to	Area is highly drought-prone due to less than average rainfall Villages vulnerable	Education level is very low thus majority of population is unaware of the various disasters and ways to cope up with	Per capita income is relatively low due to dependence on agriculture and micro dolomite industries.	District is newly formed, many of the departments are not operational and are understaffed. Lack of

	<p>get damaged during rains</p> <p>Around 60% population lives in Kuccha houses which are vulnerable to floods and earthquakes</p>	<p>due to Jobat Project</p>	<p>disaster.</p> <p>Alcoholism is major problem as most of the people are drunk during the day which may result in lead to casual approach in the face of disaster.</p>		<p>advanced medical facilities may affect treatment of serious injuries.</p> <p>Lack of advanced technology in the district control rooms and other established head quarters.</p> <p>More stress on inter department co-ordination should be given and attempts to be made to refine the existing structure of the department.</p>
Chandra Shekhar Azad Nagar	<p>Difficulty in accessing CHCs and PHCs which may affect response and relief action of health department.</p> <p>Rural Connectivity is available only to gram panchayat.</p>	<p>Degraded waste lands which affects the land use.</p>	<p>Population inclusion is problem as majority of population is tribal.</p> <p>Education level is very low.</p> <p>Alcoholism is major problem.</p>	<p>Very low per capita income due to large dependence on rain-fed agriculture</p>	<p>Block Level DMC not formed</p> <p>Community based DMC not formed. Community is not trained to plan for disaster mitigation</p> <p>Advanced medical facility does not exist</p>
Jobat	<p>Lack of communication</p>	<p>Area is highly</p>	<p>Alcoholism is major problem</p>	<p>Poor rainfall affects the</p>	<p>Block Level DMC not</p>

	<p>infrastructure which may relief operations</p> <p>Roads and bridges are vulnerable due to poor construction.</p>	<p>drought-prone due to less than average rainfall</p>	<p>as most of the people are drunk during the day which may result in lead to casual approach in the face of disaster.</p> <p>Education level is very low.</p>	<p>crop which can have serious economic influence due to dependence on rain for agriculture.</p>	<p>formed</p> <p>Community based DMC not formed.</p> <p>Gram Pachyat level DMC not formed which affects the response action</p>
Katthiwada	<p>Difficulty in accessing CHCs and PHCs which may affect response and relief action of health department.</p>	<p>Thick Forest in the Katthiwada range is prone to forest fire</p>	<p>Population inclusion is problem as majority of population is tribal.</p>	<p>Undulating terrain pose problem to agriculture due to difficulty in cultivation.</p>	<p>Block Level DMC not formed</p> <p>Fire station not available.</p> <p>Community based DMC not formed.</p> <p>Advanced medical facility does not exist</p>
Sondwa	<p>Floods due to Sardar Sarovar Project pose a severe threat to the bridges and roads that are prone to get damaged during rains</p> <p>Difficulty in accessing CHCs and PHCs which may affect response and relief action of health department.</p>	<p>Prone to floods due to Narmada during July to September.</p> <p>Mathwada region is vulnerable to forest fires</p>	<p>Illiteracy affects the measures to protect on the face of disaster like flood, earthquake etc.</p>	<p>Flood affects the crop which may lead to loss in income</p>	<p>A proper planning system is not in place. Stress is laid only to save the people from the existing disaster but govt. should also consider the after effects of floods.</p>
Udaygarh	<p>Health facilities lie in difficult areas which may affect</p>	<p>Roads, bridges vulnerable</p>	<p>Education level is very low.</p>	<p>Per capita income is low.</p>	<p>Block Level DMC not formed, thus</p>

	the relief measures	due to earthquake sensitive zone	Alcoholism creates problem at the face of disaster		affects the mitigation and preparedness planning. Fire station not available. Community based DMC not formed.
--	---------------------	----------------------------------	--	--	---

Figure 2: Vulnerability profile of each block in Alirajpur district

	Physical/ Infrastructural Vulnerability	Environmental/ Natural vulnerability	Social vulnerability	Economic vulnerability	Institutional vulnerability
Alirajpur	High	Medium	High	Medium	High
ChandraShekhar Azad Nagar	Medium	Medium	High	Medium	High
Jobat	Low	Low	Medium	Medium	Medium
Katthiwada	High	High	Medium	Medium	Medium
Sondwa	High	High	Medium	Medium	High
Udaygarh	Medium	Medium	Medium	Medium	High

B 3. Capacity Analysis

Table 24: Resource inventory, Block wise

Resource Type	Details	Number	Govt, Private	Contact no. of nodal person/s
Equipments used for cutting, Search & Rescue (S&R), grinding m/c etc.	Static Set See table below	24	Govt	-
Temporary shelters, camps	<u>DRP Line</u> Tent	10	Govt	Shri Hindu Singh, RI – 9424860065
Emergency Search lights	DRP Line	12	Govt	Shri Hindu Singh, RI – 9424860065
Trained manpower,	Presently, search and rescue	28	Govt	Home Guard,

professionals available in specific domain like S&R, First Aid, Response Warning, Swimming etc.	team exist only for dealing with floods. Swimmers do the search and rescue work. List Attached below.			Jhabua- 07392-294305
First Aid / Medical emergency requirements, equipments to be used	First Aid Kit, X-Ray	All Blocks, 6	Govt.	CHMO 07394-233704
Location of key hospitals, blood banks, Doctors, medical stores	Hospitals, doctors and medical store list attached in annexure. Blood Bank, District Hospital, Alirajpur	1	Govt.	Customer Care - Blood Bank: 07394-233700
Availability of equipments like Bulldozers, Hydra, Crane, for clearance, JCB	Nagar Palika JCB(Alirajpur -1); Tempo (Alirajpur-1, Jobat -1, Chandra Shekhar Azad Nagar -1); Tractor(Alirajpur-5, Jobat -2, Chandra Shekhar Azad Nagar -1) PWD Tractor -1	1;3;8 1	Govt.	Nagar Palika 07394-233516 PWD 07394-233548
Transportation(Fit Vehicles available with nodal agencies, in emergency)	DRP Line Police vehicles including 1 Rapid Intervention Vehicle	44	Govt	Shri Hindu Singh, RI - 9424860065
Total no. of boats (with info about capacity, size, contacts of Orgn./owner etc)	Chilkada: 3 Fiber boat Kakrana: 3 Fiber boat Jobat Pariyojna: 1 Fiber boat	7	Private	Chilkada 1.Shri Sumariya - 9009736851 2.Shri Raman - 9978161903 3.Shri Bansi - 9009323937 Kakrana 1.Shri Burala - 9754793335 2.Shri Nirmal - 9754362052 3.Shri Ballu - 9753083170 Jobat

				1.Shri NaharSingh - 9179789335
Availability of fire fighting equipments, Fire tenders	Fire brigade(Alirajpur – 2, Jobata 1, Chandra Shekhar Azad Nagar- 1); Fire fighter(Alirajpur -2)	4,2	Govt	07394-233516
List of PDS Shops	Alirajpur – 34, Sondwa -35, Katthiwada – 32, Udaygarh – 20, Chandra Shekhar Azad Nagar – 24, Jobat – 24	169	Govt	Food Dept. 07394-233115
List of NGOs / CBOs	List attached in Annexure	23	Private	-
Veterinary Hospitals	<ol style="list-style-type: none"> 1. Alirajpur 2. Jobat 3. Udaygarh 4. Bori 5. Chandra Shekhar Azad Nagar 6. Barjhar 7. Katthiwada 8. Sondwa 9. Umrali 	9	Govt	Deputy Director – Alirajpur, Jobat Mob.–9424032720 1.07394-233574 2.9424032720 3.9301385117 4.NA 5.8103132650 6.9977742539 7.9425961516 8.NA 9.9424062884
Telephone Exchange	Alirajpur	1	Govt	07394-233722
List of petrol pumps (if possible)	<p><u>Alirajpur</u></p> <ol style="list-style-type: none"> 1. Vishal Petroleum, IOCL 2. M.R Desai, IOCL 3. Rahi Petroleum, HPCL 4. Jai Ambe Petroleum, BPCL <p><u>Sondwa</u></p> <ol style="list-style-type: none"> 5.Davar Petroleum, Chaktala, BPLC <p><u>Jobat</u></p> <ol style="list-style-type: none"> 6.Rajmal Badrilal Agrawal, BPCL 7. Davar Petroleum, HPCL 8. Kailash Petroleum, IOCL <p><u>ChandraShekhar Azad Nagar</u></p>	9	Govt	Food Dept. 07394-233115

9. Leela Petroleum, BPCL			
--------------------------	--	--	--

There are **no fire stations** in the district. Fire tenders are available at Nagar Palika, Alirajpur and Nagar Panchayat at Jobat and Bhabhra. **Blood bank is only available in District Hospital. Safe places are not yet identified** by district authorities. According to officials, all government structures can be used for temporary shelter. Flood relief shelters are mentioned in section C.1.3.9.

Equipments used for cutting, Search & Rescue (S&R), grinding m/c etc.

S. No	Resource	Quantity
Home Guard Office		
1.	Life Jacket	64
2.	Life Buoy	45
3.	Search Light	1
4.	Stretcher with trolley	5
Narmada Valley Development Authority		
5.	Extension Ladder	02
6.	Jute Rope(100 by 1 inch)	25
7.	Gaiti	6
8.	Sibble	6
9.	Shovel	6
10.	Lantern	6
11.	Generator	2
DRP Line		
12.	Helmet	15
13.	Body Guards	12
14.	Portable stretcher	4
15.	Generator	1

List of Swimmers with Home Department

S.No.	Sainik No.	Name	Location
1.	293	Haider Singh	Kakrana
2.	22	Cheerka	Flood Relief
3.	127	Ratan Singh	Flood Relief
4.	287	Kashar Singh	Flood Relief
5.	154	Dilip	Flood Relief
6.	264	Bhekala	Flood Relief
7.	303	Ishwar Singh	Flood Relief
8.	268	Jibrahil	Flood Relief
9.	290	Dulhe Singh	Flood Relief
10.	180	Mehar Singh	Katthiwada
11.	4	Silas	Katthiwada
12.	34	Sanjay	D J Bungalow
13.	195	Manoj	D J Bungalow
14.	288	Sardar Singh	Treasury Guard

15.	255	Shantilal	Treasury Guard
16.	310	Dharmendra	D M Bungalow
17.	147	Laxman Singh	D M Bungalow
18.	58	Nahar Singh	D M Bungalow
19.	160	Babu Singh	D M Bungalow
20.	265	Naval Singh	D M Bungalow
21.	44	Laxman Singh	D M Bungalow
22.	52	Jhuv Singh	Bori
23.	61	Jagan Singh	Bori
24.	185	Rahul	Home guard Line
25.	170	Dal Singh	Bori
26.	284	Ralu Singh	NA
27.	110	Khumala	NA
28.	5	Deep Singh	Jobat

No information has been updated on www.idrn.gov.in related to resource inventory

B 4. Risks Assessment

B.4.1 Potential impact of applicable hazards and existing vulnerabilities

Table 25: Potential impact of applicable hazards and existing vulnerabilities

Type of hazard	Vulnerable areas	Vulnerability	Potential Impact	Identified safer places
Flood	Bakhatgarh, Sondwa, Jobat(26 Villages)	Population at risk(404 families), drinking water problem, livestock safety issues, damage to roads, bridges.	Loss of crop, livelihood and houses	Temporary Shelter at Chilkada, Kakarana, Jobat Police ground, Badi Kahali
Earthquake	Alirajpur District (No incidence have been reported)	4 blocks are in Zone III and 2 blocks in zone II. Hence approx. 4.5 lacs population is at high risk, and 2.8lacs is at low risk, damage to road, bridges and public and private property.	Loss of life, infrastructure, private property, live stock, crops.	Nearby Public Infrastructure can used like Gram Panchyat land, Police ground, school ground. (No such places have be identified)
Drought	Alirajpur,	Crop Damage,	Loss of	Not Applicable

	Katthiwada, Sondwa	Drinking water problem	livelihood, crop, necessitate the need to migrate to nearby region for livelihood	
Fire	Forest area of Katthiwada, Maaua, Alirajpur, Bhabhra or anywhere in the district	Environment, Forest, wild life	Loss of trees, Climate change, loss of wild life	Not Applicable
Accidents	Anywhere in district	Life at risk, property	Loss of life, damage to public infrastructure, private property	Not Applicable
Epidemic	Anywhere in district	Life at risk, large scale spread of disease	Loss of life, loss of livelihood	Transfer affected population to quarantine area

B 4.2 Risk profiling of the district

Alirajpur is vulnerable to natural and manmade disasters. The district is vulnerable to 6 types of hazards out of 33 identified by the High Powered Committee (HPC) of Government of India. Brief overviews of some of these hazards are:

Earthquake: *Alirajpur* district falls under earthquake zone III. No earthquake has been observed in recorded history for the district.

Forest Fire: Every year during the month of March to May, many forest areas of district experience the incidence of Forest fires. These forest fires in some of the cases engulf hectares of forest area and destroy valuable forest resource and also affects environment directly and indirectly.

Drought: *Alirajpur* has been classified as one of seven highly affected district of MP. It has faced drought in the year 2001-2004, 2008, 2009, 2011, and 2012.


Flood: Flood condition in the district arises in the month of July to September due to 2 big dam – Sardar Sarovar Pariyojna and Shaheed Chandra Shekhar Azad Jobat Pariyojna, Nanpur. Around 26 villages in affected due to Sardar Sarovar Pariyojna and 23 due to Shaheed Chandra Shekhar Azad Jobat Pariyojna, Nanpur.

Accidents: Accidents can take dangerous level due to “excessive overloading” of vehicles. Alcoholism, curved roads and disobedience of traffic rule can further aggravate the situation.

Epidemic: Malaria, Common flu, diarrhea, and TB are the prevalent diseases which can reach to proportion to be declared as epidemic.

Apart from the hazard prone geographical conditions, the district is also vulnerable due to the administrative neglect of the past, backward region, illiteracy, poverty, population, and adivasi culture. In the rural areas of the district, it’s the lack of awareness among the rural communities and also their remoteness, which makes them more vulnerable to disasters.

The extent of vulnerability of the area, people and property to a hazard or the probability of its occurrence defines the extent of risk. Based on the analysis in the previous sections about the vulnerability and applicable hazards, below mentioned table describes block wise risk.

Block	Risk Profile				
Alirajpur	Alirajpur block is regularly affected by droughts due to less than average rainfall. Large populace is affected due to dependence on rain-fed agriculture. Eastern part of the block lies in earthquake zone III. Forest Ranges in the block are regularly affected by forest fires which lead to depletion of forest cover and leads to environmental damage. Considering the various vulnerabilities applicable to block and its ability to cope up, it is at moderate risk.				
ChandraShekhar Azad Nagar	Bhabhra Block completely lies in the earthquake zone III. No other major disaster is applicable to the block. Considering the various vulnerabilities applicable to block and its ability to cope up, it is at relatively lower risk than Alirajpur.				
Jobat	Jobat Block completely lies in the earthquake zone III. No other major disaster is applicable to district. Considering the various vulnerabilities applicable to block and its ability to cope up, it is at relatively lower risk than Alirajpur.				
Katthiwada	Northern part of the block lies in the earthquake Zone III. It is also affected by forest fires. Considering the various vulnerabilities applicable to block and its ability to cope up, it is at higher risk than Jobat and lesser than Alirajpur.				
Sondwa	Southern part of the block is regularly affected by the floods and also lies in the earthquake zone III. It is also vulnerable to epidemic during the floods. Considering the various vulnerabilities applicable to block and its ability to cope up, it is at more risk than Alirajpur.				
Udaygarh	Udaygarh Block completely lies in the earthquake zone III. No other major disaster is applicable to district. Considering the various vulnerabilities applicable to block and its ability to cope up, it is at higher risk than Jobat and lesser than Alirajpur.				
Sondwa	Alirajpur	Katthiwada	Udaygarh	Jobat	ChandraShekhar Azad Nagar
					

C. DISTRICT LEVEL DISASTER MANAGEMENT PLANNING

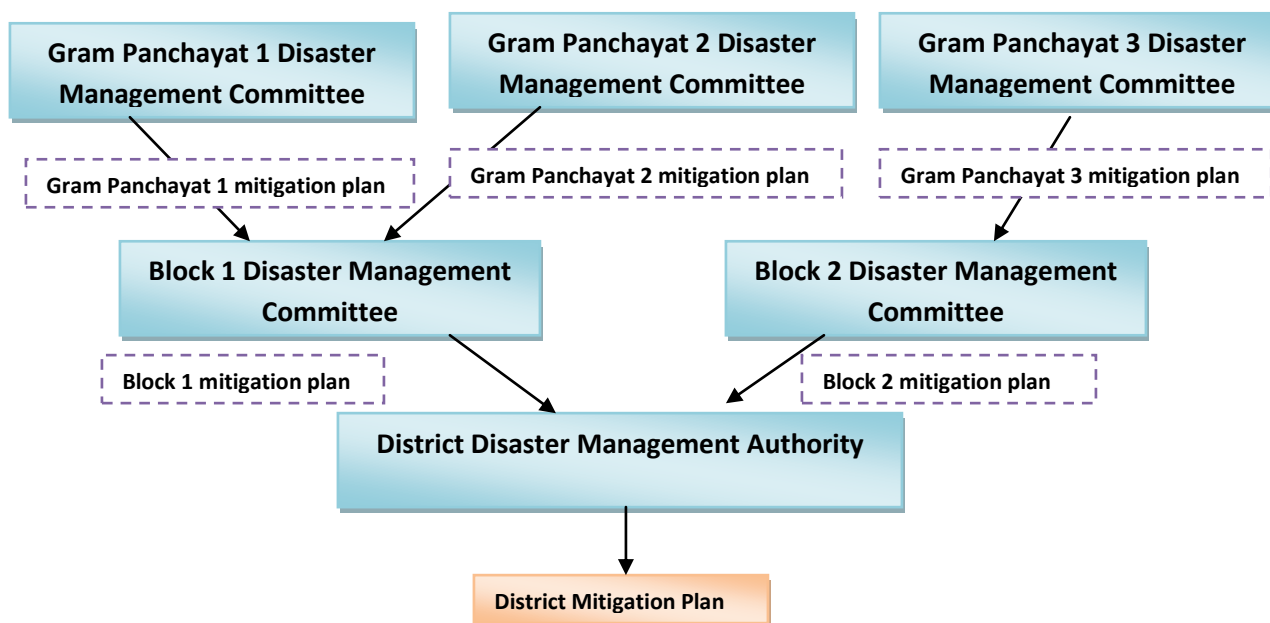
C 1 District Action Plans

C 1.1 Mitigation Plan

Mitigation Plans form the foundation for a community's long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction, and repeated damage. The planning process is as important as the plan itself. It creates a framework for risk-based decision making to reduce damages to lives, property, and the economy from future disasters. Hazard mitigation is sustained action taken to reduce or eliminate long-term risk to people and their property from hazards.

Mitigation strategies need to ensure the higher level of community involvement and participation. For this, District Disaster Management Authority should follow a “Bottom to Top” approach in preparation of the plan. The inputs for preparing the District level mitigation plan will come from the Gram Panchayat level, Block level and in the case of urban areas from municipal corporation or Nagar Panchayats level.

Vulnerability analysis and risk assessment are essential for developing mitigation strategies and this analysis needs to come from the ground level to understand the locale specific situation.



C 1.1.1 Scope of Integrating Risk Reduction in Development Schemes

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

Disaster management is no more confined to revenue department. It is a subject of all the departments. Well planned implementation of development schemes by respective departments can

help in reducing impact of disaster on the lives of people and infrastructure. There are number of government schemes which can help in sustainable development of *Alirajpur*.

Sectors / Line Departments	Integrating Risk Reduction in Development Schemes
Backward Region Grant Fund (Zila Panchayat and RES)	<p>This scheme can help to reduce infrastructural vulnerability by capacity building.</p> <ul style="list-style-type: none"> Community halls, Anaganwadi Bhawan, Yatri Pratikshalaya and Crimination ground constructed under the scheme should consider mitigation perspective for the area.
Rural Livelihood Mission (Panchayat and Rural Development) [Available in 10 districts in MP]	<p>This scheme can help to reduce economic vulnerability.</p> <ul style="list-style-type: none"> To enhance poor people's livelihoods in tribal districts Self employment opportunities for disaster prone areas of flood and drought. Scheme should try to provide alternative employment based on the skills and abilities of the people.
Indira Awaas Yojna(Gram Panchayat)	<p>This scheme can help to reduce socio economic and infrastructural vulnerability by providing safe housing facilities to the poor.</p> <ul style="list-style-type: none"> To provide housing for the rural poor. Sanitary latrine and smokeless <i>chullah</i> are required to be constructed along with each IAY house for which additional financial assistance is provided from Total Sanitation Campaign and Rajiv Gandhi Grameen Viduytikaran Yojana respectively. This scheme will help during the preparedness phase as the people will be well equipped in infrastructure. Additional, houses under scheme in vulnerable areas should be advised and instructed by district authorities to be earthquake resistant
Sarva Shiksha Abhiyan (Gram Panchayat)	<p>This scheme can help to reduce social vulnerability by imparting knowledge and infrastructure support for the administration.</p> <ul style="list-style-type: none"> To open schools in those habitations which do not have schooling facilities and strengthen existing school infrastructure through provision of additional class rooms, toilets, drinking water, maintenance grant and school improvement grants. This program will help in capacity building and improving the literacy rate thus decreasing the social vulnerability. Schools being constructed should be earthquake resistant by following the proper guidelines
MGNREGA (Zila Panchayat and RES)	<p>This scheme can help to reduce economic vulnerability and can help in development/up gradation of necessary infrastructure for disaster risk reduction</p> <ul style="list-style-type: none"> Facilitate advocacy on special planning with focus in employment generation and asset creation in disaster prone areas. Micro level planning with DRR integration for creation of assets and infrastructure (road, culvert, escape route, raised tube well for pure drinking water, irrigation structure) and get it approved at the

	<p>district.</p> <ul style="list-style-type: none"> • Providing gainful employment to populace with sustainable development as the major theme based on the vulnerabilities found in areas. • Strengthening and maintenance of such physical features that may vitally protect/help in rescue of communities during disaster situations • Construction of small dam, stop dam, rural road etc rural youth can work under MNRGA and reduce vulnerability
NRHM	<p>This scheme can help in strengthening the health facilities in the district and providing necessary measures which can help in mitigating risk.</p> <ul style="list-style-type: none"> • Design of training curriculum for ASHA incorporating DRR. • Conduction of Training for ASHA, paramedics, ANM and others health staff on DRR. • Improving hygiene and sanitation infrastructure • Strengthening of district hospital, CHCs, SHCs for quality health services • Special attention should be given to the diseases like Malaria, Dengue, Chickengunia, TB, HIV/AIDS and jaundice so that epidemics can be avoided. • 100% availability of at least one month's stock of essential drugs and medicines at Sub Centers/PHCs/CHCs
Housing, Urban Development Department, Rural Development Department & Public Works Department	<ul style="list-style-type: none"> • Advocate retrofitting in existing infrastructure (public buildings for earthquake protection. • Structural measures and building code in earthquake and flood zone • Earthquake resistant planning in Indira Awaas Yojna houses. • Facilitate adaptation measures in drainage pattern / sewerage treatment in flood • Training of engineers/ masons • Advocacies in schools and hospital safety program
Public Health Engineering Department	<ul style="list-style-type: none"> • Construction of high raised tube wells
Agriculture/ Animal Husbandry	<ul style="list-style-type: none"> • Facilitating farmers in doing insurance on Crop and Livestock and Crop diversification as per the agro-climatic zone • Localized weather data through community radio and farmers
Forestry and Environment	<ul style="list-style-type: none"> • Generating public awareness on importance to social forestry and preservation of biodiversity that works as carbon sink • Public awareness on greenhouse gas emission and its impact on disaster frequency
Education	<ul style="list-style-type: none"> • Coordinate with MP State board to incorporate DRR basics into curriculum • Exposure of students and teachers to DRR best practices in their agro-climatic zone

C 1.1.2 Training & Capacity Building

Training and capacity building are prerequisite for effective and efficient preparation of mitigation plan. Government Officials should attend the training provided by Disaster Management Institute, Bhopal and should focus on understanding hazards specific to the district and the mitigation plan. It provides insights on the mitigation strategies which can be integrated with development process and thus resulting in sustainable development. Knowledge sharing with the concerned members of the department should be encouraged so that in case of transfer, knowledge can be preserved.

Programme	Training Centre
<ul style="list-style-type: none"> • Disaster Preparedness and Response Program for Home Department • Training of Trainer Program for Home Department • Incident Command System for Home Department • Training Program on Mass Casualty Management in Emergency Situation for Medical Officers for Public Health and Family Welfare Department • Disaster Management Course for Development Professionals UAD, Panchayat and Rural Development Department • Multi Hazard Disaster Management Training Program for Engineers for PWD, WRD, PHED, RES 	Disaster Management Institute, Prayavaran Parisar, E-5, Arera Colony, PB No. 563 Bhopal-462016, MP (India) Tel:+91-755-2466715, 2461538, 2461348, 293592, Fax: +91-755- 2466653, E-mail:dmi@dmibhopal.nic.in

Identified active communities and NGOs from the district working in the development or health care should be encouraged to attend Disaster Management training program. Public awareness campaigns should be organized by DM Committee in association with NGOs to deal with specific disaster and provide people with basic do's and don'ts while facing disaster.

Presently, officials have attended few training session with DMI, latest being in the year 2011. As the district is newly formed, it would be preferable to have more training sessions.

C 1.1.3 Community Initiatives

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

The community awareness and training activities will basically be carried out in the form of training programs through NGOs and Government Training Institutions. Apart from spreading awareness of disasters, the focus will essentially be on community capacity building. Special focus will be given to local contractors, Government Contractors and masons, who are the prime responsible for construction work. Training programs will target the informal construction sector by building their capacities on safe construction practices and renovating and retrofitting of existing structures. An institutional arrangement is required to ensure that in the long term, contractors and mason ensure

safe construction practices which satisfies the safety needs based on the hazards identified in the HRVC section.

Primary agencies for community level training and public awareness are as follows:

- Environment, Scientific & Technology department
- Technical Education Department
- NGO
- Private sectors

The NGOs and other government training institutions will, in turn, organize training and simulation exercises at the district and community level, in order to ensure preparedness from the grass-roots.

Mobilizing Community Efforts for Mitigation

The community needs to be encouraged to reduce the impact of the any forthcoming disaster by building houses according to specified standards for the region. Nagar Palika, Nagar Panchayat and Gram Panchayat need to enforce certain minimum standard while allowing construction of houses. Latest technology should be used to build village offices, primary health centers, community centre, schools, supermarkets and various lifeline buildings.

The objective of such activity will be to encourage local communities to undertake either at individual, household or community level to avoid loss of life, damage to property and crop.

C 1.1.4 Risk Management Funding

According to section 48 under Chapter IX, Finance, Account and Audit) of Disaster Management Act, 2005, provisions are to be made by state government for the District Disaster Mitigation Fund. This fund needs to be used for various disaster mitigation needs of the district which are not fulfilled through other schemes of government. This fund can be used to meet short term (immediate loss) or long term needs (set up of fire stations, watershed management, planting trees along the river etc) of the district.

There are also a number of important ongoing schemes that specifically help reduce disaster vulnerability. Some of these are: Integrated Watershed Development Programme (IWDP), Drought Prone Area Programme (DPAP), Flood Control Programme, National Afforestation & Eco-development Programme (NA&ED), Accelerated Rural Water Supply Programme (ARWSP), Crop Insurance, Sampurn Grameen Rozgar Yojana (SGRY), Food for Work, Indira Awaas Yojana, BRGF etc. These schemes will be used to meet long term mitigation needs of the district.

C 1.2 Preparedness Plan

In most disaster situations, the experience has shown that loss of life and property could be significantly reduced because of preparedness measures and appropriate warning systems. It is therefore necessary that with respect to every disaster a responsible officer is designated to issue the warnings.

- The District Disaster Management Authority will be the prime agency responsible for issuing the disaster warning at the district level through the District Emergency Operation Centre.
- Additionally the technical agencies authorized to issue warning will also communicate the same to the District Emergency Operation Center and State Emergency Operation Centre for further actions.

Disasters can also take place without any warning such as Earthquakes, accidents and fire. The preparedness action plan is crucial in order to safeguard the lives and properties.

Disaster Management preparedness plans are made every year pre-monsoon to deal with floods in Sondwa block due to Sardar Sarovar Pariyojna and Shahid ChandraShekhar Azad Pariyojna, Jobat. A mechanism is put in place under the chairmanship of Collector for planning the resources to deal with the situation. Also, plans are made by SP office to deal with disaster and accidents.

C.1.2.1 Preparedness before response

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

Health Department

- Develop policy framework for the department.
- Establish a combat team for each block and publish the list with district authorities.
- Ensure adequate availability of first aid kits in high risk areas.
- Train volunteers on emergency preparedness programs such as first aid and preventive measure against diseases in disaster prone areas.
- Prepare a list of medical and Para-medical personnel in disaster prone areas and disseminate it to concerned governors and administrators.
- Carry out and disseminate a risk evaluation of the population.
- Establish and operate an early warning system for health threats based on the routine health information and in collaboration with other departments. IDSP will assist in detecting epidemic in early stages.
- Develop a plan on emergency preparedness and response within the Health sector.
- Procure necessary medication and arrange for emergencies in case, victim cannot be treated with available facilities.
- Arranging and conducting training related to Primary Health, Primary Medicine, Community Welfare measures etc.

Rural Rehabilitation Department

- Designate one Liaison Officer in the Department and the Province Offices as the Disaster Management focal point.
- Identify the safe shelter in the area.
- Prepare maps showing population concentration and distribution of Resources.
- Encourage disaster resistant technological practices in buildings and Infrastructure.

Civil Defense Department
<ul style="list-style-type: none"> • Designate one Liaison Officer in the Department as the Disaster Preparedness Focal Point. • Educating the community • Taking up Civil Defense awareness and safety initiatives in schools / colleges. • Sensitizing government functionaries at all levels. • Involving employees of semi-government / PSUs • Forming Mobile teams for needed locations. • Assist in taking precautionary measures on receiving advance warning of disaster.
Home Department
<ul style="list-style-type: none"> • Assembling the available resources for deployment. • Preparing search and rescue team. • Evacuation planning and transfer of people from affected areas. • Coordinating with various line departments for specific needs of affected population.
Municipal Boards
<ul style="list-style-type: none"> • Arranging for fire tenders and keeping them in ready to go condition. • Clean the town and make provisions for sanitation facilities • Make arrangement for clean drinking water. • Clear the <i>nallas</i> • De-silting and sanitizing the <i>nallas</i> • Make arrangements for resources to clear the town of debris in case of earthquake, water drainage in case of floods, spraying with disinfectant in case of epidemic like malaria and water facilities in case of drought.
Police
<ul style="list-style-type: none"> • Monitoring the Disaster Warning through Control room • Deploying staff in the disaster prone region with proper equipments • Establishing Police Control room as provisional disaster control cell. • Planning the response • Identifying the impact areas.

C.1.2.2 Pre-Disaster Warning, Alerts

When the district authorities receive alerts on likelihood of disaster such as Flood, Forest Fire, Epidemics (Human/Animal), Earthquake or major accident, DDMC should carry out carry out following activities:

- Activate DEOC
- Based on early warning received, prepare initial information report with estimation of likely severity and scale of disaster.
- The ESF will be asked to conduct a review of the preparedness level of the districts likely to be affected by the disaster, by calling a meeting of District DMCs.
- Prepare a team for deployment to assess damage and needs.
- Inform respective departments to activate respective SOPs
- Provide appropriate warning to public.

- Coordinate with district authorities on dissemination of warning to general public and if necessary, carry out evacuation.
- Request Home Department to be on standby for rescue and relief operations.
- If required, declare de-warning.

Important Elements for warning

The following aspects may be considered for dissemination of warning:

- All warning systems and equipments are maintained in good working condition and checked regularly
- Communities in disaster prone areas are made aware of the warning systems and the Gram Panchayat Disaster Management Committees and their Taskforces are trained in dissemination of warning to the communities
- Alternate warning systems must be kept in readiness in case of technical failure (e.g., power failure)
- Only the designated agencies/officers will issue the warning.
- Multiple warning systems should be used to ensure the maximum spread.
- The warning should, to the extent possible, be clear about the severity, the time frame, area that may be affected.
- Warning statements should be conveyed in a simple, direct and non-technical language, and incorporate day-to-day usage patterns.
- The do's and don'ts should be clearly communicated to the community to ensure appropriate responses.
- Warning statements should not evoke curiosity or panic behavior. This should be in a professional language devoid of emotions.
- Rumor control mechanisms should be activated.
- All relevant agencies and organizations should be alerted.
- Wherever possible, assistance of Gram Panchayat Disaster Management Committees and task forces, community leaders and organized groups should be sought in explaining the threat at local level.
- Once a warning is issued, it should be followed-up by subsequent warnings in order to keep the people informed of the latest situations.

Agencies responsible to issue the warnings are as follows:

Table 26: Prediction agency for various disaster

Hazards	Agencies involved*	Mode of communication, info. dissemination at district level**
Flood	NVDA, CWC, Revenue	NVDA monitors the water level in Narmada and communicate the level to district authorities at Collectorate and NVDA office at Bhopal twice during the monsoon. It is communicated through wireless set or telephone.
Drought	Revenue, IMD	Information is communicated from gram

		panchayat to tehsildar to SDM Land records regarding the drought situation. This information is further communicated to Collector or DDMC for preparedness and response.
Forest Fire	Forest department	Forest monitoring system at Bhopal alerts the forest officer in case of forest fire
Epidemic	Health Department	PHC, CHC and district hospital monitors the disease trends and updates CHMO about the number of cases on weekly basis. In case it exceeds the threshold, CHMO declares it as epidemic and communicate district authorities for preparedness planning.
Fire	Police or public	From police to fire services
Earthquake	Seismograph, IMD	Seismograph would measure the intensity of earthquake and IMD would communicate details about possible effects and magnitude to district authorities
Accidents	Police, public	Police or public would call district control room.

* These nodal agencies must have the local prediction centers/ regional stations, which are the source of prediction at local level.

C.1.2.3 Evacuation preparedness

Evacuation of human population and livestock is the only prescribed means to save them from disasters. Evacuation of affected communities can be one of the most difficult response operations, especially, when it involves large population, thus necessitating preparedness measures. Evacuation needs to be carried out as a precautionary measure based on warning indicators, prior to impact, in order to protect threatened persons from the full effects of the disasters. For carrying out successful evacuation, the threat perception on the part of DM officials is essential. Continuous dialogue with stakeholders such as early warning providers, transportation authorities, health-care authorities/personnel, food and essential commodity suppliers and civil society is essential. Following measures should be taken care off in planning stage for carrying out evacuation process:

- It is important to understand the nature of threat and the procedures to be adopted and must be incorporated as part of the evacuation plan in the Gram Panchayat, Block and Urban areas evacuation plans.
- Safe routes and 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.
- All agencies involved in evacuation must have a common understanding of their roles and responsibilities in order to avoid confusion and panic in affected community.
- Different situations demand different priorities and hence the responsibility for ordering evacuation is assigned to different agencies.
- All evacuations will be ordered only by the Designated Officer appoint by DDMA/Deputy Commissioner.
- For appropriate security, law and order, evacuation should be undertaken with assistance from home department, community leaders/Village Panchayat Disaster Management Committee and Task Forces responsible for evacuation.

C.1.2.3 Organizing mock drills

Mock drill is an integral part of the disaster management plan, as it is a preparedness drill to keep the community alert, activate DM Teams across the district and review & modification of DM plan.

Mock Drills should be carried out in accordance to identified/existing disaster of Alirajpur district. It should be conducted at least once in 6 months. For monitoring of the Mock Drills exercise the inspector or trainer from Disaster Management Institute, Bhopal should be summoned. After every such Mock Drills necessary modification of the Working Plan should be conducted depending upon the advice of the Monitoring team. This process will help the DM team some exercise in disaster management planning and alert about the weakness in plan.

Presently, mock drills are not conducted in the district as the only disaster(flood) which requires intervention and planning occurs on yearly basis and DM team has sufficient process in place to deal with it. Improvement measures from past DM experiences should be documented and learning should be incorporated in future planning process.

It is recommended to have basic mock drills for identified process and all the concerned officers be made aware of the plan of action so that it can be exercised in efficient manner at the time of disaster.

Health Department should conduct once in 6 months mock drills to deal with epidemic, accidents, and fire affected. This should help to understand the requirement in case of major disaster.

C 1.3 Response Plan

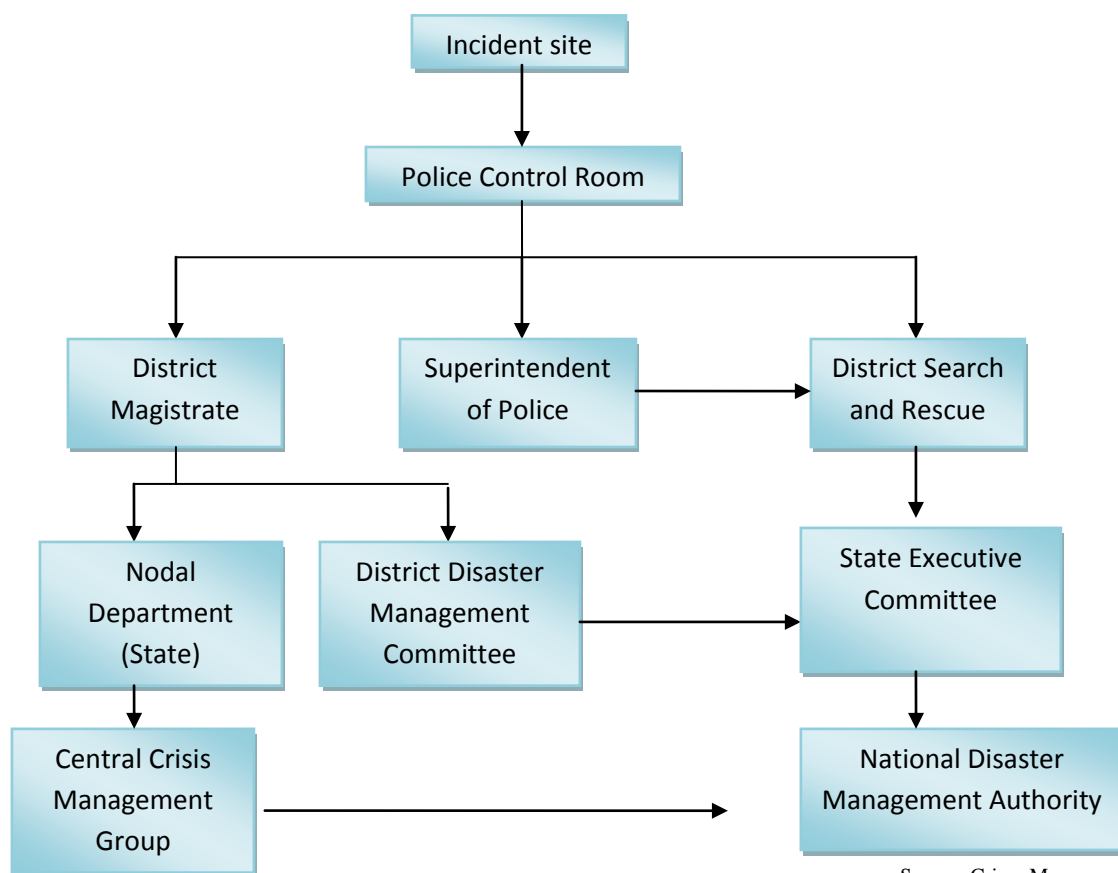
Effective response planning requires realistic identification of likely response functions, assignment of specific tasks to individual response agencies, identification of equipment, supplies and personnel required by the response agencies for performing the assigned tasks.

C 1.3.1 Disaster Emergency Response Force

District emergency response force comprises of members of Home Guard and District Reserve Police with respective department head District Commandant, *Jhabua* and Reserve Inspector, *Alirajpur* as Commander of respective force. As of now, no separate provision is made under each department for separate response force and Officer in-charge will guide through the emergency operations. 100 % of the force would be available during emergency operation.

C 1.3.2 Crisis management direction & coordination

Flow Chart for Crisis / Emergency Situation



Source: Crises Management Document, SP office

District Crisis Management Group is headed by the District Magistrate. Following are the members:

- Superintendent of Police
- Civil Surgeon or Chief Medical and Health Officer
- Chief Municipal Officer, Nagar Pallika
- Additional District Magistrate or Chief Execution Officer Zila Parishad

First responder to any crisis situation will be the Quick Response Team which is self contained with primary activity material, survival kits, satellite phone, HF Radio and other communication equipments.

C 1.3.3 Incident Command System (ICS) or Incident Response System (IRS)

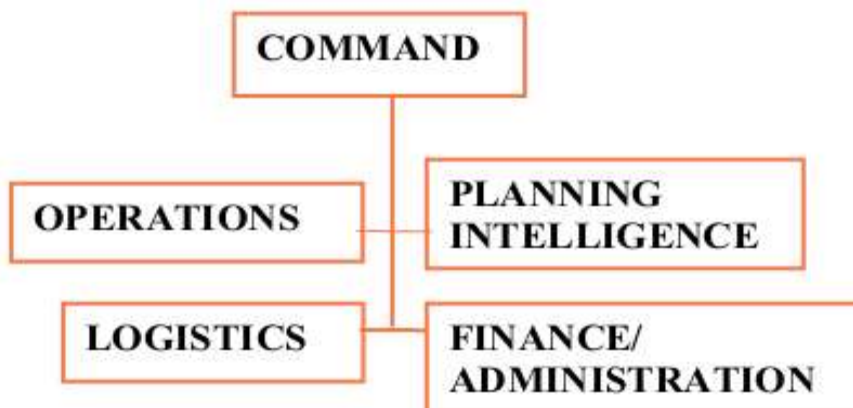
Presently, there is no formal ICS/IRS system in district for dealing with unexpected disaster. Currently, a meeting is convened pre-monsoon every year to deal with flood affected region of Sondwa and prepare a response plan. A structured approach of such meeting can cover all the requirements of IRS to deal with all kinds of hazards possible in district and thus helps in holistic approach to Disaster Management. This will help to minimize loss of life and property by strengthening and standardizing the disaster response mechanism. Following necessitates the use of IRS in disaster Management:

- Lack of accountability because of ad-hoc and emergent nature of arrangements and no prior training for effective performance;
- Lack of an orderly and systematic planning process;
- Unclear chain of command and supervision of response activity;
- Lack of proper communication, inefficient use of available resources, use of conflicting codes and terminology and no prior communication plan;
- Lack of predetermined method/system to effectively integrate inter-agency requirements into the disaster management structures and planning process;

The Incident Response System (IRS) is an effective mechanism for reducing the scope for ad-hoc measures in response. It incorporates all the tasks that may be performed during Disaster Management irrespective of their level of complexity. It envisages a composite team with various Sections to attend to all the possible response requirements. The IRS identifies and designates officers to perform various duties and get them trained in their respective roles.

IRS is a flexible system and all the Sections, Branches and Units need not be activated at the same time. Various Sections, Branches and Units need to be activated only as and when they are required. Primary Features of ICS/IRS are mentioned in below diagram

FIVE PRIMARY I.C.S MANAGEMENT FUNCTIONS



The ICS seeks to strengthen the existing disaster response management system by ensuring that the designated controlling/responsible authorities at different levels are backed by trained Incident Command Teams (ICTs) whose members have been trained in the different facets of disaster response management.

The five command functions in the Incident Command System are as follows:

- Command:** The Incident Commander is responsible for all incident activity. Although other functions may be left unfilled, there will always be an Incident Commander.
- Operations Section:** Develops tactical organization and directs all the resources to carry out the Incident Action Plan.
- Planning Section:** It is responsible for the collection, evaluation, and display of incident information, maintaining status of resources, and preparing the Incident Action Plan and incident related documentation.
- Logistics Section:** It provides resources and all other services needed to support the organization.
- Finance / Administration Section:** Monitors costs related to the incident, provides accounting, procurement, time recording, cost analysis, and overall fiscal guidance.

District Level Incident Response

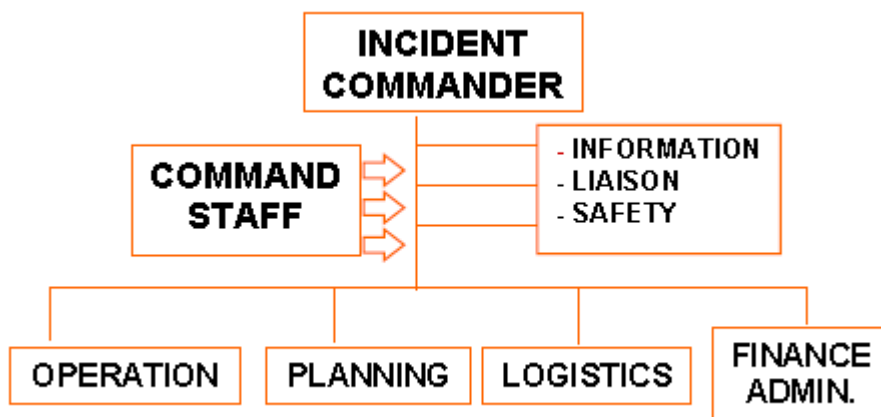
At the district level, there will be one District Headquarters Team with the primary function of assisting the District Collector in handling tasks like general co-ordination, distribution of relief materials, media management and the overall logistics. Suitable officers from the district administration will be carefully selected and professionally trained for the different ICS positions in order to constitute the District Level Incident Command Teams (DICTs). The teams will focus on the operational aspects of response management, duly supported by other functions in ICS, e.g. Planning, Logistics, Finance/Administration, etc. The officers drawn for this assignment will be carefully selected by the District Collector depending upon their fitness, ability and aptitude for any of the DICT positions and they will be professionally trained to fulfill their assigned roles.

Arrangements will also be made for ensuring their mobilization in a time-bound manner for their deployment to the trouble spot. Due consideration for the appropriate level of seniority will be given while constituting the teams. The team personnel may be selected from the General Administration / Revenue Department which traditionally handles disaster response in our country, the option to pick up willing and capable personnel from any other department for taking up specific positions in the DICT will be left open. For some positions, a suitable number of additional personnel will be trained as reserve for taking care of contingencies like transfers, promotions, etc.

For the position of the Incident commander, a suitable officer of the rank of Additional District Magistrate will be preferred. The District Level Incident Command Teams will function under the overall control of the Collector / District Magistrate. The State governments can also deploy the DICTs to other districts depending upon the magnitude of the disaster.

ICS Organization in Detail

The ICS organization is built around five major functions that are applied to any incident whether it is large or small. Unified Command, which is a management method to use for multi jurisdictional and /or multi-agency events, is a major feature of ICS.



Role and Responsibilities of ICS Staff

A. Incident Commander

The incident commander’s responsibility is the overall management of the incident. The Incident Commander may have a deputy who may be from the same agency, or from an assisting agency.

Major responsibilities and duties of Incident Commander

- Assesses the situation and/or obtain a briefing from the prior Incident Commander.
- Determine incident objectives and strategy.
- Establish the immediate priorities.
- Establish an incident command post.
- Establish an appropriate organization ensure planning meetings are scheduled as required.
- Approve and authorize the implementation of an Incident Action Plan.
- Ensure that adequate safety measures are in place.

- Co-ordinate activity for all Command and General Staff.
- Coordinate with key people and officials.
- Approve requests for additional resources or for the release of resources.
- Keep agency administrator informed of incident status.
- Approve the use of students, volunteers, and auxiliary personnel.
- Authorize release of information to the news media.
- Order the demobilization of the incident when appropriate.

1. Establish an Incident Command Post (ICP)/ DEOC (District Emergency Operations Centre):

The ICP will be wherever the Incident Commander is located. As the incident grows, it is important for the Commander to establish a fixed location for the ICP and to work from that location. The ICP provides a central coordination point from which the Incident Commander, Command Staff and Planning functions will normally operate.

The ICP can be any type of facility that is available and appropriate, e.g., vehicle, trailer, tent, an open area or a room in a building. The ICP may be located at the Incident Base if that facility has been established. Once established, the ICP should not be moved unless absolutely necessary.

It is proposed that the DEOC be established with the Department of Home since the Civil Defense and Police for Disaster Preparedness is a dedicated department suited to the logistical management of an EOC. The DEOC will be set up with the entire infrastructure as per the given layout.

- The Chief of operations will initiate the activation of emergency services of the DEOC as established.
- Activation of the DEOC should immediately follow the declaration of a District Level Emergency.
- The Individuals staffing the DEOC are responsible for establishing communications with their respective departments through radio and telephone etc.
- The DEOC Chief or designee will determine what staff he/she deems necessary to effectively operate the DEOC apart from the prescribed staff.
- The designated officers of the Police will provide security at the DEOC

2. Establish the Immediate Priorities

First Priority: safety of

- People involved in the incident
- Responders
- Other emergency workers
- Bystanders

Second Priority: Incident Stabilization.

Stabilization is normally tied directly to incident complexity. When considering stabilizing the Incident Commander must:

- Ensure life safety
- Ensure Protection of life and property
- Stay in Command
- Manage resources efficiently and cost effectively

3. Determine Incident Objectives, Strategy, and Tactical Direction

It is safe to say that all agencies employ some sequence of steps to meet incident-related goals and objectives. Several different approaches have been suggested. Some of these offered below:

A. Know Agency Policy

The Incident Commander may not always be an employee of the agency or jurisdiction experiencing an incident. Therefore he must be fully aware of agency policy. This includes any operating or environmental restrictions, and any limits of authority. Agencies will vary on how this policy is made known to the Incident Commander. Agency policy can affect the establishment of incident objectives.

B. Establish Incident Objectives

Incident Objectives are statements of intent related to the overall incident. For some kinds of incidents the time to achieve the objectives is critical. The following are some single examples of Incident Objectives for several different kinds of incidents.

- Release all hostages safely with no further casualties.
- Stop any further flow of toxic material to riverbed.
- Contain fire within existing structures.
- Search all structures for casualties.

C. Develop Appropriate Strategy

Strategy describes the general method that should be used either singly or in combination that will result in achieving the incident objective.

D. Execute Tactical Direction

Tactical Direction describes what must be accomplished within the selected strategies in order to achieve the incident objectives.

Tactical Direction consists of the following steps:

1. Establish Tactics

Determine the tactics that are to be used appropriate to the strategy. The tactics are normally established to be conducted within an operational period.

2. Assign Resources

Determine and assign the kind and type of resources appropriate for the selected tactics.

3. Monitor Performance

Performance monitoring will determine if the tactics and resources selected for the various strategies are both valid and adequate.

4. Monitor Scene Safety

Public safety at the scene of an incident is always the top priority. If the incident is complex, or the Incident Commander is not tactical expert in all the hazards present, a Safety Officer should be assigned. Hazardous materials incident requires the assignment of a Safety Officer

5. Establish and Monitor Incident Organization

One of the primary duty of the Incident Commander is overseeing the Management organization. The organization needs to be large enough to do the job at hand, yet resource used must be cost effective.

6. Manage Planning Meetings as Required

Planning meetings and the overall planning process are essential to achieving the incident objectives. On many incidents, the time factor does not allow prolonged planning. On the other hand, lack of planning can be more disastrous. Proactive planning is essential to consider future needs.

7. Approve and Authorize the Implementation of an Incident Action Plan

Plans can be oral or written. Written plans should be provided for multi-jurisdiction or multi-agency incidents, or when the incident will continue for more than one Operational Period.

8. Approve Requests for Additional Resources or for the Release of Resources

On small incidents, the IC will personally determine additional resources needed and order them. As the incident grows in size and complexity, the ordering responsibility for required resources will shift to the Logistics Section Chief and to the Supply Unit if those elements of the organization have been established.

9. Authorize Release of Information to the News Media

The sophistication of modern news gathering methods and equipment make it very important that all incidents have procedures in place for managing the release of information to the media, as well as responding appropriately to media inquiries.

There are three important staff functions that are the responsibility of the Incident Commander unless Command Staff positions are established.

- Public Information and media relations
- Maintaining liaison with assisting and co-operating agencies
- Ensuring safety

Information Officer

The information officer is responsible for developing and releasing information about the incident to the news media, to incident personnel, and to other appropriate agencies and organizations.

Reasons for the IC to designate an Information Officer

- An obvious high visibility or sensitive incident media demands for information may obstruct IC effectiveness.
- Media capabilities to acquire their own information are increasing.
- Reduces the risk of multiple sources releasing information.
- Need to alert, warn or instruct the public
- The Information Officer should consider the following when determining a location to work at the incident.
- Be separate from the Command Post, but close enough to have access to information.
- An area for media relations and press/media briefings must be established.
- Information displays and press handouts may be required.
- Tours and photo opportunities may have to be arranged.

Liaison Officer

Incidents that are multi-jurisdictional, or have several Agencies involved, may require the establishment of the Liaison Officer position on the Command Staff.

The Liaison Officer is the contact for Agency Representatives assigned to the incident by assisting or co-operating agencies. These are personnel other than those on direct tactical assignments or those involved in a Unified Command.

Reasons for the IC to designate a Liaison Officer

- When several agencies send, or plan to send, agency representatives to an incident in support of their resources.
- When the IC can no longer provide the time for individual co-ordination with each agency representative.
- When it appears that two or more jurisdictions may become involved in the incident and the incident will require on-site liaison.

Safety Officer

The Safety Officer's function on the Command Staff is to develop and recommend measures for assuring personnel safety, and to assess and/or anticipate hazardous and unsafe situations.

Only one Safety Officer will be assigned for each incident. The Safety Officer may have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions. Safety assistants may have specific responsibilities such as air operations, hazardous materials, etc. The Safety Officer will correct unsafe situations by working through the chain of command. However, the Safety Officer may exercise emergency authority to directly stop unsafe acts if personnel are in imminent life-threatening danger.

B. Operations Section

The Operations Section is responsible for managing all tactical operations at an incident. The build-up of the Operations Section is generally dictated by the number of tactical resources involved and span of control considerations.

The Operations Section consists of the following components:

1. Ground or Surface-based Tactical Resources

There are three ways of organizing tactical resources on an incident. The determination of how resources will be used will be determined on the application area and the tactical requirement. Resources can be used as:

- Single Resources
- Task Forces
- Strike Teams

2. Staging Areas

The second component of the Operations Section is the Staging Area. An ICS Staging Area is a temporary location for placing resources available for incident assignments. All resources within the Staging Area belong to the incident. Resources assigned to a Staging Area are available on a three

minute basis to take on active assignment. Staging Area are temporary facilities. They can be set up at any appropriate location in the incident area and moved or deactivated as needed.

The Staging Area Managers report to the Operations Section Chief or to the Incident Commander.

C. Planning Section

In ICS, the Planning Section is responsible for managing all information relevant to an incident. When activated, the Planning Section Chief who is a member of the General Staff manages the Section

The Planning Section collects, evaluates, processes, and disseminates information for use at the incident. Dissemination can be in the form of the Incident Action Plan, formal briefings, or through map and status board displays.

Some incidents may require personnel with specialized skills to be temporarily assigned to the Planning Section. These persons are called Technical Specialists such as

- Chemist
- Hydrologist
- Geologist
- Meteorologist
- Training Specialist

There are four units within the Planning Section that can be activated as necessary

- Resources Unit
- Situation Unit
- Documentation Unit
- Demobilization Unit

Common responsibilities of Unit Leaders are listed below:

- Obtain briefing from the Section Chief
- Participate in incident
- Determine current status of unit activities
- Confirm dispatch and estimated time of arrival of staff and supplies
- Assign specific duties to staff, supervise staff
- Develop and implement accountability, safety, and security measures for personnel and resources
- Supervise demobilization of the unit, including storage of supplies
- Provide Supply Unit Leader with a list of supplies to be replenished
- Maintain unit records, including Unit Log

1. Resources Unit

This Unit is responsible for maintaining the status of all assigned resources at an incident. It achieves this through:

- Overseeing the check-in of all resources
- Maintaining a status-keeping system indicating current location and status of all the resources.

- Maintenance of a master list of all the resources, e.g. key supervisory personnel, primary and support resources, etc.

2. Situation Unit

- The collection, processing, and organizing of all incident information takes place within the Situation Unit. The Situation Unit may prepare future projections of incident growth, maps, and intelligence information. Three positions report directly to the Situation Unit Lead.
- Display Processor – maintains incident status
- Field Observers, resource status reports, etc. information is posted on maps and status boards as appropriate.
- Field Observer – Collects and reports on situation information from the field.
- Weather Observer – Collects current weather information from the weather service or an assigned meteorologist.

3. Documentation Unit

The Documentation Unit is responsible for the maintenance of accurate, up-to-date incident files. Duplication services will also be provided by the Documentation Unit. Incident files will be stored for legal, analytical, and historical purposes

4. Demobilization Unit

The Demobilization Unit is responsible for developing the Incident Demobilization Plan. On large incidents, demobilization can be quite complex, requiring a separate planning activity.

Planning for demobilization should begin at the early stages of an incident, particularly in the development of rosters of personnel and resources, thus ensuring the efficient and safe demobilization of all the resources.

5. Technical Specialists

Certain incidents or events may require the use of Technical Specialists who have specialized knowledge and expertise. Technical Specialists may function within the Planning Section, or be assigned wherever their services are required.

In the Planning Section, Technical Specialists may report to the following:

- Planning Section Chief
- A designated Unit Leader

Some examples of the more commonly used specialists are:

- Meteorologist
- Environmental Impact Specialist
- Flood Control Specialist
- Water Use Specialist
- Fuels and Flammable Specialist
- Hazardous Substance Specialist
- Fire Behaviour Specialist
- Structural Engineer
- Training Specialist

D. Logistics Section

The Logistics Section is responsible for the following:

- Facilities
- Transportation

- Communications
- Supplies
- Equipment maintenance and fuelling
- Food Services
- Medical Services
- Ordering Resources

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

Six Units may be established within the Logistics Section:

- Supply Unit
- Facilities Unit
- Ground Support Unit
- Communications Unit
- Food Unit
- Medical Unit

E. Finance / Administration Section

The Finance/Administration Section is responsible for managing all financial aspects of an incident. There are four units, which may be established within the Finance/Administration Section:

1. Time Unit: The Time Unit is responsible for ensuring the accurate recording of daily personnel time, compliance with specific agency time recording policies, and managing commissary operations if established at the incident.

2. Procurement Unit: All financial matters pertaining to vendor contracts, leases and fiscal agreements are managed by Procurement Unit. The Procurement Unit establishes local sources for equipment and supplies, manages all equipment rental agreements and processes all rental and supply fiscal document billing invoices.

3. Compensation / Claims unit: The Claims Unit is responsible for investigating all claims involving property associated with or involved in the incident. This can be an extremely important function on some incidents.

Two Specialists report to the Compensation / Claims Unit Leader:

- Compensation –for- injury Specialist - Administers financial matters arising from serious injuries and deaths on an incident. Work is done in close cooperation with the Medical Unit.
- Claims Specialist – manages all claims related activities (other than injury) for an incident.

4. Cost Unit: The Cost Unit provides all incident cost analysis. It ensures the proper identification of all equipment and personnel requiring payment, records all cost data, analysis and prepares estimates of incident costs, and maintains accurate records of incident costs.

C 1.3.4 Rapid damage assessment & reporting

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

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

Table 27: Initial Assessment Report

INITIAL ASSESSMENT REPORT											
1	NATURE OF DISASTER:										
2	DATE OF OCCURRENCE:						TIME:				
3	<i>DAMAGE AND LOSS ESTIMATES</i>										
	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	<i>INFRASTRUCTURE DAMAGE</i>										
	Name of the Site (Village, Block, Tehsil)	Housing	Agriculture	Animals	Water source	Road and bridge	Power	Communication	Govt Building	Others	

5 NEED ESTIMATES								
	<i>Name of the Site (Village, Block Tehsil)</i>	<i>Medical Needs</i>	<i>Population requiring shelter</i>	<i>Cloth es</i>	<i>Foo d</i>	<i>Water</i>	<i>Sanitati on</i>	<i>Any Other</i>
6	ANY OTHER VITAL INFORMATION							
7	SPECIFY IMMEDIATE NEEDS: (With quantity)							
	Food							
	First aid							
	Machinery							
8	Possible Secondary Affects:							
9	NAME THE CONTACT PERSON:							
10	AGENCY/ADDRESS:							
TELEPHONE NUMBER								
DATE:					SIGNATURE:			
FOR OFFICE PURPOSE:					REPORT NO.:			
ACTION TAKEN:								

C 1.3.5 District Search & rescue Team

There is no specific search and rescue team in the district. At the time of emergency, all the swimmers along with the members of District Reserve Police line and Home Guard will do the search and rescue work. DRP Line and Home guard force goes through regular physical training and special training program can be incorporated to address the disaster related training based on the identified needs of the force. Disaster specific training program can be conducted on quarterly basis. Please see the list of swimmers for the rescue team. Contact below mentioned officials for the search and rescue team at the time of emergency.

Table 28: District Search & rescue Team

S.No.	Name and designation of S&R Team Commander	Address with contact nos.
1.	Shri Hindu Singh, Reserve Inspector, DRP Line, Alirajpur	9424860065
2.	Shri Sumat Jain, District Commandant, Home Guard Jhabua	07392-222439

In case of disaster, teams under the instruction of Collector will start search, rescue and relief work immediately, without waiting for orders from the state government.

C 1.3.6 Medical response

District Combat teams are constituted to respond to emergency situations. They are provided with necessary instructions and medicines to deal with the injured and affected person. Combat team will provide necessary arrangements to control epidemic and treat the affected population.

District Combat Team 1	
Dr Santosh Solanki	Medical Officer(Team Lead)
Smt Gloria Bhavar	Nurse
Shri MukamSingh Masaniya	Class 4 officer
Shri Kalash Chandra Verma	Driver
District Combat Team 2	
Dr Sachin Patidar	Medical Officer(Team Lead)
Shri Vishwanath Sharma	Dresser
Shri MukamSingh Chauhan	
Shri Saleem Mohammad	Driver

Block levels combat teams are also constituted to respond to epidemic or disaster situation

Block Combat Team, Jobat			
Khattali	Dr K Gehlot	BMO	9981101762
	Smt Kalavati Thakur	Supervisor	9302477185
	Shri Dinesh Solanki	Store Keeper	8305699948
	Shri Ram Singh Maurya	Driver	

	Nandram	Wardboy	
Undari	Dr D L Sisodiya	BMO	9424565016
	Smt Usha Upadhaya	Supervisor	
	Shri Dinesh Solanki	Store Keeper	8305699948
	Shri Ram Singh Maurya	Driver	
	Nandram	Wardboy	
Kanwada	Dr Anand Atulakar	BMO	9424565016
	Shri J L Parmar	Supervisor	9425908084
	Shri Dinesh Solanki	Store Keeper	8305699948
	Shri Ram Singh Maurya	Driver	
	Nandram	Wardboy	
Block Combat Team, Katthiwada			
Katthiwada	Dr K S Jamara	BMO	
	Smt Agnis Arwin	ANM	
	Shri Savita Davor	ANM	
	Shri Makbul Hussain	MPW	
Chandpur	Smt Kusum Vaghmore	LHV	
	Smt Girja A S	ANM	
	Ms Pratima Tomar	ANM	
Aamkhut	Shri N K Hariyal	MPS	
	Smt Suman Devi	ANM	
	Smt Sheela Mansingh	ANM	
Sorwa	Shri NaharSingh Davor	MPS	
	Shri Narsingh Bhuria	MPW	
	Smt Seema	ANM	
Block Combat Team, Sondwa			
Sondwa	Dr N S Gehlot	BMO	9425942184
	Smt Krishna Shukla	LHV	9575606696
	Smt Kaushalya Chauhan	ANM	
	Ms Anita	ANM	
	Shri Amarsingh Solanki	Sweeper	
Umrli	Dr Sandeep Bhide	MO	
	Shri D S Chaugarh	MPS	9009184905
	Smt Jyoti	ANM	
	Smt Sunita Bamaniya	ANM	
	Shri N K Hariyal	MPS	
	Smt NaharSingh Dodwa	Sweeper	
Guneri	Dr Akhilesh Patidar	MO	
	Smt Pushpa Lahare	LHV	9009068702

	Smt Garima Tomar	ANM	
	Shri Kirta Paralkiya	MPW	
Bakhatgarh	Dr M S Chauhan	MO	9009878756
	Shri B S Chauhan	MPS	
	Smt Rajkumari	ANM	
	Smt Chaiya Kulkarni	ANM	
	Shri Jitendra Davor	WB	
Chaktala	Dr A S Davor	MPS	
	Ms Sumitra Kirad	ANM	
	Shri Ramesh Kanesh	MPW	
	Smt Kavita Ravat	ANM	
	Shri Mohan Singh	MPW	
Block Combat Team, Udaygarh			
Udaygarh	Dr Moti Singh	BMO	
	Pramila Solanki	LHV	
	Rambai Masaniya	ANM	
	Ramesh Panchal	Compounder	
Bori	Dr Amit Dalal	MO	
	Udaynayak	MPS	
	Ranghu Chauhan	ANM	
	Archana Vasuniya	ANM	
Kanakakad	Dr Yogesh Ajnar	MO	
	Pushpa Chauhan	ANM	
	Vandana Solanki	ANM	
	Suman Dubey	LHV	
	Gulab Kanesh	ANM	
Block Combat Team, ChandraShekhar Azad Nagar			
	Dr P C Jain	BMO, Team Leader	9827542128
	Smt Nirmala Chauhan	BEE, CHC	9425959188
	Shri R K Raikavar	Dresser, CHC	
	Shri Mahendra Singh Hihor	MPS, CHC	
	Smt Sunita Jain	ANM, CHC	
	Shri Saleem Khan	Wardboy, CHC	
Block Combat Team, Ambua			
	Dr Hitesh Maseh	BMO	
	Shri Savesingh Chauhan	BEEE	
	Smt Bharti Thakur	ANM	
	Shri Imamudeen	Wardboy	

Source: CHMO Office, 2012

To deal with the medical emergency at the time of disaster, CHMO office has constituted Depot Holder in every block. Every Depot holder will have first aid facility/medicines.

Block	Number of Depot
Ambua	446
ChandraShekhar Azad Nagar	321
Jobat	311
Katthiwada	319
Sondwa	397
Udaygarh	260

Integrated Disease Surveillance Programme (IDSP) is a decentralized, state based surveillance program in the country. It is intended to detect early warning signal of impending outbreaks and help initiate an effective response in a timely manner. It is also expected to provide essential data to monitor progress of ongoing disease control program and help allocate health resources more efficiently. All outbreaks cannot be predicted or prevented. However, precautionary measure can be taken within the existing health infrastructure and service delivery to reduce risks of outbreak and to minimize the scale of the outbreak if it occurs.

CHMO has appointed Dr K C Gupta as Nodal Officer for Integrated Disease Surveillance Project.

C 1.3.7 Logistic arrangements

Details of good working vehicles, allied equipments and its maintenance schedule, to be displayed online, on board, for reference, in case of any type of emergency.

DRP Line owns 44 vehicles which is mix of police jeeps, Tata Sumo, Tractor, Motor Cycles, Ambassador, Tractor and a Rapid Intervention vehicle. These vehicles are maintained in timely manner and the list, availability and location is available with DRP Line.

Type	Number of Vehicles
Ambassador	1
Tata Sumo	1
Mahendra Max	5
Mahendra Major	8
Mahendra Marshal	2
Mahendra Pickup	2
Jail Vehicle	1
Tata 407	3
Bus	2
Truck	1
Tractor	1
Motor Cycle	15
Rapid Intervention Vehicle	1

Ambulances are available in the District hospital, CHCs, NVDA and Red Cross. Number of ambulances available is mentioned earlier in section A 1.1.6

Nagar Transport operates number of buses to different towns in and around *Alirajpur*. Department of Transportation, *Jhabua* can be contacted to get the list of available vehicles for disaster purpose.

Contact No:

Shri G S Chauhan, District Transport Officer, Jhabua

Tel No – 07392-243557

C 1.3.8 Communications

Sending all Out-Messages on behalf of Camp Officer of the Relief Camp. Data collection, record keeping, assistance in locating missing persons, information centre, organization of information for Site Operations Centre and on specific demands, maintaining In-Message and Out-Message register should be done in communication room. Following facilities should be made available in the communication room:

- Mobiles
- Telephone
- Computer with Internet
- Wireless
- FAX

Proper communication channels needs to be created between the Camp Officer, Public Relationship officer and media so as to avoid misrepresentation of facts. Rumors should not be spread. The correct numerical data should be published so that the public is not misguided.

C 1.3.9 Temporary shelter management

Presently, Shelter locations have been identified for dealing with floods in Sondwa region. Temporary Camps are constructed pre-disaster stage at below mentioned locations

Table 29: Temporary Shelter for Flood

S.No.	Name and address of safe shelters	Arrangement of food / free kitchen
1.	Chilkada, Chilkada	NVDA Kukshi/Food Dept
2.	Kakrana, Kakrana	NVDA Kukshi/Food Dept
3.	Jobat Police Ground, Badi Khattali	NVDA Kukshi/Food Dept

In case of unforeseen emergency in other areas, camps can be set up in public schools, municipal building, police grounds and religious places. Below mentioned is the *suggestive* list of schools which can be used for temporary shelter:

S.No.	Name and address of safe shelters	Arrangement of food / free kitchen
1.	Fateh Sports Club, Alirajpur	Arranged by Disaster Emergency
2.	Govt PG College, Alirajpur	Operations team in support from local

3.	Govt College, Jobat	bodies and other line department
4.	Govt College, ChandraShekhar Azad Nagar	

Temporary shelter management is taken care by District Emergency Control room after seeking information from:

- Home departments
- Police
- PWD
- Local NGO's and CBO's

C 1.3.10 Water and Sanitation (WATSAN)

Water and Sanitation is very important element at the time of disaster. It needs to be addressed on the top priority, as it is directly related to the basic needs. Required provisions will be made by Nagar Palika – Alirajpur, Nagar Panchayat – Jobat and ChandraShekhar Azad Nagar, and Janpad Panchayat in rural areas for supply of pure drinking water, and to meet the other needs of water as well as timely addressal of sanitation requirements. This also includes the maintenance of hygiene in & around emergency shelters, periodic monitoring and inspection of storm water drainage, *nallah*, adherence of the cleaning schedule of the camps and other places.

Nagar Palika and Janapad Panchayat would be responsible for following:

Water

- Providing clean potable water;
- Providing distribution systems like tap stands, washing areas for clothes and for bathing.
- Water source protection: Ensuring existing water sources are protected from further contamination.
- Use of Grant fund to get the water from dam, filter the water and supply in the affected area.

Sanitation:

- Construction of field *latrines* and soak pit *latrines* at relief camps and final disposal of excreta.
- Design and commissioning of drainage facilities.
- Cleaning and de-silting of *nallas*
- Fogging the affected area to avoid spread of malaria
- Medicating the area with Phenol, insecticides etc.

Vector Control:

- Solid Waste disposal
- Drainage of waste water
- Insecticide spraying against flies & mosquito's & promotion activities to encourage further use.

Source: Nagar Palika, Alirajpur, 2012

C 1.3.11 Law & order

The Police Forces are one of the key responders to disasters. The police force will be trained in disaster management skills and will be upgraded to acquire multi-hazard rescue capability.

Following are the roles and responsibilities of Police Department at the time of disaster to maintain law and order in the district:

- Shifts the people to the safer places.
- Help Revenue Department to carry out relief work without any hindrance during disaster period and safeguard the properties of the victim.
- It will arrange law and order against theft in the disaster-affected area and co-ordinate with the search and rescue operation through NCC/VTF/NGO.
- It will also arrange for security at the relief camps/relief material storages.
- It is also responsible to maintain law and order at the time of distribution of relief material.
- It assists the authorities for evacuation of people to the safe places. It makes due arrangements for post mortem of dead persons, and legal procedure for speedy disposal.
- It specially protects the children and the women at the shelter places.

C 1.3.12 Public grievances/missing persons search/media management

District Emergency Operation team along with Home Guards and Police department will coordinate search and rescue operations. SP Office would be responsible for listening and responding to public grievances through number of communication channels made available during disaster situation. Disaster Control room will also be responsible for communicating grievances to SP Office. DDMC may authorize special nodal in-charge in case of serious disaster.

Search and rescue team will get the list of families in affected area from the revenue department and make sure well being and rescue of each family member. In case of missing or dead person, list will be updated at regular interval and would be made available at SP Office, Collectorate and DEOC.

Media management will be handled by District Public Relationship Officer, who would communicate authentic and authorized information to public media. In case, wrong information is broadcasted by public media, Public Relationship Officer will investigate the issue and take timely action to correct the information to avoid panic and public outcry.

C 1.3.13 Animal care

Veterinary department will take care of vaccination of animals (cattle), treatment of injured and diseased animals and disposal of carcass after post mortem.

- Veterinary department should monitor the spread of disease in the disaster affected area and provide treatment to cattle's and other animals.
- It should vaccinate cattle with vaccines "HS, BQ, ETV, FMD, PPR" before disaster situation like flood.
- Ambulatory team should visit the affected area.
- It should provide regular medical help and provide medicines and vaccine.

- Animals killed by accident or due to any other non-contagious diseases are left in open field in deserted place for scavengers.

Disease	Respective Disasters	Animals affected	Carcass Treatment
Peste des Petits Ruminants (PPR)	Generally occurred during draught like condition or summers	Goat, Sheep	Animals killed by PPR are buried properly
Haemorrhagic Septicaemia (HS)	During flood	Bovines	Animals killed by HS are buried properly
Black Quarter(BQ)	During flood	Cattle, Buffalo	Animals killed by HS are buried properly
Foot and Mouth Disease(FMD)	During flood	Cattle, Buffalo	Animals killed by HS are buried properly

Following committees have been formed to take preventive, response and relief action for the dealing with floods. Same committee can respond to any other disaster situation.

District Level Flood Control Team

Officer/Staff	Position	Telephone/Mobile
Dr. C S Bhati	VAS	9425485987
Shri Gyanendra Singh Gehlot	Nodal Officer, flood relief	9907005054
Shri Lovendra Singh Chauhan		9425970369
Shri Rajendra Singh Bhati		
Shri Arjun Singh		
Shri Ratan Singh Sagar	Sahayak Grade -3	9752625155
Shri Dinesh Mandaloi	Sahayak Grade -2	
Shri RajBahadur Diwakar	Sahayak Grade -3	
Shri Narimdeen	Class 4 employee	
Shri Mukesh Srivastava	Class 4 employee	

Block Level Flood Control Team, Jobat

Office/Staff	Position	Telephone/Mobile
Dr. S S Maurya	VAS	
Shri P K Tanvar		
Shri Bhupendra Singh Bhadoriya	Lab In charge	
Shri V K Tiwari	Medicine In charge	
Shri Yusuf Khan	Class 4 employee	

Block Level Flood Control Team, Udaygarh

Office/Staff	Position	Telephone/Mobile
Dr. Kamla Makwana	VAS	
Shri Amritlal Katara		
Shri Ramkumar Jatav	Lab In charge	
Shri Kamal Rukha	Medicine In charge	

Shri TambuSingh	Class 4 employee	
-----------------	------------------	--

Block Level Flood Control Team, ChandraShekhar Azad Nagar

Office/Staff	Position	Telephone/Mobile
Dr. MalSingh Kharat	VAS	9425946883
Shri NarSingh Hisor		9425946879
Shri Sundar Singh Nayak	Class 4 employee	
Shri Sonu Bai	Class 4 employee	

Block Level Flood Control Team, Sondwa

Office/Staff	Position	Telephone/Mobile
Dr. Ramesh Nageshiya	VAS	9754104689
Shri SherSingh Chauhan		9424095613
Shri Lokendra Gehlod		9827636328
Shri Ramesh Chandra Bhatt	Vaccinator	
Shri Keshwar Singh Solanki	Class 4 employee	

Block Level Flood Control Team, Katthiwada

Office/Staff	Position	Telephone/Mobile
Dr. Anil Meda	VAS	
Shri Chandar Singh Bamaniya		9179307922
Shri Bharda Goyara	Class 4 employee	

Source: Veterinary Hospital, 2012

C 1.3.14 Management of deceased

There are 4 major functions for the Carcass disposal team in case of mass casualties:

- 1) Identification of Deceased and informing the family members
- 2) Post Mortem and Legal Formalities
- 3) Quick disposal
- 4) Mortuary Facilities

Care should be taken while disposing bodies so as not to affect the religious sentiments of the public. Care should be taken while disposing bodies and should be preferred to be done in mortuary facilities of district or place which is at sufficient distance from the relief camp.

For unidentified/unclaimed bodies, body disposal fund under RBC 6-4 can be used for proper disposal of bodies after taking sufficient information about the deceased.

C 1.3.15 Civil Defense and Home Guards

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

- **Home Guards**

The Home Guards serve as an auxiliary arm of the police force and support the district administration. They will be trained for carrying out search, rescue and relief operations on occurrence of disasters. Home Guards would be the prime agency to initiate the emergency response under the guidance of District Commandant, who would also be the DDMO.

- **Civil Defense**

The community has a major role to play both as a victim and necessarily as a first responder. Integration of the Civil Defense organization into disaster management can work as a great catalyst for organizing community capacity building. CD has been authorized in 225 designated towns in the country out of which 121 have already been activated where volunteers have been recruited and trained. According to the proposal for revamping, the primary role of CD will be community capacity building and creating public awareness in pre-disaster phase. The proposal envisages converting the town specific setup of CD to a district specific set up. It is proposed to have 18 persons employed on full time basis in each district-specific set up, out of which eight will be the trainers and their duty will be to train volunteers.

Civil Defense is not activated in the district, though community help is available at the time of disaster.

C 1.3.16 Role of Private Security

Currently, there is no security agency operating in the district. Watchmen can play a role in monitoring the situation and assisting in relief operations.

C 1.3.17 NGOs & Voluntary organizations

Mentioned below are the roles which NGOs and voluntary organization should play during the disaster.

- Voluntary organization and NGOs are usually the first responders in the aftermath of a disaster. The NGO and voluntary agencies should undertake rescue and relief measures immediately, to the extent possible on their own, before the district or the state administration steps-in. After the intervention of the district or state administration they should continue the works of rescue and relief under the overall direction and supervision of the MPSDMA or the DDMA. They should work in close coordination with DDMA/Secretary, MPSDMA to avoid duplication and ensure equity.
- They should take a pro-active role in assisting the victims of disaster and should provide inputs to relevant authorities as to the magnitude of effect of disaster, need for additional resources etc.
- They should also co-operate with relevant authorities in the conduct of a preliminary damage assessment etc
- They should assist in transferring victims to safe shelter or hospitals.
- They should arrange for the food and water arrangement for the victims and relief workers.

Currently, following are some of the NGOs which can assist at the time of disaster:

Table 30: NGO and Voluntary Organisation

S.No.	Name and address of NGOs, CSOs	Contact nos. of person concerned
1.	Mission Hospital, Mission Compound, Jobat	07393-287542
2.	Aadivasi Sahayata Samiti, Narmada Nagar Colony, Jobat	
3.	Lions Club	
4.	Prerna Club	
5.	Sahyog Sanstha	

Communities are the first respondent to disaster. If properly initiated with Disaster Management techniques, they can play significant role in response to disaster situation. A number of community based organization exist in the district which have assisted in the past during the relief operation. Some of the communities which can provide assistance at the time of disaster are:

- Jain Samaj
- Vaishanav Samaj
- Rathore Samaj
- Rajput Samaj
- Maheshwari Samaj
- Harsola Samaj

C 1.3.18 Relief management planning

Many issues in the post-disaster phase are required to be addressed. Relief management should be done carefully so that all the victims will be benefited from the limited resources and manpower. In this regard the following activities must be assigned to related desks while serving the people in disaster hit areas. The specific functions of the various desks are given below:

Functions of Infrastructure Desk

- Temporary structure for storage and Protection
- Shelters for affected people
- Sanitation facilities
- Medical facilities
- Education facility
- Food Preparation and distribution
- Recreational facility
- Postal facility
- Communication Facilities
- Temporary repairs to damaged infrastructure
- Removal of debris and reconstruction

Functions of Logistics Desk

- Organize distribution of Relief Supplies
- Receive, store, secure, relief materials for relief camps and affected villages

- Co-ordinate supplies distributed directly by NGOs and other organizations including private donors
- Ensure proper maintenance of vehicles and equipment.
- Ensure optimum utilization of resources such as fuel
- Mobilize and co-ordinate the work of the volunteers ensuring community participation
- Organize facilities for staff and volunteers.

Functions of Health Desk

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

Functions of Communication and Information Management Desk

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

C 1.3.19 Media Management

Media plays a vital role in mass communicating information regarding disaster to public. It provides district authority platform to disseminate information to affected populace about the impact of disaster, rescue and relief measures adopted by the authorities and attract other government and non government agencies to respond to relief measures. Thus, media management is of utmost importance for timely communicating authentic and authorized information and avoid mass commotion due circulation to inaccurate information or hype.

Public Relationship Officer would be in-charge of managing media and communicating right information to people. PRO needs to investigate information through various channels and get approval from Collector or Nodal officer before communicating it to media. At the wake of emergency, press conference can be held and Collector or Nodal Officer would address the media about the disaster situation.

Source: Jan Sampark, Alirajpur, 2012

C 1.3.20 Fire Services

Fire Services are mostly required at the time of man-made disaster. In case of fire related disaster, immediate response is required to prevent large damage to property and save life. Fire department needs to be prepared at all times and respond in least possible time. They need to coordinate with nearby fire agencies for quick response. Fire department should keep fire proof jackets and blankets

for protecting life. Fire tenders should also carry basic equipments for rescue operations and operators should have proper training for extinguishing fire, rescue operation and basic first aid. *Presently, Nagar Palika Alirajpur, Nagar Panchayat Jobat and Bhabhra have fire tenders.* A quick and well coordinated response is required from the departments in case of fire accident. While responding to fire accident, saving life should be first priority followed by saving property.

C 1.4 Recovery and Reconstruction Plan

Short-term recovery will return the vital life support systems to minimum operating standards while long term rehabilitation will continue till complete redevelopment of the area takes place. Rehabilitation and reconstruction comes immediately after relief and rescue operation of the disaster. This post disaster phase continues until the life of the affected people comes to normal. This phase mainly covers damage assessment, disposal of debris, disbursement of assistance for houses, restoration of basic infrastructure, formulation of assistance packages, monitoring and review cases of non-starters, rejected cases, non-occupancy of houses, relocation, town planning and development plans, awareness and capacity building, housing insurance, grievance redressal and social rehabilitation etc.

C 1.4.1 Restoration of basic infrastructure

After the assessment of the damage due to the disaster, the restoration of infrastructure should be taken up in order to bring normalcy in the affected area. As per the existing laws and regulations, compensation shall be paid to the victims to support their restoration activities and to help them get back to normal life. Basic Public infrastructure should be quickly reconstructed in affected area and it should take into account DRR techniques.

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:

- Owner Driven Reconstruction
- Public Private Partnership Program (PPPP)
- Insurance.
- 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.

Details regarding government relief measures can be found in below table.

Revised List of Items and Norms of Assistance from Calamity Relief Fund (CRF) and National Calamity Contingency Fund (NCCF) for the Period 2005-10 (MHA Letter No. 32-34/2007-Ndm -I dated the 27th June, 2007)

C 1.4.3 Restoration of livelihoods

Restoration of livelihood of the disaster victims should take place through direct and indirect support from Govt., NGOs and the civil society. Govt. can assist the victims to restart their businesses, provide incentives in purchasing seeds and other farming equipment necessary for agriculture, and it even may consider relaxing certain norms in order to take the burden off the victims and to support their livelihoods for a period of time. Calamity relief Fund and National Calamity Contingency Fund (MHA Letter No. 32-34/2007-Ndm -I dated the 27th June, 2007) can provide assistance to disaster affected populace for restoration

C 1.4.4 Psycho-social interventions

Disaster-affected people experience various psychological reactions. These reactions immediately follow the event based on the socio-economic impacts like lack of employment, homelessness, destruction of property, shame and humiliation and disorganization. The psychological reactions that people experience as a result of the disaster may be either adaptive or maladaptive. Adaptive responses allow individuals to overcome the difficulties caused by the disaster. For instance, obtaining information or developing effective survival skills. Maladaptive reactions can include denial, ineffective actions etc. Maladaptive reactions can be prevented from occurring and if they do occur then they can be treated. For instance, people committing suicides on the learning about the financial and family loss. Early recognition and counseling can prevent many such prolonged agonies. Special needs of women and children should be considered while providing relief to affected populace.

Presently, there is no separate provision for dealing with Psychological impact of disaster. Trauma handling can be dealt under the guidance of Chief Health and Medical Officer. Medical Officers, Nurses, ANM, MPW and NGOs working for women and children can help to counsel the affected people and understand their worries and guide them in rehabilitation process.

Initiatives can be taken for Community based psycho-social counseling by which the simple tools and techniques of counseling can be taught to the community workers and other local level functionaries.

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, are promoted through Community Based Organizations. Presently, Jan Abhiyaan Parishad has constituted 180 CBOs in 6 development blocks. Every year it constitutes 10 CBOs in every block. Major initiatives taken by CBOs are

- Water Conservation

- Power Saving
- Education
- Health and safety
- Tree Plantation
- Use of natural fertilizer in Agriculture

Communities can be involved in various aspects of Disaster Management in the following manner.

Shelter & Infrastructure

- Following the owner driven reconstruction principle, self-help groups, including the most vulnerable, are organised and engaged in construction with assistance in the form of finances, building materials, and DRR engineering services

Food Security

- Formation or strengthening of farmers co-operatives (for access to Govt. Schemes, bulk purchase of inputs, grain banks, etc).

Health Services

- Communities are trained in counseling skills to deal with post-disaster trauma.

Water, Sanitation and Hygiene

- Quality control is exercised by the community by participating in the risk proof creation of community drainage systems, sanitation facilities, waste management etc.

Education

- Engaging community in design and monitoring of education program.

Environment & Disaster Management

- Quality control by beneficiaries.
- Community-based risk assessments.
- Community Early warning systems are put in place.
- CBOs are trained on embankment monitoring.

Presently, disaster management is not part of initiatives by Jan Abhiyaan Parishad. It should be included for capacity building and empowering of the communities to deal with local disaster situations.

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 should be developed by every line department in the district.

Differently Able Persons
<ul style="list-style-type: none"> • Easy and preferential access to medical facility and food.

- Wheelchairs, supportive devices need to be arranged.
- Rescue team needs to identify specific needs of differential abled person and made specific arrangements for their basic needs.

Dalits, minorities, ethnic groups

- Equity and equality in access to services and benefits.
- Avoid marginalization of vulnerable groups which may induce maladaptive psychological impact.

Senior Citizens or Elderly

- Easy and preferential access to medical facility and food.
- Arranging for recommended and prescribed medical needs of elderly to avoid complications
- Construction of old age homes or community centers for old age.

Women

- Easy and preferential access to medical facility and food.
- Maternal health, menstrual hygiene.
- Employment and reconstruction schemes for affected women

Children

- Help line to locate family members
- Provision for adoption for orphaned children for integration into family
- Orphanages for orphaned children
- Access to medical facility and understanding medical needs of children.
- Avoid trafficking and exploitation of children after emergencies when the family, community and school's protective frame work weakens.

C 1.5.3 Addressing climate induced anthropogenic issues

Depleting Forest reserves and forest cover in the Katthiwada and other regions in the district would affect the rainfall during the monsoon. As the region is mostly agriculture based, intensity of rainfall has huge impact on the livelihood of people. People affect by drought due to less than average rainfall might have to move to other regions like Gujarat and have to work in factories or construction labor due to scarcity of food and means of livelihood.

Other major source of water for agriculture is seasonal rivers, irrigation dams and ground water. Due to high use of ground water, water table is lowering in the region and needs to be replenished. Water table needs to be measured on timely basis and replenishment through construction of micro watershed (implemented in Sondwa and Dholkheda), *talabs*, tube well recharging by relevant departments – Gram Panchyat, Agriculture, Irrigation etc.

Forest plantation activity needs to be carried out of regular basis by forest department and fallen or burned trees need to be replenished with new plants. Soil erosion can be prevented through plantation and can be enriched by planting specific kinds of plant.

Climatic changes like average temperature, rainfall, soil erosion, wildlife conservation needs to be monitored by the land department in association with relevant line department and significant

changes needs to be addressed by responding to situation in timely manner after consultation with State Climate change cell and Indian Metrological Department.

It has been noticed by the populace that the forest cover of the region has depleted and many areas have been converted to open forest – Umralli and Mathwad range. Forest cover is also depleting in Katthiwada, dense forest region of district. These changes may further aggravate the drought situation in the district.

C2 Standard Operating Procedures (and Checklists)

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 causalities and damage from disasters.
- **Before Disaster Stage– Preparedness:** To build the capacities of local communities in order to safeguard their lives an 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

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

Table 31: SOP Revenue Department

Non Disaster Time
<p>Mitigation</p> <ul style="list-style-type: none"> • To ensure that funds are being allocated under the District Disaster Mitigation Fund. • To ensure that structural and non-structural mitigation measures are taken by all its department offices. <p>Preparedness</p> <ul style="list-style-type: none"> • To appoint a nodal officer in the DEOC. • Establish infrastructure for DEOC and maintain in state of readiness with all equipment in working order and all inventories updated. • Train personnel on operations of DEOC. • Ensure basic facilities for personnel who will work at district level for disaster response. • To coordinate the preparedness functions of all line departments.

- Establish disaster management funding mechanisms to ensure adequate resources for preparedness work, and quick availability of resources for relief and rehabilitation when required.
- Ensure that all the gram panchayats, urban bodies and blocks prepare their disaster management plan.
- Coordinate with other state departments of state and centre for their disaster management plan at the district level and synchronize the same with the district disaster management plan.
- Help District Administrators with additional resources for disaster preparedness, if necessary.
- On annual basis report to the SEC of the preparedness activities.

Before Disaster – Alert and Warning

- Maintain contact with forecasting agencies and gather all possible information regarding the alert.
- Ensure activation of District EOC in standby mode.
- Advise concerned District collectors to carry out evacuations where required, and to keep transport, relief and medical teams ready to move to the affected areas at a short notice.
- Dispatch field assessment teams, if required.
- Provide assessment report to the DDMA.

During Disaster – Response

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

After Disaster – Recovery and rehabilitation

- Assessing financial and economic losses, preparing report and declaring level of disaster
- Keep the DDMA informed of the situation.
- Arranging finance necessary for rehabilitation purposes.
- Visit and coordinate the implement of various rehabilitation programmes.
- Coordinate the activities of NGOs in relief and rehabilitation programmes.

Irrigation and Public Health Engineering Department: Department is involved in disaster management in relation to drought and floods, as they affect agricultural production, irrigation systems and water supply and management. It is primary agency for Drinking water & sanitation and secondary agency for Information & planning, relief supplies, shelter and transport emergency support functions for DEOC.

Table 32: Irrigation and Public Health Engineering

Non Disaster Time
<p>Mitigation</p> <ul style="list-style-type: none"> • Make departmental mitigation plan and ensure its implementation. • Identify the areas which have irrigation problem and notify the DDMA and assist them in construction of tube well and lakes. • Construct wells in strategic location to replenish water tables. • Implement safe and recommended construction of sanitation facilities in the district. <p>Preparedness</p> <ul style="list-style-type: none"> • Designate one Liaison Officer in the department as the Disaster Preparedness Focal Point. • Ensure efficient management of flood forecasting and warning centers and improve procedure of flood forecasts and intimation to appropriate authorities. • Identify flood prone rivers and areas and activate flood monitoring mechanisms in all flood prone areas. • Make water provision for drought prone areas.
Before Disaster – Alert and Warning
<ul style="list-style-type: none"> • Mount watch on flood protection works and canal systems.
During Disaster – Response
<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 – Recovery and reconstruction
<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.

Power Department

Table 33: Power Department

Non Disaster Time – Preparedness
<ul style="list-style-type: none"> • Identification of necessary resources for temporary work during disaster • Organising Training program for Electrical Mechanic and ensuring that the established Standards and norms are followed for installation of electrical equipments. • Establishing necessary standards in order to prevent hazards due to snapping of electrical conductors and inspecting the same at regular intervals. • Formulation of necessary plans in order to ensure minimum damage to high tension wires during any disasters. • Conducting Mass-Awareness program to ensure minimum damage of lives due to

<p>electricity during any natural or manmade disaster.</p> <ul style="list-style-type: none"> • Formulation of plan to provide quick electrical connection to important and sensitive places.
Before Disaster – Alert and Warning
<ul style="list-style-type: none"> • Shutting down all the electric supply if flood warning message is received
During Disaster – Response
<ul style="list-style-type: none"> • Ensuring that no electrical casualty during any disaster
After Disaster – Recovery
<ul style="list-style-type: none"> • Necessary cooperation in inspection of damaged electrical appliances. • Ensuring quick repairing and replacement of electrical appliances such as electric poles, transformers etc. • Ensuring quick restoration of electricity to the place after disaster.

Transport Department: Department would need to take steps to arrange for sending personnel and relief material to the disaster affected area, relocate the affected people, keep access routes operational and inform about alternate routes.

Table 34: Transport Department

Non Disaster Time
<p>Mitigation</p> <ul style="list-style-type: none"> • Make departmental mitigation plan and ensure its implementation. • Organize departmental awareness programs for the same. • Strictly observing the safety norms under all circumstances. • Ensure the rules for overcrowding are made and communicated to all public transport operators. Strict penalties should be enforced to offenders. • Organising Mass-Awareness camp to spread the Road Safety norms. • Conducting School awareness program to teach students the basics of road safety. <p>Preparedness</p> <ul style="list-style-type: none"> • Develop and implement disaster management plan for the department. • Preparing the list of vehicles that can be utilized during disaster.
Before Disaster – Alert and Warning
<ul style="list-style-type: none"> • Ensure availability of fuel, recovery vehicles and equipment. • Take steps for arrangement of vehicles for possible evacuation of people.
During Disaster – Response
<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. • Collect and disseminate information regarding operational and safe routes and alternate routes, fuel availability etc. to personnel operating in the field. • Launch recovery missions for stranded vehicles.
After Disaster - Recovery and rehabilitation
<ul style="list-style-type: none"> • Assess damage to transportation infrastructure. • Maintenance of vehicles to make them roadworthy.

Health Department: The department is primary agency for public health emergency support function for DEOC and is responsible for prevention, protection and control of health related problems of the disaster affected community of natural disasters and man-made disasters, as well as for investigation and response to outbreak of communicable diseases

Table 35: Health Department

Non Disaster Time – Mitigation
<ul style="list-style-type: none"> • Ensure DMPs are developed in health centers, hospitals. • Ensure that all hospital staff has been informed about possible disasters in the district, likely damages and effects, and information about ways to protect life, equipment and property. • Ensure that orientation and training for disaster response plans and procedures are undertaken. • Ensure adequate availability of Emergency Health Kits in high risk areas. • Prepare a list of medical and Para-medical personnel in the district and disseminate it to DDMA, DEOC and all block disaster management committees. • Establish and operate an early warning system for health threats based on the routine health information and in collaboration with other departments.
Before Disaster – Alert and Warning
<ul style="list-style-type: none"> • To prepare and keep ready Mobile Hospitals and stock them with emergency equipment that may be required after the disaster. • Assess likely health impacts and share with DEOC for planning purpose • To ensure pre-positioning of Emergency Health Kits and Personnel in all the areas under the disaster threat. • Direct the activation of health/medical personnel, supplies and equipment as required.
During Disaster – Response
<ul style="list-style-type: none"> • Appoint one personnel as Nodal Health Officer for the affected area. • Mobilize medical teams, Para-medical personnel to go to affected areas as part of Rapid Assessment and Quick Response Teams • Provide medical assistance to the affected population • Provide chlorine tablets to people in affected area • Special care for women with infants and pregnant women • Carry out technical assessment on health infrastructure availability and need. • Vaccination to prevent contagious diseases.
After Disaster – Recovery and Rehabilitation
<ul style="list-style-type: none"> • Continuous monitoring of intensity of diseases. • Determine the extent of loss in health institutions. • Prepare respective plans for their rehabilitation. • Share learning which will help in the improvised Hospital DM planning and preparedness. • Psychological Counseling of the affected people.

Police Department

Table 36: Police Department

Non Disaster Time – Preparedness
<ul style="list-style-type: none"> • Preparing of Search and Rescue Team, Evacuation Team and conducting Mock Drills at regular interval. • Acquisition of modern and sophisticated instrument and up gradation of existing equipments. • Training of personnel to handle modern and sophisticated instrument properly. • Rotational posting of Emergency Response forces to ensure fitness.
Before Disaster – Alert and warning
<ul style="list-style-type: none"> • Ensuring proper working of all the communication and wireless equipments and disbursement of extra wireless equipments at sensitive areas. • Coordination with District Administration and Disaster Management Authority.
During Disaster – Response
<ul style="list-style-type: none"> • Providing security to temporary relief shelter and relief materials. • Posting of police forces at the sensitive and disaster affected places. • Proper arrangement of safety and security. • Cooperating with District Administration for search, rescue and evacuation operation.
After Disaster – Recovery and rehabilitation
<ul style="list-style-type: none"> • Temporary arrangement of communication at the disaster affected places. • Ensuring strict law and order situation at the affected places. • Cooperating with District Administration to prevent Black-marketing.

Public Works Department: Department of Public Works plays a vital role in provision and maintenance of vital public infrastructure. It plays the role of primary agency for Public works and engineering emergency support function at the DEOC. The department will also act as secondary agency for Transport, Information & Planning, and Relief supplies and shelter emergency support functions.

Table 37: Public Works Department

Non Disaster Time
<p>Mitigation</p> <ul style="list-style-type: none"> • Prepare mitigation plan for the department and enforce the same. • Advise the district disaster management authority on structural mitigation measures for the district. • Repair, Maintenance and retrofitting of public infrastructure. • Identify/prioritize mitigation activities of lifeline buildings and critical infrastructure and coordinate with the DDMA for its implementation. • Place danger sign boards in the areas highly prone to specific type of disasters, such flood, road accidents. <p>Preparedness</p> <ul style="list-style-type: none"> • Designate one Liaison Officer in the department as the Disaster Preparedness Focal Point.

- Take precautionary steps for the protection of government property against possible loss and damage during disaster.
- Formulate guidelines for safe construction of public works.
- Prepare list, with specifications and position, of heavy construction equipment within the district.
- Organize periodic training of engineers and other construction personnel on disaster resistant construction technologies.
- Inspect all roads, road bridges by a bridge engineer, including underwater inspection of foundations and piers. A full check should be made on all concrete and steel works.
- Inspect all buildings and structures of the state government (including hospital buildings) by a senior engineer and identify structures which are endangered by the impending disaster.
- Collection of major utilities which can be used during disaster.

Before Disaster – Alert and Warning

- 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.
- Establish a priority listing of roads which will be opened first. Among the most important are the roads to hospitals and main trunk routes.
- Work under construction should be secured with ropes, sandbags, and covered with tarpaulins if necessary.

During Disaster – Response

- Provide assistance to the damage assessment teams for survey of damage to buildings and infrastructure.
- Adequate road signs should be installed to guide and assist the drivers.
- Begin clearing roads. Assemble casual laborers to work with experienced staff and divide into work-gangs.
- Mobilize community assistance for road clearing by contacting community organizations and 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 the decisions of the District Emergency Operations Center undertake construction of temporary structures required, for organizing relief work and construction of relief camps, feeding centers, medical facilities, cattle camps and Incident Command Posts.
- If people are evacuating an area, the evacuation routes should be checked and people assisted.
- Provide sites for rehabilitation of affected population

After Disaster – Recovery and Reconstruction

- Carry out detailed technical assessment of damage to public works.
- Assist in construction of temporary shelters.
- Organize repairs of buildings damaged in the disaster
- Prepare detailed programs for rehabilitation of damaged public works.
- Arrange technical assistance and supervision for reconstruction works as per request.
- Valuation of the work done and maintaining its official records

Fire Service Department: Departments plays a critical role in controlling fire in the district. Department needs to be vigilant and prepared to responds to emergencies around petrol bunks, festivals, public functions and gathering like *samuhik vivah*, distribution centers for inflammable substances like kerosene. Fire services are provided in the district by Nagar Palika and Nagar Panchayat.

Table 38: Fire Service Department

Non Disaster Time – Preparedness
<ul style="list-style-type: none"> • Observing strictly the Fire Safety rules and regulations. • Strengthening the Fire Extinguishing structures and procurement of modern sophisticated instruments. • Identification of Fire prone Structures and areas and inflammable articles like petrol bunks. • Conducting Mass Awareness program regarding Fire Safety and Security. • Imparting training to local people to handle the Fire hazards. • Imparting training to Electrical Workmen regarding Fire Retardant technology. • Not approving the building plans violating Fire Safety norms.
Before Disaster – Alert and Warning
<ul style="list-style-type: none"> • Checking of alternative escape plan. • Evacuation of people from potentially dangerous places. • Shutting down of all electrical connection. • Keeping Fire Tenders and Fire Fighting personnel ready for operation.
During Disaster – Response
<ul style="list-style-type: none"> • Rescue of persons trapped by fire in various places such as damaged building, transport, restaurants and public places. • Controlling of fire by specified means to minimize the damage. • Controlling and protection of potentially dangerous and inflammable articles.
After Disaster – Recovery
<ul style="list-style-type: none"> • Identification of the cause of fire such as Short-circuit, illegal storage of inflammable articles, use of mobile phones or electrical equipment near petrol bunks. • Restoration of normal life. • Checking of re-observance of fire Safety rules and regulations.

Forest Department: Department plays a crucial role in controlling the environmental hazards in the district by keeping check on the development of forest and ensuring quick response to forest fires.

Table 39: Forest Department

Non Disaster Time – Mitigation and Preparedness
<ul style="list-style-type: none"> • Encouragement of plantation of trees in areas where community people reside. • Conducting Awareness drive publication of Information booklet regarding the Forest Land, and soil utility of forest area, and its benefit to the local community. • Acquiring modern sophisticated instrument and upgradation of existing equipments to protect forest from forest fire, illegal poacher and other natural and manmade disasters. • Acquiring and utilizing modernized GPS system and Satellite based images to monitor the condition of the forest.
Warning Time – Alert and Warning
<ul style="list-style-type: none"> • Preparing the Hand saw and Mechanized saw to meet the potential disaster needs. • Preparing of vehicle, trucks and personnel for the disaster. • Identifying the intensity and expansion rate of forest fire and other disasters.
During Disaster – Response
<ul style="list-style-type: none"> • Mobilization of the machinery and personnel to the disaster affected places. • Drawing Fire Line to check the rate of spreading of forest fire. • Using Sand and soil to extinguish the fire. • Cooperation with other relief teams carrying out mitigation activities. • Proper Coordination and communication with Government functionaries.
After Disaster
<ul style="list-style-type: none"> • Root Cause analysis of the forest fire and other disaster. • Examining the damaged caused by disaster. • Plantation of trees after removing the debris. • Imparting training to the personnel keeping in view of the needs.

Panchyati Raj Department: Department plays a major role in development of the district through implementation of various government schemes. It should implement these schemes with DM as background tone for sustainable development.

Table 40: Panchayat Raj Department

Non Disaster Time
<p>Mitigation</p> <ul style="list-style-type: none"> • Prepare & implement department’s mitigation plan • Ensure that all the development schemes of the department have a mitigation component as an integral part. <p>Preparedness</p> <ul style="list-style-type: none"> • Develop a disaster management plan for the department at district level & update it annually. • Analyze the training needs of the department’s personnel, which include its officials and elected representatives of Gram panchayat, panchayat samiti’s and zila panchayat and organize trainings with the help of HIDM or other agencies. • Conduct gram panchayat level mock drills as part of preparedness. Helping other departments to get cooperation from local communities.

During Disaster – Response
<ul style="list-style-type: none"> • Coordinate with local authorities and support the response efforts • Coordinate the support from unaffected gram panchayats.
After Disaster – Recovery and rehabilitation
<ul style="list-style-type: none"> • Ensure proper distribution of reconstruction schemes and monitoring of the same during Block development committee and zila parishad meetings

Information & Public Relation Department: Department has to play a major role in education and awareness programmes for better organized preparedness and response at government and community levels. It also plays a main role to collect reliable information on the status of the disaster and disaster victims for effective coordination of relief work at district level. It is the primary agency for Media emergency support function for DEOC.

Table 41: Information & Public Relation Department

Non Disaster Time
Mitigation
<ul style="list-style-type: none"> • Creating awareness among local community and media by involving them into various types of disaster management policies and works. • Providing feedback to the community regarding various procedures followed or to be followed during disaster.
Preparedness
<ul style="list-style-type: none"> • Popularize the techniques for preparedness and survival during pre-disaster, disaster and post-disaster period through television, radio and other publicity media. • Ensure strict performance of the allotted duties by radio, television, news media, films and publications related departments. • Take proper and adequate security steps for the protection of own installations and properties. • Prepare guidelines / policy for necessary action by mass media on reporting disasters.
Before Disaster – Alert and Warning
<ul style="list-style-type: none"> • Acquire accurate scientific information from the Scientific and technology department • Disseminate information to all victims in the affected area • Curb the spread of rumors. • Caution the victims about the dos and don'ts during a disaster.
During Disaster – Recovery and Rehabilitation
<ul style="list-style-type: none"> • Coordinate with the DEOCs for required information for relief workers. • Provide information of emergency numbers and other key contact numbers on television, through newspapers, loudspeakers and radio networks. • Ensure that the news to be broadcasted reflects the true and clear presentation of the actual position and does not create panic in the minds of the people and also advises them to desist from taking unreasonable steps. • Take steps for publicity of news and directives relating to the situation issued by the DDMA. • Arrange visit to the affected area by the local and foreign journalists in the interest of

publication of accurate and true report in the news.

- Inform unaffected population about hospitals where they can find victims and where assistance is required.

After Disaster – Recovery and rehabilitation

- Informing local people regarding various reliefs and rehabilitation help provided by Government and other agencies.
- Arrange dissemination of information of the short and long term measures of different ministries, Departments/Agencies for relief and rehabilitation of the affected people.

Public Distribution Department

Table 42: Public Distribution Department

Non Disaster Time – Preparedness
<ul style="list-style-type: none"> • Establishment of Store House at sensitive places and repairing of the same at regular intervals. • Storage of necessary materials keeping in view of disaster. • Ensuring and preventing damage of stored materials.
Before Disaster – Alert and Warning
<ul style="list-style-type: none"> • Keeping the stored materials ready for disbursement as relief during need. • Keeping the transportation vehicle ready to carry the material. • Preventing possible misuse of materials.
During Disaster – Response
<ul style="list-style-type: none"> • Disbursement of good quality relief materials. • Disbursement of adequate quantity of relief material and ensuring minimum standards of relief. • Arrangement to provide security to relief material. • Ensuring that good and adequate quantity of relief materials are delivered to the affected people.
After Disaster – Recovery
<ul style="list-style-type: none"> • Drafting and managing the list of resources. • Proper storage and management of arrived materials from different sources.

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

Table 43: Home Department

Non Disaster Time
<p>Mitigation</p> <ul style="list-style-type: none"> • Make departmental mitigation plan and ensure its implementation. • Organize road safety and fire and festival safety awareness programs for schools and community. <p>Preparedness</p> <ul style="list-style-type: none"> • Prepare an operational Plan for responding to any type of disaster.

- Establish, maintain and train district level search and rescue response team.
- Impart training to the members of Police Force in first aid, evacuation, rescue and relief operations.
- To conduct Search and Rescue training to gram panchayat task forces.
- Prepare an inventory of all man power and equipment available.
- To prepare an inventory of volunteers who have already completed training courses successfully and can be utilized in the search and rescue operations.
- Identify the 'High Risk' and 'Risk' areas for different disasters and instruct the existing police installations located in those areas for keeping themselves in readiness for undertaking emergency rescue, evacuation relief operations.
- Maintain and operate the DEOC throughout the year in preparedness mode during non-disaster times and in emergency mode during disaster times.
- Arrange drills for fire extinguishing, rescue, evacuation and transportation of injured persons and prepare coordinated Action Plans in cooperation with District administration and concerned local agencies
- Hold annual drills on disaster preparedness and response.

Before Disaster – Alert and Warning

- Depute one liaison officer for disaster management within the department.
- Representative to be positioned at the DEOC.
- Maintain communications with the police installations in the areas likely to be affected by disaster.
- Inform nearest police station (from the likely disaster affected area) for dissemination of warning.
- Instruct all concerned to accord priority to disaster related wireless messages, if required by appropriate officials.
- On receipt of directives from the DEOC for evacuation - organize personnel and equipment for evacuation and undertake evacuation operations.
- Earmark reserve task forces, if needed.
- Move task forces to the convenient positions, if needed.

During Disaster – Response

- Send task forces in disaster affected areas.
- Carry out search & rescue operations.
- Maintain law and order.
- Keep close watch for any criminal and anti-state activity in the area.
- Keep direct contact with different officers like District EOC and Incident command
- Assist local administration in removing the dead bodies and debris in affected areas.
- Set up field hospital if required.
- Coordinate with other offices for traffic management in and around damaged areas.

After Disaster – Recovery and rehabilitation

- Maintain law and order, especially during relief distribution.
- Assist the local administration in putting a stop to theft and misuse in relief operation.
- Arrange security of government property and installations damaged in a disaster.

Agriculture Department: Agriculture has a role in assessment of damage to agricultural crops. Their main role is to provide seeds and necessary planting material and other inputs to assist in early recovery.

Table 44: Agriculture Department

Non Disaster Time – Mitigation
<ul style="list-style-type: none"> • Designate a focal point for disaster management within the department. • Identify areas likely to be affected. • Arrange for keeping stock of seeds, fertilizers and pesticides. • A pests and disease monitoring system should be developed to ensure that a full.
Before Disaster – Alert and Warning
<ul style="list-style-type: none"> • Provide timely warning to DEOC/DDMA about droughts. • Check available stocks of equipments and materials which are likely to be most needed after the disaster. • Stock agricultural equipments which may be required after a disaster • Determine what damage, pests or diseases may be expected, and what drugs and other insecticide items will be required, in addition to requirements of setting up extension teams for crop protection, and accordingly ensure that extra supplies and materials, be obtained quickly. • Provide information to all concerned, about disasters, likely damages to crops and plantations, and information about ways to protect the same. • All valuable equipments and instruments should be packed in protective coverings and stored in room the most damage-proof.
During Disaster – Response
<ul style="list-style-type: none"> • Monitor damage to crops and identify steps for early recovery • Ensure that adequate conditions through cleaning operations are maintained to avoid water-logging in flooded areas.
After Disaster – Recovery and rehabilitation
<ul style="list-style-type: none"> • 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.

Tribal Welfare: Department play a role in creating awareness amongst children about the effects of disaster and measures to cope up with the disaster. It should conduct training program for teachers and children. The department will coordinate with the local authority and arrange for mock drills, search and rescue drills.

Table 45: Tribal Welfare Department

Non Disaster Time
Mitigation

- Identify structural and non structural mitigation measures and get them implemented.
- In coordination with the SSA &/or Public works department assess schools and colleges buildings conditions and place the proposal of retrofitting of the structurally unsafe buildings with the state education department and/or DDMA.
- Make departmental mitigation plan and ensure its implementation.
- Ensure that earthquake resistant features are included in new school buildings.

Preparedness

- In consultation with DDMA, state education directorate and state education board include disaster related subjects in the curricula in schools, and colleges.
- Arrange for training of teachers and students on Dm and school safety activities.
- Ensure that construction of all educational institutions in earthquake zones is earthquake resistant.
- Conduct regular mock drills in the educational institutes

During Disaster – Response

- In the event of disaster, place required number of education institutions and their buildings, under the DEOC for use as emergency shelter and relief centre, if necessary.
- Students and staff trained as task forces as part of the school disaster management planning's can provide local voluntary assistance for distribution of relief material and assistance to special needy people in the locality.

After Disaster – Recovery and rehabilitation

- Determine the extent of loss in educational institutions and submit the report to DDMA and state education department.

Department of Power

Table 46: Power Department

Non Disaster Time
<p>Mitigation</p> <ul style="list-style-type: none"> • In coordination with the DDMA, conduct building assessments, identification of structural and non structural mitigation activities. <p>Preparedness</p> <ul style="list-style-type: none"> • Develop a disaster management plan for the department. • Carry out survey of condition of all power supply at state and district level.
Before Disaster – Alert and warning
<ul style="list-style-type: none"> • Check emergency toolkits
During Disaster – Response
<ul style="list-style-type: none"> • Assist authorities to reinstate generators for public facilities such as Hospital, water supply, police stations, telecommunication building and meteorological stations. • Dispatch emergency repair teams equipped with tools, tents and food. • Establish temporary electricity supplies for relief material warehouses.
After Disaster – Recovery and rehabilitation
<ul style="list-style-type: none"> • Review total extent of damage to power supply installations. • Take steps to ensure speedy repair and restoration of power supply installations

Indian Red Cross and NGOs

Table 47: Indian Red Cross and NGOs

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

Preparedness Checklist for the District Collector

- Preparation of the DDMP with the assistance of DDMC after setting up the DDMA for the district.
- Set up District Control Room.
- Establishment of various committees – UADMC, BDMC, GPDMC

- Under the DDMP, district level agencies would be responsible for directing field interventions through various agencies right from the stage of warning to relief and rehabilitation.
- The Collector will co-ordinate all the field responses which include, setting up Transit Camps, Relief Camps and Cattle Camps.

Preparedness Checklist for All Departments	
Common to All department	<ul style="list-style-type: none"> • The department is familiar with the disaster response plan and disaster response procedures are clearly defined. • An Officer has been designated as Nodal Officer for Disaster Management. • Sources of materials required for response operations have been identified. • Orientation and training for disaster response plan and procedures undertaken. • Special skills required during emergency operations imparted to the officials and the staff. • Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed
Department Specific Preparedness Checklist	
Police	<ul style="list-style-type: none"> • Adequate warning mechanisms established for evacuation.
Health	<ul style="list-style-type: none"> • A hospital plan for the facilities, equipment and staff of that particular hospital based on “The Guide to Health Management in Disasters” has been developed. • Hospital staff is aware of which hospital rooms / buildings are damage proof. • All the staff of the hospital has been informed about the possible disasters in the district, likely damages and effects, and information about ways to protect life, equipment and property. • An area of hospital identified for receiving large number for casualties. • Emergency admission procedures with adequate record keeping developed. • Field staff oriented about DDMP, standards of services, and procedures for tagging. • Setting up of Integrated Disease Surveillance Project to monitor the epidemic situation.
Irrigation	<ul style="list-style-type: none"> • Flood monitoring mechanisms can be activated in all flood prone areas • All staff is well aware of the precautions to be taken to protect their lives and personal property. • Each technical assistant has instructions and knows operating procedures for disaster conditions. • Methods of monitoring and impounding the levels in the tanks evolved. • Methods of alerting officers on other dam sites and the district control room, established.

	<ul style="list-style-type: none"> • Mechanisms evolved for forewarning settlements in the downstream, evacuation, coordination with other dam authorities.
PWD	<ul style="list-style-type: none"> • All officers are familiar with pre-disaster precautions and post-disaster procedures for road clearing and for defining safe evacuation routes where necessary.
Agriculture	<ul style="list-style-type: none"> • Information provided to all concerned officers about the disasters, likely damages to crops and plantations, and information about ways to protect the same.
Veterinary	<ul style="list-style-type: none"> • All the staff of the veterinary hospitals and centers has been informed about the possible disasters, likely damages and effects, and information about the ways to protect life, equipment and property. • An area of the hospital identified for receiving large number of livestock. • Emergency admission procedures with adequate record keeping developed.

C 2.2 Hazard specific SOPs for designated Departments and Teams

Below are the SOPs for hazards applicable to *Alirajpur*

Table 48: SOP - Flood

Structural Work
<ul style="list-style-type: none"> • Construction of safety wall and embankment for identified villages and places where the flood water reaches first • Development of Natural Detention Basin for flood prone rivers in the district. • Construction of Check-Dam, Stop-Dam and Reservoir primarily in the flood prone areas as and when required. • Construction of drainage system for flood prone and other areas of the district. • Construction of structures to divert flood water in villages and areas which are prone to it. • Plantation of trees to reduce soil erosion in flood affected places. • Establishment of water level measurement apparatus in all rivers flowing through the district.
Non-Structural Work
<ul style="list-style-type: none"> • Informing people, living in flood prone areas, regarding various types of available Insurance policies. • Identification of places affected by floods previously. • Drafting of special type of Map indicating flood prone areas, direction of river flow, drainage system and all the metallic and gravel roads.

Table 49: SOP - Flood

Structural Work
<ul style="list-style-type: none"> • Rain Water Harvesting – Check Dam, Reservoir and Stop Dam are to be constructed for storing rain water • Deepening and Digging of Water bodies – In order to store more rain water, cleaning of water bodies, deepening and digging activities is to be carried out.

- **Tree Plantation** – In order to prevent drought, tree plantation activities are to be carried out and necessary policies are to be formulated.

Non-Structural Work

- District level arrangement is to be developed in order to ensure efficient utilization of water resources.
- Encouraging farmers to take up insurance related to agriculture.
- In order to spread awareness regarding agricultural insurance several camps is to be organized throughout the district in coordination with insurance companies.
- Mass Awareness program is to be conducted for better maintenance of water resources.
- Encouraging and imparting training to the farmers relating to crops which requires less water.
- Cooperative organization is to be formed and mobilized.

Table 50: SOP - Earthquake

Structural Work

- Identification and retrofitting and renovation of old, dilapidated structures and building.
- Construction of Earthquake resistant (upto specified Richter scale) building and strict adherence to the building construction rules thereof.
- Strengthening, retrofitting and renovation of lifeline building such as District Hospital, Collectorate etc. in the first phase.
(Strict adherence to the rules of earthquake resistant building construction as given in the manual published by Disaster Management Institute, Bhopal is to be ensured)

Non-Structural Work

- **Useful Land Planning** – Preventing the construction of tall structures in Earthquake prone areas. If construction is necessary then strict adherence to the rules of earthquake resistant building construction is to be strictly followed.
- **Training and Workshop** – Arranging Workshop for all the people related to the building construction such as Civil Engineer, Contractor, Supervisor, mason etc. In this manner it will be easy to ensure adherence to the rules of earthquake resistant building construction.
- **Mass Awareness** – In order to reduce the damage ensuring training and education to the families / communities / Government and Non-Government Organisation and departments regarding various aspects of earthquake and its relative effect on livelihood and property.

Table 51: SOP - Epidemic

Structural Work

- Ensuring proper drainage system and proper removal of dirty and polluted water.
- Establishing waste disposal system and construction of dustbin at required places.
- Arrangement of purified drinking water source and construction of lavatory.
- Spraying of D.D. T and bleaching powder from time to time.
- Establishing Primary Health Centers.
- Identifying places for disposal of dead animals and carcass.

Non-Structural Work

- Arrangement of special Health Camp from time to time at sensitive places.
- Conducting awareness program to convey the reasons for spreading of epidemics.

- Proper arrangement of vaccination.
- Conducting special Education and Information campaigning program such as Wall Painting, Folk Songs etc. to aware people regarding various aspects of Health and Hygiene.

Table 52: SOP - Road and Other Accidents

Structural Work
<ul style="list-style-type: none"> • Construction of Two Lanes in the pre-identified places of accidents. • Construction of Sign Boards at the accident prone zone. • Ensuring necessary activities to displace the markets form main roads and State Highways. • Construction of Side Railings of the culverts and repairing thereto. • Marking on the surface of the roads. • Construction of Ramble Strip at the accident prone places and junctions to reduce the speed of the vehicles plying on the roads. • Penalizing overloading of vehicles. Transport department should put a check on over boarding of passengers on the roof, sides and bumper of the vehicles.
Non-Structural Work
<ul style="list-style-type: none"> • Establishment of Pickets at all accident prone zones. • Activation of Mobile Medical Team. • Imparting training of Emergency First Aid Relief to Police personnel posted at accident prone zone. • Ensuring strict observance of the rules of Seat Belt and helmet.

Petrol Bunk Owners and Operators: Flammable vapors will be released when petrol is handled, or transferred between storage tanks and containers and whenever petrol is spilt or exposed to the air. A flammable atmosphere may exist above the liquid in tanks containing petrol. Following structural and non structural measures are required to avoid disaster.

Table 53: SOP - Petrol Bunk Owners and Operators

Structural Work
<ul style="list-style-type: none"> • Identify hazards and assess and control risks arising from the storage and handling of dangerous goods. • Electrical equipment should be excluded from hazardous areas • Appropriate staffing levels at the time of unloading petrol from tanker. • Establish a suitable means of contacting the emergency services • System of supervision when a tanker has to manoeuvre on site will reduce the risk of collision and possible oil spill
Non-Structural Work
<ul style="list-style-type: none"> • Induction, information and training for the staff • Inform non-employees, such as temporary or contract workers, of the relevant risks to them, and provide them with information about the nominated competent persons, and about the fire safety procedures for the premises. • Appropriate information, instruction and training to employees, during their normal working hours, about the fire precautions in workplace

Checklist to avoid ignition source:

Ignition sources, which may be introduced into hazardous areas by customers, employees or contractors, should also be controlled or, preferably, excluded, these include:

- People smoking/using smoking materials such as lighters; tools or equipment which may cause sparks if rubbed or knocked against meta concrete or brick;
- Vehicle engines still running while petrol is being dispensed;
- Equipment transmitting radio- frequencies (such as radios fitted to the emergency services vehicles);
- Portable electrical equipment (such as mobile phones and power drills);
- Hot surfaces (such as turbo-chargers and catalytic converters fitted to vehicle engines)
- Naked flames;
- Static electricity; and
- Faulty wiring or light source very close to inflammable substance

Restaurant owners and shops selling inflammable material

Table 54: SOP - Restaurant owners and shop selling inflammable material

Structural Work
<ul style="list-style-type: none"> • Identify hazards and assess and control risks arising from the storage and handling of dangerous goods. • Electrical equipment should be excluded from hazardous areas • Establish a suitable means of contacting the emergency services
Non-Structural Work
<ul style="list-style-type: none"> • Appropriate information, instruction and training to employees, during their normal working hours, about the fire precautions in workplace

Checklist to avoid fire in restaurant and food shops:

- Care should be taken while operating open *chullah*.
- Gas cylinder (LPG) stock should be kept away from kitchen.
- Flammable materials should not be kept in the kitchen
- Electrical wiring needs to be inspected and corrected at the site of inflammable substance
- Children should be restricted from working in the kitchen.
- Gas burner should be closed after use.
- Open *Chullah* should be protected with covering after use.
- Fire extinguishing substances like water, sand etc should be kept at reachable distance.
- Staff should be aware of safety measures.

Checklist for shops selling inflammable material

Public distribution shops or general stores dealing with inflammable material like kerosene and gas are required to follow safety measures to avoid fire incidences.

- Inflammable material should not be exposed to fire.
- Materials should be kept in fire safe containers
- Electrical wiring needs to be inspected and corrected at the site of inflammable substance

C3 Financial Provisions for Disaster Management

C 3.1 District Disaster Response Fund

DDRF will basically cover the disaster response, relief, and rehabilitation part. The State Disaster Response Fund (SDRF) and Chief Minister's Relief Funds are also available to meet any emergency requirement, at the district level.

According to section 48 under Chapter IX, Finance, Account and Audit) of Disaster Management Act, 2005, provisions are to be made by state government for the District Disaster Response Fund. The two main windows presently open for meeting relief expenditures are the Calamity Relief Fund (CRF) and National Calamity Contingency Fund (NCCF).

C 3.2 District Disaster Mitigation Fund

DDMF will basically cover the disaster mitigation and preparedness activities.

According to section 48 under Chapter IX, Finance, Account and Audit) of Disaster Management Act, 2005, provisions are to be made by state government for the District Disaster Mitigation Fund. This fund needs to be used for various disaster mitigation needs of the district which are not fulfilled through other schemes of government. This fund can be used to meet short term (immediate loss) or long term needs (setting up of fire stations, watershed management, planting trees along the river etc) of the district.

C4 Coordination mechanisms with other stakeholders

C 4.1 Mapping of stakeholders in the District

C 4.1.1 Private and Public Sectors

Presently, there are no major industries in the district in the private or public sector that can assist with equipments or human resource during response and recovery phase. There are few contractors from whom assistance can be sought for equipments and medical aid. Currently, tenders are floated to get the required inventory from private vendors to deal with flood situation. NVDA arranges for the required inventory from the vendors.

C 4.1.2 Non Governmental Organizations and Community Based Organisations

Local NGOs and CBOs, due to their proximity to the community, can act as a vital link between government and the community particularly during emergencies. They are in a better position to appreciate the area and time specific problems of the people and their flexibility in approach makes them more acceptable in the community. The Role of NGOs and CBOs in disaster management will be in three stages:

Preparedness
<ul style="list-style-type: none"> • Community awareness and capacity building • Community Based Disaster Management Planning.

- Assisting and participating in preparation of disaster management plans at Block, district, municipal and gram panchayat levels.
- Support in vulnerability assessment and mapping
- Support in preparing mitigation strategy and plans; assessments for structural and non-structural mitigation.
- Support in policy review on disaster management
- Reviewing and upgrading DM Plans
- Documentation

Emergency Response

- Dissemination of warning
- Evacuation, Search and Rescue
- Relief distribution
- Medical aid
- Emergency shelter
- Immediate restoration
- Women and Child care
- Trauma Counseling
- Coordination of Volunteers
- Community mobilization
- Documentation

Recovery

- Restoration of damaged community structures (schools, etc.)
- Restoration of livelihood
- Rehabilitation of vulnerable groups
- Restoration of environment
- Managing emergent group activities
- Recovery planning, coordination, evaluation
- Documentation

C 4.1.3 Religious Institutions

There is only one major religious institution which can be used for shelter during disaster is Shri Laxmani Teerth around 8km from *Alirajpur* on Kukshi road. It sports a large hall which can be used for shelter.

C 4.1.4 Academic Institutions

Schools and colleges premises can be used as relief centers and temporary shelter during flood or any other disaster.

The Disaster management Institute, Bhopal can act as the provider of subject specific expertise for disaster management planning.

Disaster Management Institute,
Prayavaran Parisar, E-5, Arera Colony,
PB No. 563 Bhopal-462016, MP (India)

Tel: +91-755-2466715, 2461538, 2461348, 293592, Fax: +91-755-2466653,
E-mail: dmi@dmibhopal.nic.in

C 4.1.5 International Humanitarian Organizations

The only prominent International Humanitarian Organization active in Alirajpur is Red Cross society. It is located in the premises of district hospital.

Indian Red Cross Society Red Cross Bhavan Shivaji Nagar Bhopal- 462016. Code: 0755 (O) 07552550441. Fax- 0755 2552475

During a major disaster International Organizations which have presence in Madhya Pradesh and India like UNICEF, WHO, Oxfam, save the children can be approached for relief measures.

C 4.2 Responsibilities of the stakeholders

Key responsibilities of the stakeholders are:

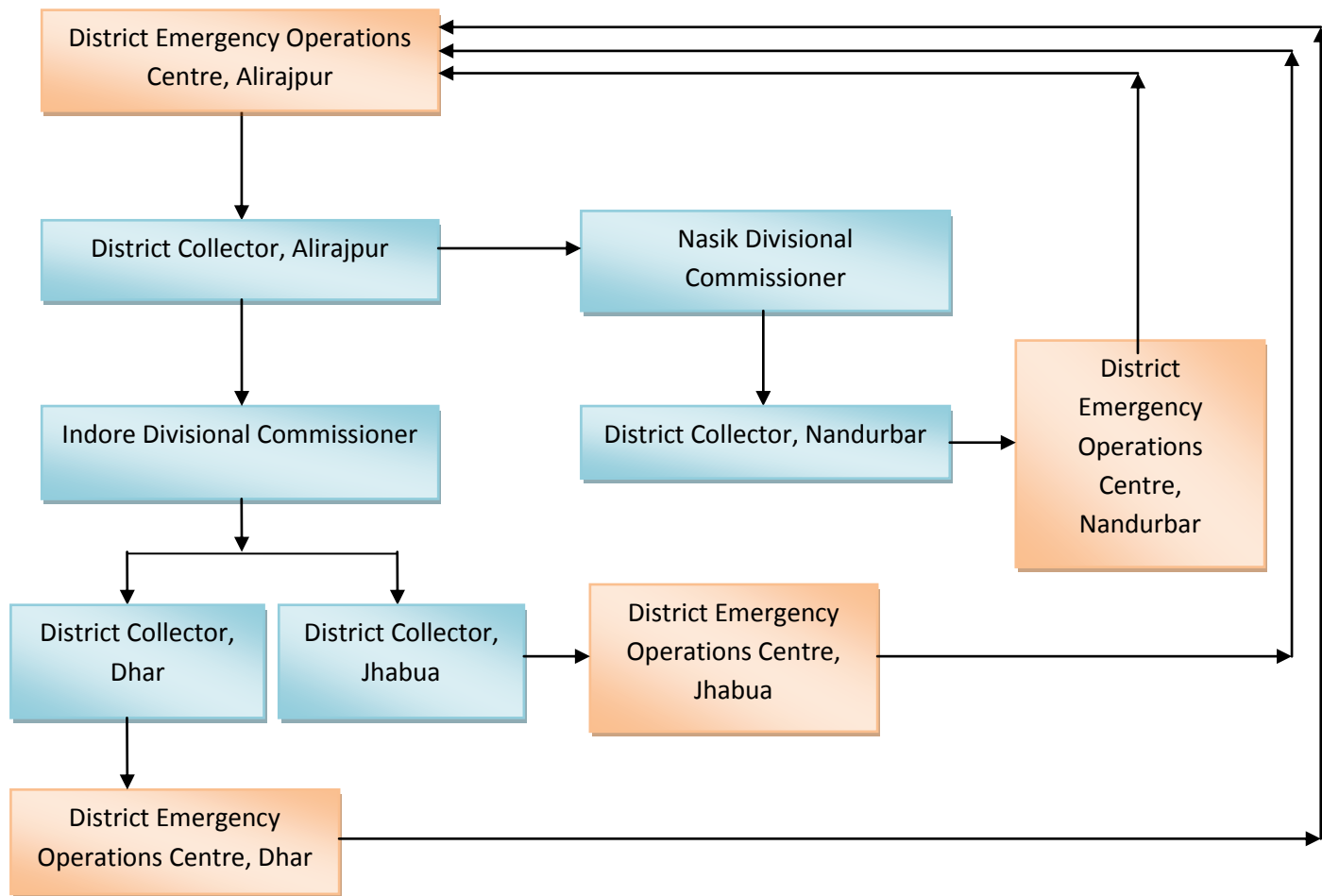
- Informing the district authorities about the specific vulnerability of the area.
- Assisting the district authorities in implement mitigation strategies for the vulnerability.
- Coordinating with the Search and rescue team.
- Providing district authorities the required resources at subsidized rates during the disaster.
- Providing all the available facilities with them to the disaster affected victims
- Volunteering to organize and maintain the relief centers.
- Working with the Disaster team in restoration of livelihoods
- Getting funds for relief measures.
- Arranging for resources needed in health institutions to deal with emergency.
- Being actively connected with the restoration and reconstruction process.

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

During emergencies district may require support from other adjoining districts, which are not affected by disasters. For this *Alirajpur* EOC can seek help from other districts through Divisional Commissioner or State EOC.

In *Alirajpur* district, usually floods are the most frequently occurring disaster due to the Sardar Sarovar Project on Narmada Rivera and Jobat Project on Hatni near Fata. Any abnormally high levels of rainfall on the course of Dam can have an effect on the water levels of Narmada River in the villages of Sondwa block of *Alirajpur*. Hence there is a need to establish proper coordination mechanism with district authorities at *Jhabua, Dhar, Khandwa, Barwani and Nandubar(Maharashtra)* in order to be get early warnings and alert about any kind of flood related disasters. Based on this information, necessary steps can be taken up in *Alirajpur* district to prevent any loss of life or property.

In case of any other major disaster in the district, nearby district officials can be contacted for relief and assistance. Below mentioned is the Standard Operation Procedure for the Inter district coordination.



Important Contact Numbers

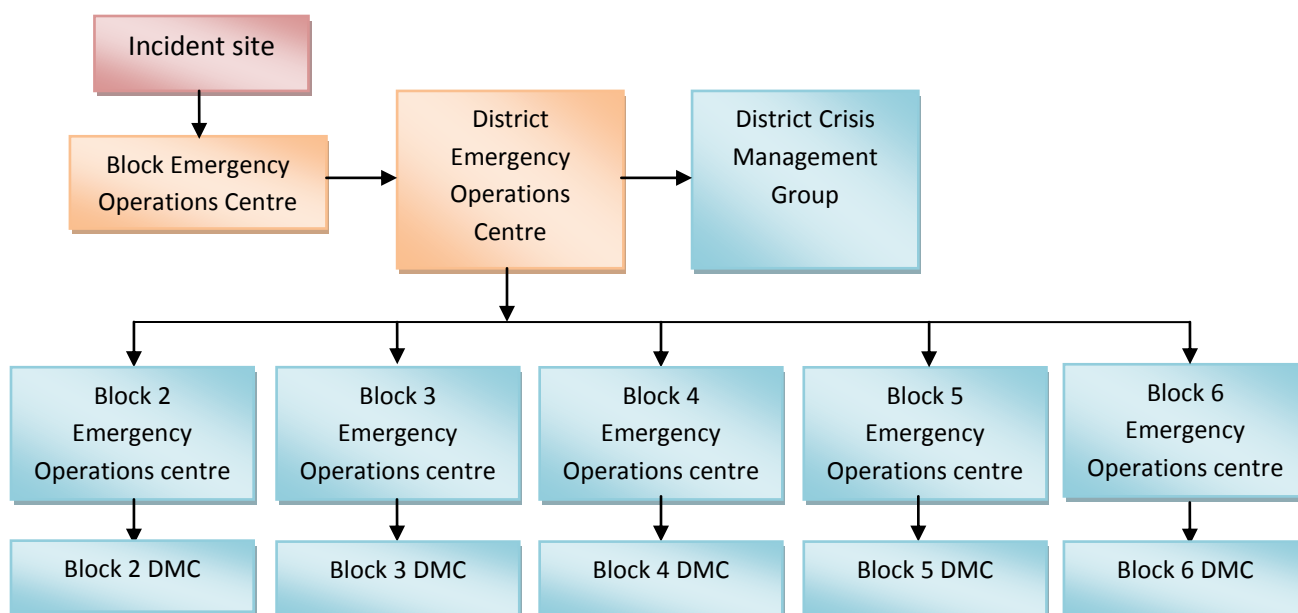
District	Name and Designation	Office number	Residence
Barwani	Shri Shirman Shukla, Collector	07290-224001	07290-224002
Dhar	Mr. B. M. Sharma, District Magistrate	07292 -234702	07292 -234701
Jhabua	Jaishri Kiyawat, District Collector	07392-243401	07392-243402
Khandwa	Shri Kavindra Kiyawat	0733 - 2226666	0733 - 2223333
Nandurbar(Maharashtra)	Shri Dr A T Kumbhar, Collector	02564- 221001	-
Indore	Shri Prabhat Kumar Parashar, Commissioner Indore Division	2535222, 2435111	2700888,2701702

C6 Intra-District Coordination Mechanisms – [with Block Headquarters]

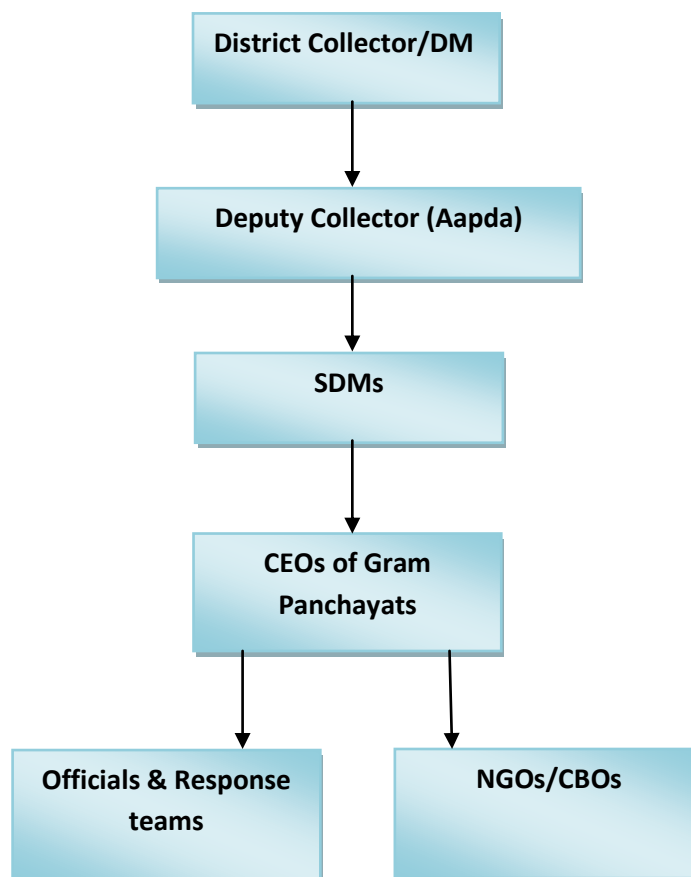
The recommended “integrated disaster management plan” follows ‘Top to Bottom’ approach. Recommended structure for disaster management committees are from gram panchayat level and block level up to the district level. On each stage, the nodal contact people are appointed who will ensure the adequacy of 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.

Usually, the District Emergency Operation Center/District Control Room will take charge of the disaster management activities and controls and directs the block level and gram panchayat level control rooms and nodal agencies. Local authorities at the village level will follow the directions and get all kinds of assistance from the gram panchayat and block level committees.

Below is the Intra District coordination mechanism which should be followed in an event of major disaster in the district.



Mentioned below is the mechanism followed in the district:



Currently, no committees exist at Block level and Gram Panchayat level for disaster management. Meeting is organized under Chairmanship for Collector for flood control and instructions for prevention and preparedness measures are given to respective departmental heads.

C7 Dissemination of DM Plan

After the approval of plan by SDMA, the Alirajpur 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

- Internet
- District Website
- Government Offices like Collectorate, SP Office, PWD, Zila Panchayat, Gram Panchayat

C 7.1 Plan Evaluation

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 committee under the aegis of DDMA.

C 7.2 Plan Update

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 and coordination purposes.

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 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 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.

C8 Annexure

C 8.1 District profile

Table 55: Rainfall Data

Tehsilwise Annual Rainfall, 1998-2007

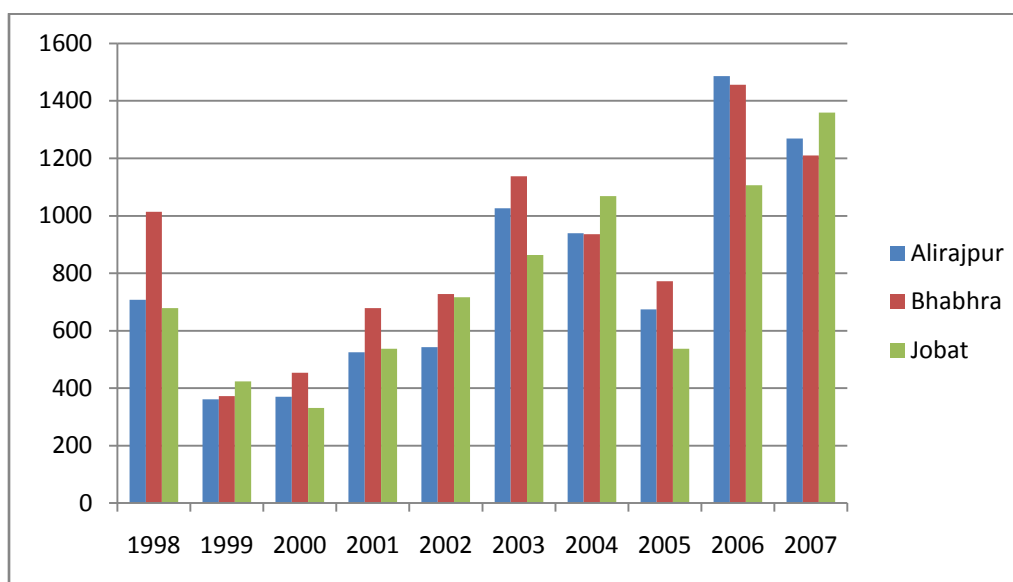
Year	Alirajpur*	Bhabhra	Jobat**
1998	707	1014	678
1999	361	372	423
2000	370	453	331
2001	525	678	537
2002	543	728	716
2003	1026	1138	863
2004	939	936	1068
2005	674	772	537
2006	1486	1456	1106
2007	1269	1210	1359
Average	790	876	762

Source: Resource Atlas of Jhabua, MP Council of science and Technology, 2008

*Alirajpur Tehsil comprise of Alirajpur, Katthiwada and Sondwa

** Jobat Tehsil comprise of Jobat and Udaygarh

Tehsilwise Annual Rainfall, 1998-2007



Block	Police Station	Police Chowkees
Alirajpur	3	2
Jobat	1	1
Katthiwada	3	2
Chandra Shekhar Azad Nagar	1	2
Sondwa	2	2
Udaygarh	2	2
Block	Branch Office	Sub Post Office
Alirajpur	20	3
Jobat	16	1
Katthiwada	4	1
Chandra Shekhar Azad Nagar	10	1
Sondwa	11	1
Udaygarh	1	0

Table 56: List of NGOs

S.No	Name	Location	Telephone No	Chairperson
1.	Lok Vikas and Anusadhan Trust	Jhabua	9826011413	Shri Tapan Bhattacharya
2.	Maa Sharda Vidya Mandir	Umralli, Alirajpur	9425486018	Shri Bhabhendra Singh Parihar
3.	Association for social reform and action	Jobat	9424064708	Shri Man Singh Kanaas
4.	Sangharsh Sewa Trust	Bori	9907529441	Shri Man Singh Baghel
5.	Kankeshwari Karyasheel Sanstha	Bhabhra	9907544378	Smt. Sangeeta Joshi
6.	Tribal Welfare Society	Alirajpur	07394-200227	Smt. Sarita Shankar
7.	Kalyani Samudahik Vikas Sansthan	Katthiwada	07394-264129	Shri Yakub Ali
8.	Shri Kamal Gaushala	Bhabhra	07393-271590	Shri Harish Kumar Trivedi
9.	Safal Grameen Vikas Sansthan	Alirajpur	9425192421	Shri Ramanuj Sharma

10.	Nidaan Shakshnik avam Samajik Sansthan	Udaygarh	07393-286094 9424095340	Shri Mohan Khode
11.	Laxya and Ansh Shiksha Sewa Samiti	Udaygarh	07393-286094 9993761220	Shri Rakesh Vani
12.	Anshul Vidya Mandir	Udaygarh	9424022118	Shri Majeda Khan
13.	New Ma Sharda Vidya Mandir Samiti	Udaygarh	9406884784 9893844255	Shri Yatendra Narayan Sharma
14.	Durgavati Adivasi Mahila mandal Samiti	Jobat	9179722543	Smt. Jhibali
15.	Laxmi Mahila Mandal Samiti	Jobat	-	Smt Rasheda
16.	Laxmi Adivasi Mahila Mandal Samiti	Jobat	9424019625	Smt Phoolbai
17.	Garib Nawaj Mahila Mandal Samiti	Jobat	07393-287875	Smt Shabena
18.	St. Abu Education and Development Socity	Jobat	-	A.R. Tiganle
19.	Maa Vabhav Lakshmi Grameen Shahari Mahila Vikas Samiti	Jobat	9484714505 9630373868	Dr. Ajay Jadhav
20.	Pahal Shakshnik Samajik Lok Chetna avam Grameen Vikas Sansthan Samiti	Alirajpur	9424837795	Shri Sudhir Jain
21.	Vocation Shiksha Samiti	Bori	9752394679 9752469128	Shri Ram Maurya
22.	Chetna Yuva Mandal	Udaygarh	-	Shri Shilendra Nema
23.	Om Anand Dham Samiti	Jobat	9425192327	Shri Jovardha Asoriya

C 8.2 Resources

1. India Disaster Resource Network (IDRN):

India Disaster Resource Network is an online inventory designed as a decision making tool for the Government administrators and crisis managers to coordinate effective emergency response operations in the shortest possible time.

The Ministry of Home Affairs, Government of India has developed a web-based database of resource named India Disaster Resource Network (IDRN). This database contains information about equipments (such as boats, bulldozers, chain saw, etc), manpower (divers, swimmers, etc) and critical supplies (oxygen cylinder, fire fighting foams, etc) required during response. It can be accessed by anyone and its direct link is <http://idrn.gov.in/publicaccess/countryquerypublic.asp>.

2. India Disaster Knowledge Network (IDKN):

India Disaster Knowledge Network (IDKN) is a web portal, that offers a broad array of resources and services, such as knowledge collaboration, networking, maps, emergency contact information system and several other valuable information related to natural disasters. It provides a platform to share knowledge and create an environment to learn about disaster management through interactive process. The main goal of IDKN is to create an easy to use unified point of access to disaster management knowledge and services and facilitate in accelerated and improved quality of disaster mitigation and response.

For more details please visit <http://saarc-sadkn.org/countries/india/default.aspx>

C 8.3 Media and information management

Below list is available with Public Relationship Officer for media management.

S.No.	Name	News Agency	Mobile
1	GOPAL MELANA	DAINIK BHASKAR	9425485751
2	RAGHU KOTHARI	DAINIK CHAUTHA SANSAR	9425925216
3	ASHUTOSH PANCHOLI	DAINIK NAIDUNIA	9425485824
4	SURENDRA VERMA	DAINIK RAJ EXPRESS	9425101366
5	DEVENDRA NIMOHI	DAINIK PATRIKA	9827317988
6	MAHESH VISHWAKARMA	DAINIK PEOPLES SAMACHAR	9752231888
7	RAKESH TANWAR	DAINIK FREE PRESS	9827317988
8	RAFIQ QURESHI	DAINIK DAFTAR	9425942229
9	DEEPAK RATHORE	DAINIK DESHBANDHU	9424062444
10	HITENDRA SHARMA	DAINIK SWADESH	9425485734
11	RAJENDRA SHARMA	DAINIK BHARTIYA PRAVAKTA	9907005033
12	SOHEL QURESHI	DAINIK DABANG DUNIYA	9617919256
13	JAYANTILAL VANI	INDORE SAMACHAR	9425192444
14	SHAJADA KHAN	DAINIK AVANTIKA	9893770965
15	ASHOK OZHA	DAINIK CHETANA	9993238089
16	DILIP VANI	DAINIK TIMES TODAY	9630043502
17	FIROJ KHAN	DAINIK SADHANA/ AZAD NEWS	9981855777
18	VIKRAM SEN	DAINIK JAGARAN	9993339515

19	ASHISH VAGHELA	DAINIK NAVBHARAT	9407427144
20	SHAKIL QURESHI	DAINIK INSAF KA PRAYAS	9893785462
21	VASHIM RAJA	SAHARA SAMAY	9425970322
22	GAFFAR KHAN	DAINIK PRABHAT KIRAN	9993678701
23	ASIF SHEKH	DAINIK NEWS QUAINT	9173332537
24	S. P. S. BHODARIYA	D D ONE/ SAHARA SAMAY	9425487490
25	GAJENDRA BHATIA	DAINIK PRASARAN	9407498800
26	SACHIN JOSHI	E TV NEWS	9993141867

C 8.4 Important Contact numbers

Table 57: Departmental Contacts

Name	Designation	Phone No.(Off.)	Phone No.(Res.)
Shri Rajendra Singh	Collector & District Magistrate	07394-234400	07394-234500
Smt. Jamuna Bhide	Additional Collector	07394-234522	07394-234502
Dr. Abhay Singh Kharari	Dy. Collector		07394-234648
Shri Khandekar	Dy. Collector	07394-233848	
Ms. Chaitra N	S.P.	07394-233350	07394-233450
Mr. Sitaram Satya	A.S.P.	07394-233534	-
Shri J S Baghel	S.D.M. (Alirajpur)		9893649231
Shri Ambaram Patidar	S.D.M. (Jobat)	07393-288031	07394-288031
Shri R N Verma	D.F.O.	07394-233530	-
Shri Sumat Jain	District Commandant, Home Guard, Jhabua	07392-294305	07392-2490080
Dr. Surendra Baghel	C.M.H.O.	07394-233704	9425449946
Shri Vivek Singh	C.E.O. Zila Panchayat	234405	-
Shri H.S. Shafdari	AD CEO ZP	234405	
Shri L M Damor	C.E.O. Janpad Panchayat-Alirajpur	233005	9425436132
Shri B. S. Rawat	C.E.O. Janpad Panchayat-Udaigarh	286013	-
Shri M. L. Taak	C.E.O. Janpad Panchayat-Jobat	0 7393-287593	-
Shri S. S. Baghel	C.E.O. Janpad Panchayat-Bhabra	9425942827	-
Shri Pramod Singh	C.E.O. Janpad Panchayat-Katthiwada	8827472948	-
Shri N.S Parmar	C.E.O. Janpad Panchayat-	07394-272725	-

	Sondwa		
Shri P. K. Pandey	Tehsildar (Alirajpur)	07394-233563	-
Shri O. P. Lard	Tehsildar (Bhabhra)	07393-271408	-
Shri Kailash Chandra Thakur	Tehsildar (Jobat)	07393-288235	-
Shri M K Nayak	Executive Engg, PWD	07394-233548	
Shri G.V.Tiwari	Executive Engg, RES	07394-234275	
Shri K.P.Verma	Executive Engg,PHE	07394-233706	
Shri A.K.Kothiwala	Executive Engg, Water	07394-233531	
Shri Ranjeet Singh Jamara	District Women and Child Development Officer	07394-234350	-
Shri Vinod Chauhan	Supply Dept(Food)	07394-233115	-
Shri Santosh Loharia	DPO	9425485401	
Shri Shakle	SDO NVDA, Kukshi	9893066730	
Dr. S.K. Duriya	Veterinary, Jhabua	244354,344356	9425486882
Shri Mahesh Tomar	Stano to Collector	07394-234772	07394-234222
Nagar Palika, Alirajpur	Fire Services	07394-233516	-

Table 58: Police Department Contacts

Rank/Region	Name	STD	Telephone	Mobile
Subdivisional Police, Alirajpur	Shri L S Solanki		233528	9424009578
Subdivisional Police, Jobat	Smt Jyoti Thakur	07393	288273	9898412180
Reserve Inspector	Shri HinduSingh Muval	-	-	9424860065
Control Room Operator	Shri Jagannath Kanash	07394	234333	9893483304
Police Station, Alirajpur	Shri Satish Arya	07394	233529	9424644658
Police Station, Sorwa	Shri Dilip Puri	07394	280723	7869714429
Chowkee Foolmaal, Thana Sorwa	Shri Mahendra Thombare	07395	272030	9893510194
Police Station Sondwa	Shri D R Suryavanshi	07395	272729	9424878641
Chowkee Umrli, Thana Sondwa	Shri Amar Singh	07395	272558	9752787717
Police Station Bakhatgarh	Shri R C Bhaskar	07395	272118	9893866010
Chowkee Chaktala, Police Station Bakhatgarh	Shri Surendra Dubey	07395	273222	9406611351
Police Station Katthiwada	Shri Mewalal Gaud	07394	261030	9176653564, 9425187930
Chowkee Aamkhut Police Station Katthiwada	Shri RaiSingh	07394	280323	9406142113
Police Station Chandpur	Shri PesuSingh Damor	07394	263033	9893739077

Police Station Jobat	Shri Rakesh Vyas	07393	288221	9425196000
Chowkee Khattali Police Station Jobat	Shri N S Jadoon	07393	286646	9826085256
Police Station Bori	Shri Sher Singh Pawar	07393	286418	9425410565
Chowkee Para Police Station Bori	Shri Vipin Verma	07393	271166	9425487788
Police Station Udaygarh	Shri D R Bacchan	07393	286029	9893752486, 9425072425
Chowkee Kanakakad Police Station Udaygarh	Shri Ramesh Damor	07393	286213	8889185991, 9425967787
Police Station Ambua	Shri Anish Khan	07393	261033	9425051051, 9479994418
Chowkee Jhiran Police Station Ambua	Shri Dinesh Shukla	07393	271840	8085644606
Police Station ChandraShekhar Azad Nagar	Shri Antar Singh Jamara	07393	271577	9424576482
Chowkee Sejawada Police Station ChandraShekhar Azad Nagar	Shri Pema Bhuriya	07393	-	9926330969
Chowkee Barjhar Police Station ChandraShekar Azad Nagar	Shri Babulal Jhad	07393	271655	9977150383
Police Station Nanpur	Shri Arjun Singh Mavi	07394	262026	9752618731

Table 59: Contacts - District Hospital, Alirajpur

Doctor's Name	Position	Specialisation	Mobile	Telephone
Dr A R Chandra(Gawali)	Civil Surgeon	Gynecologist	9425485989	233789
Dr. Surendra Bagel	CHMO			07394- 233704
Dr. K C Gupta	PGMO	Orthopedic	9425485432	-
Dr. P K Dhoke	Medical Specialist	Medical Specialist	9425345818	-
Dr R Mandal	PGMO	Surgery	9425413169	-
Dr B K Sahu	PGMO	Pathologist	9424063134	233468
Dr. N S Davor	Medical Office	Medical Office	9752130008	233854
Dr Vandana Dhoke	Gynecologist	Gynecologist	9425485920	-
Dr. Sachin Padidar	Child Specialist	Child Specialist	9827214885	-
Dr Pramay Ravadiya	Dentist	Dentist	9893709120	-
Dr Sanjay Solaki	-	-	-	-
Dr. Santosh Solanki	TB Specialist	-	-	-

Table 60: Medical Store Details

Shop Name	Location	Contact No.
Maheshwari General Store	Alirajpur	
Sonam Medicos	Alirajpur	
Rajendra Medical Store	Jobat	
Harsh Medical & General Store	Nanpur	
Azad Medical Store	Bhabhra	
Sanjay Medical Store	Khattali	
Gayatri Medical Store	Udaygarh	
Basant Medical Store	Bori	
Mahakaal Medical and General Store	Umralli	

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

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.

Do's

General

- Inform the District Control Room about the disaster and call for rescue team.
- Clear the affected area using equipments available locally or from the disaster management committee.
- After the impact, search for the missing persons and rescue them.
- Identify the safe ground and arrange to relocate people to selected area.
- Move the victims to safe location and provide necessary health facility
- Rescue team comprising of experts (medical doctors nursing assistants, chemist, police personnel) to put on full protective gear.
- Forecast the conditions on radio, cable TV and loudspeaker and keep people aware of the present conditions.
- Move the carcass of the animals/pets from the camps and nearby areas.
- Keep the deceased in different location and allow people to people to identify their family members.
- Inspect for Gas leaks and if you smell gas or hear blowing or hissing noises, open a window and quickly vacate the building.

Epidemic

- Put the infected person in quarantine room.
- Disinfect the place.
- Destroy the affected food commodities

Don't's

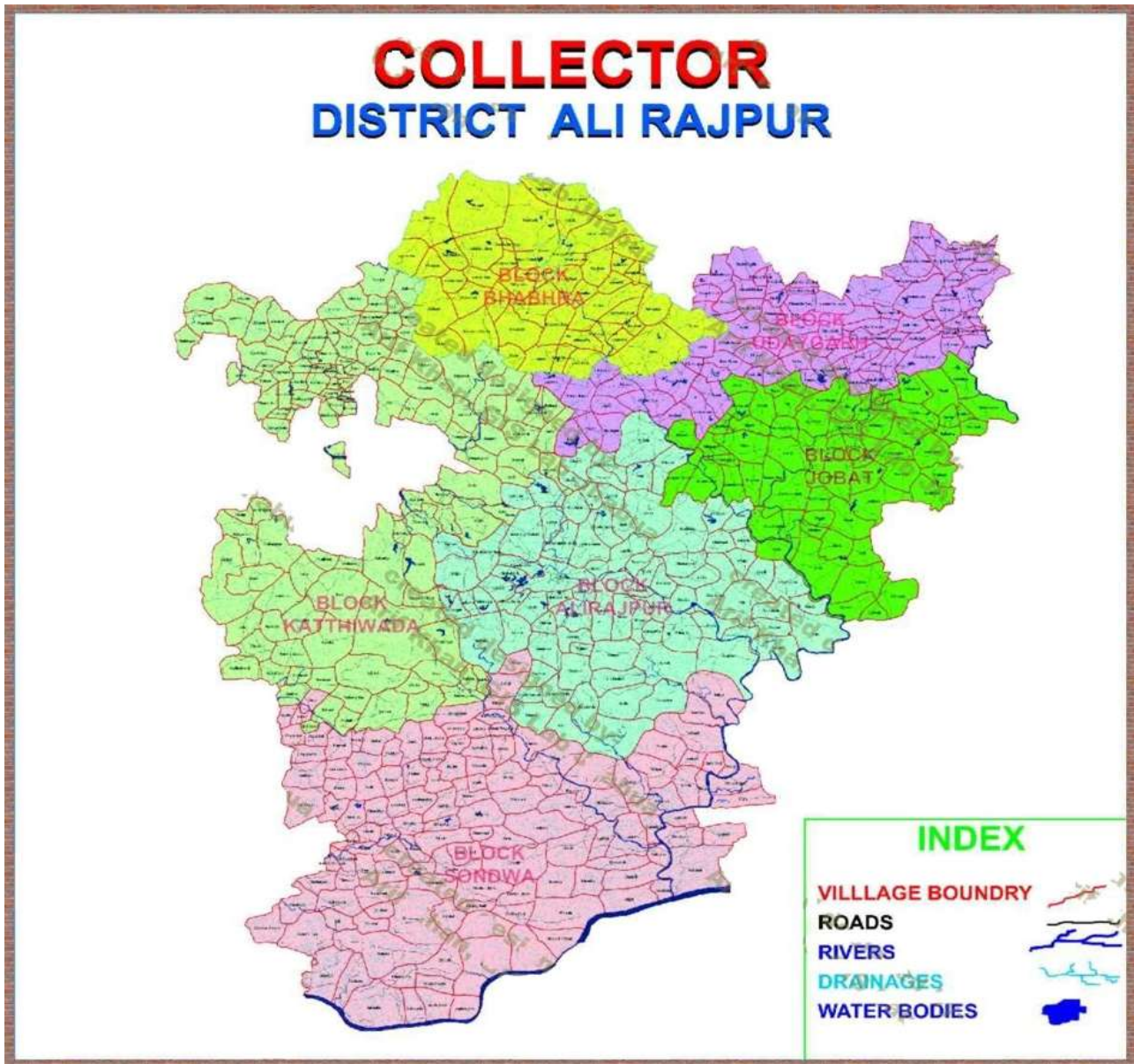
General

- Do not follow any shortcut for rescue work.
- Don't crowd near the victim.

Epidemic

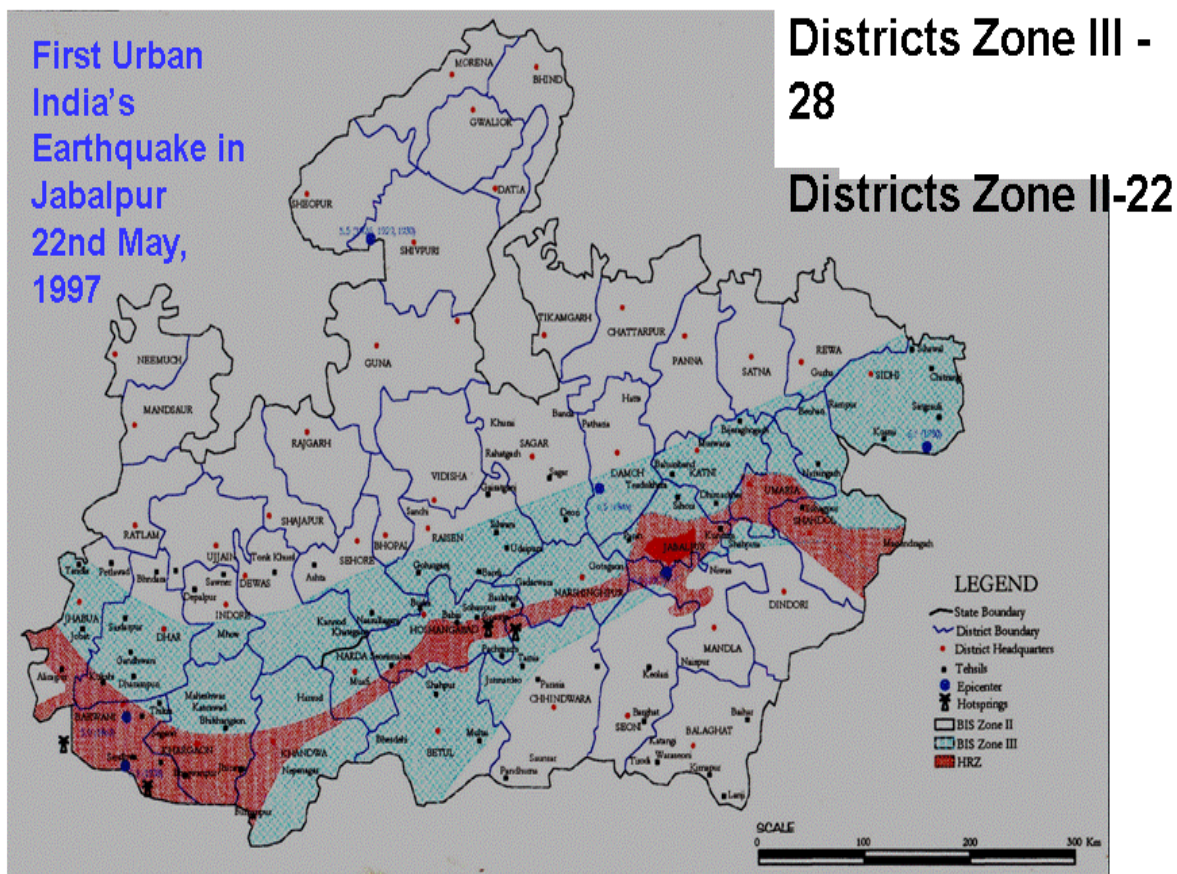
- Do not handle contaminated clothing and protective gear with bare hands- put these in sealed in polythene cover for safe-disposal later.
- Those who are in the rescue crew should not remove the protective suits until they are declared safe.
- Don't get back in to the cordoned off area till final clearance without protective gears.

C 8.6 Detailed Maps



Vulnerabilities in Alirajpur as identified by Government of Madhya Pradesh

EARTHQUAKE VULNERABILITY OF MADHYA PRADESH

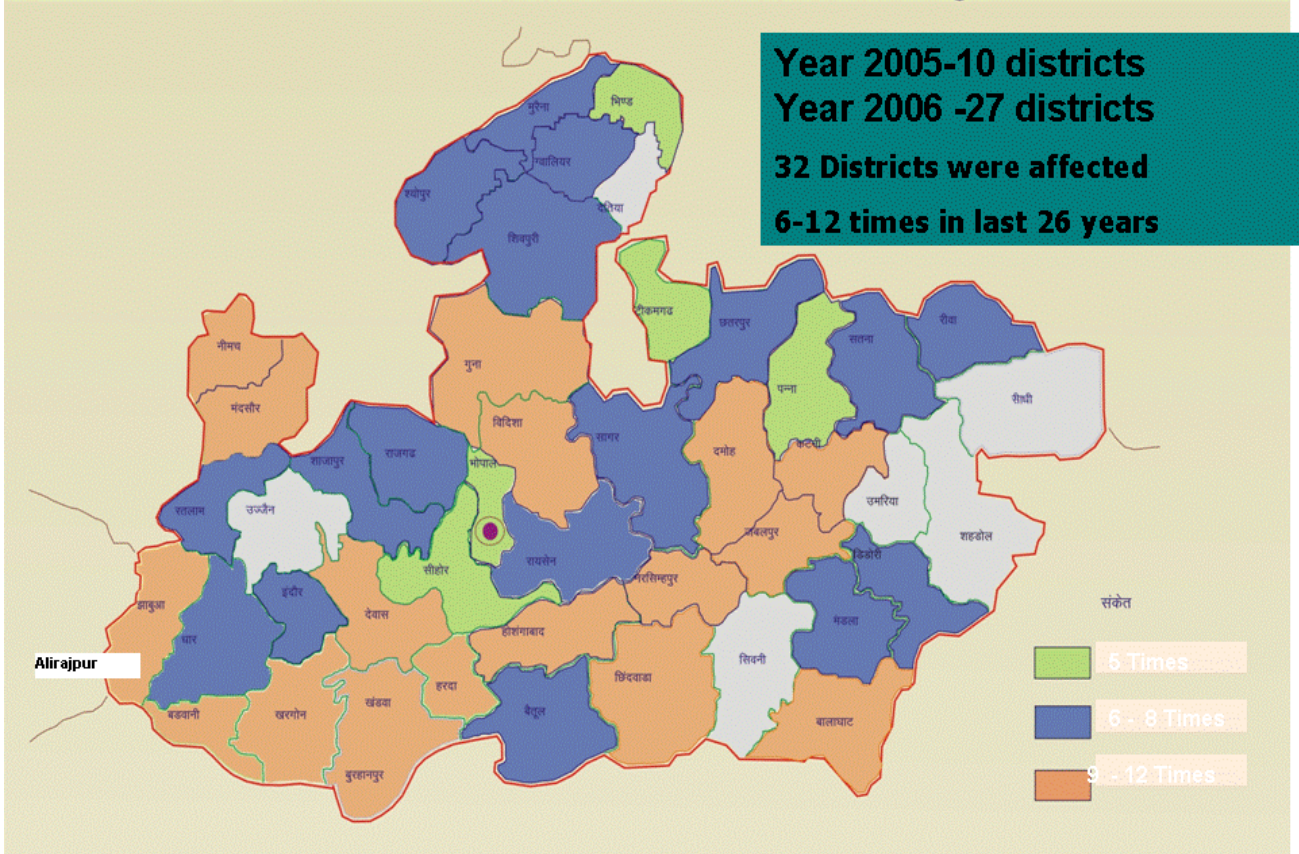


In Madhya Pradesh, 28 districts partly or completely fall under Zone-III, having moderate seismic risk viz. Jabalpur, Khargone, Indore, Khandwa, Dhar, Raisen, Dewas, Sehore, Betul, Sidhi, Shadol, Damoh, Narsinghpur, Hoshangabad, Badwani, Jhabua, Umaria, Chhindwara Harda, Burhanpur, Anuppur, Sagar, Seoni, Mandla, Dindori, Katni Singhroli & Alirajpur

Source: www.mpsdma.gov.in

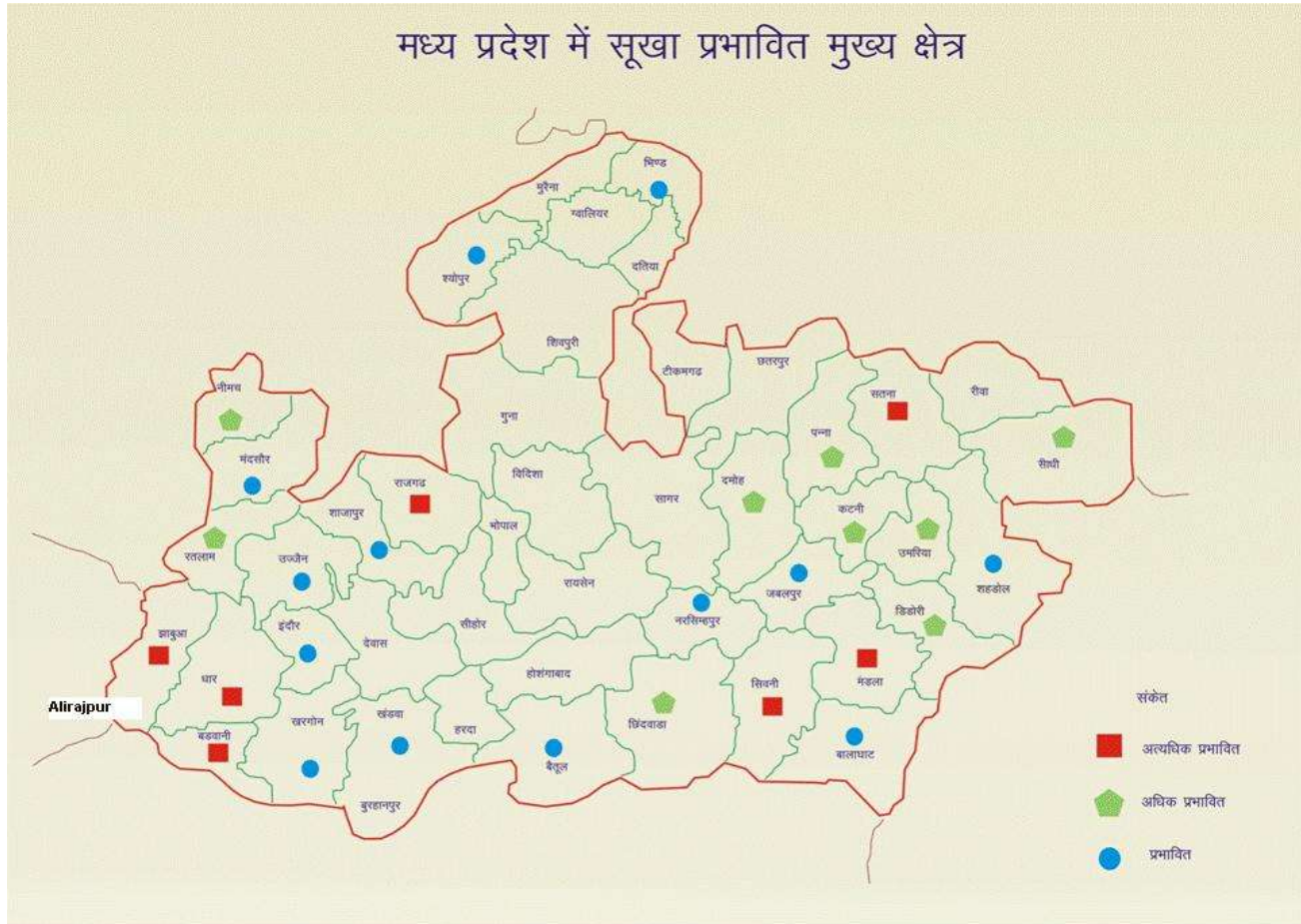
In the above map, *Alirajpur* has been identified in Highly Sensitive Zone of BIS Zone III. Area in the district which are sensitive are Udaygarh, Jobat, ChandraShekhar Azad Nagar, Northern part of Katthiwada, Eastern part of Alirajpur and Southern part of Sondwa.

FLOOD AFFECTED DISTRICTS OF MADHYAPREDESH



Source: www.mpsdma.gov.in

Alirajpur(shaded in red) is identified with 9-12 flood situation in last 26 years

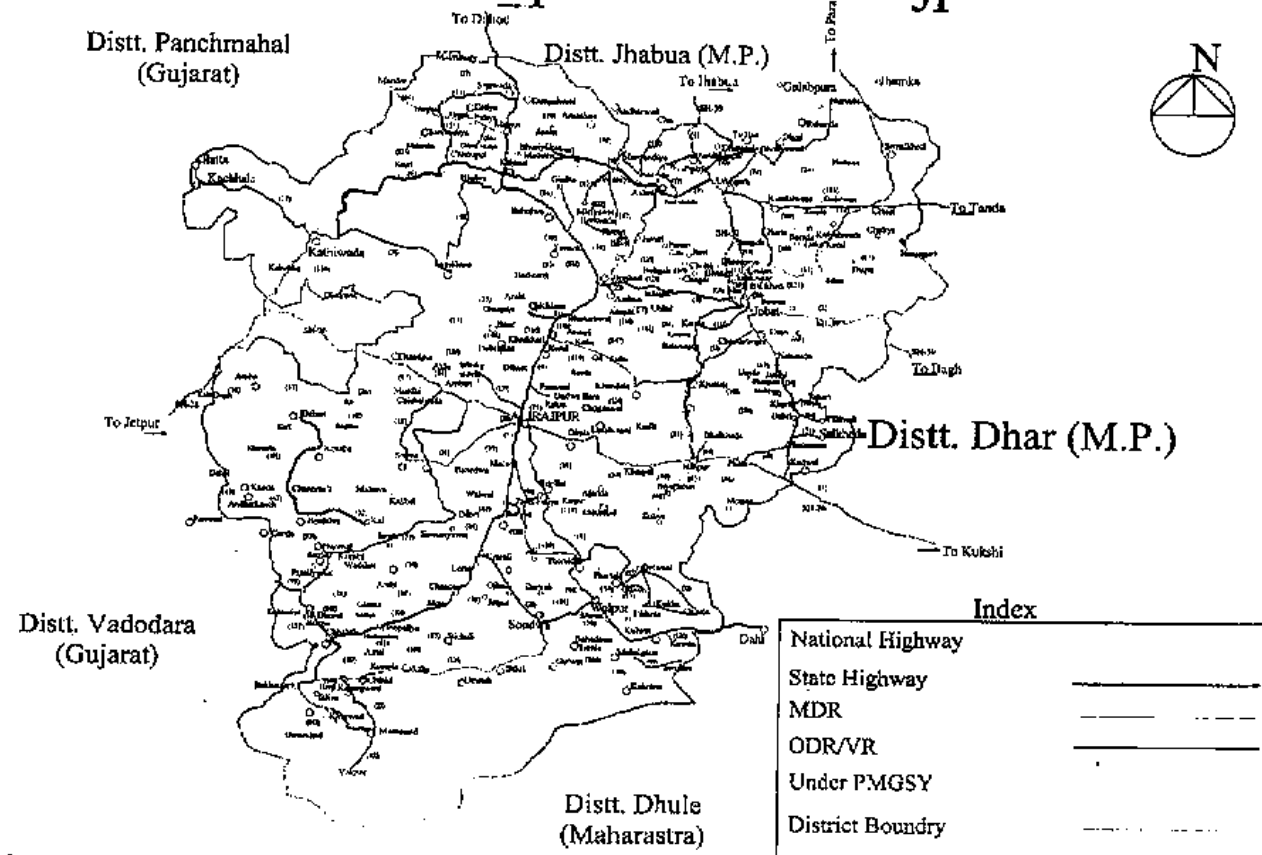


Source: www.mpsdma.gov.in

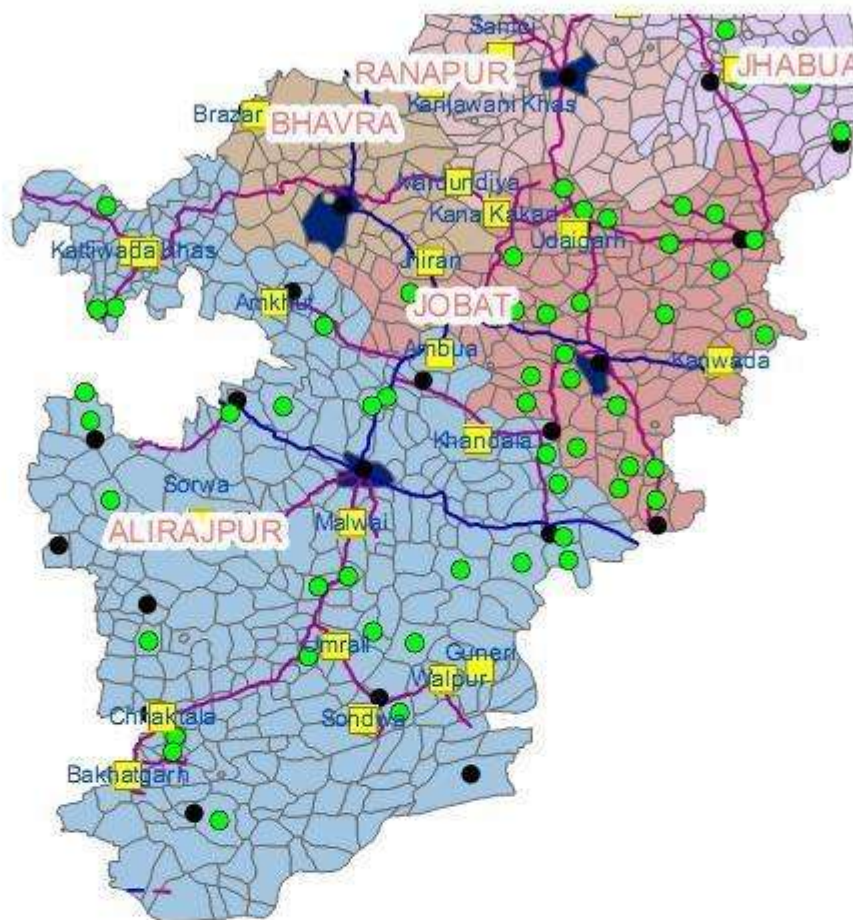
Alirajpur has been identified in red as highly affected area by MPSDMA

Road Map of Alirajpur

Road Map District Alirajpur



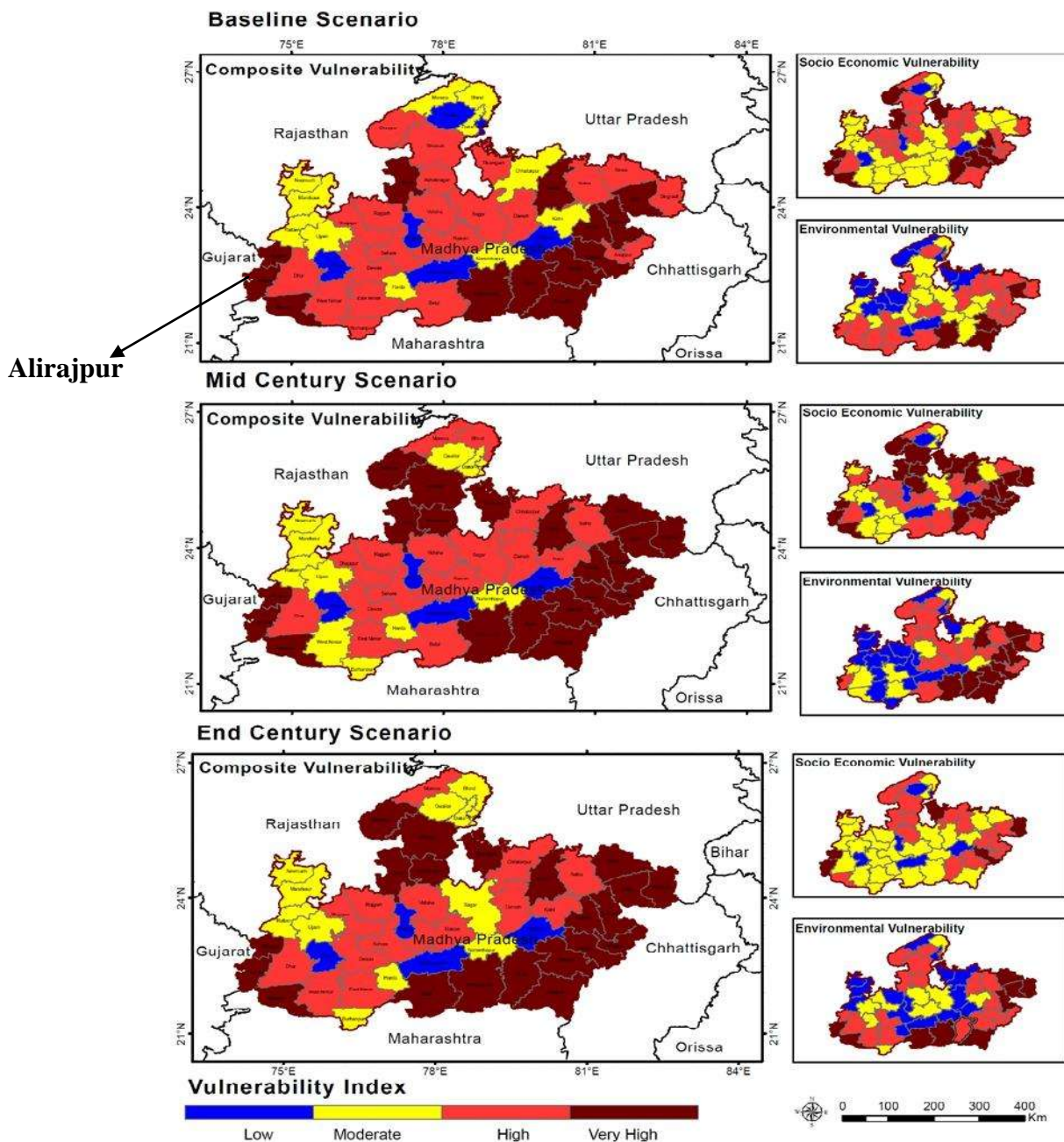
Health Facility in District Alirajpur, MP



Legend

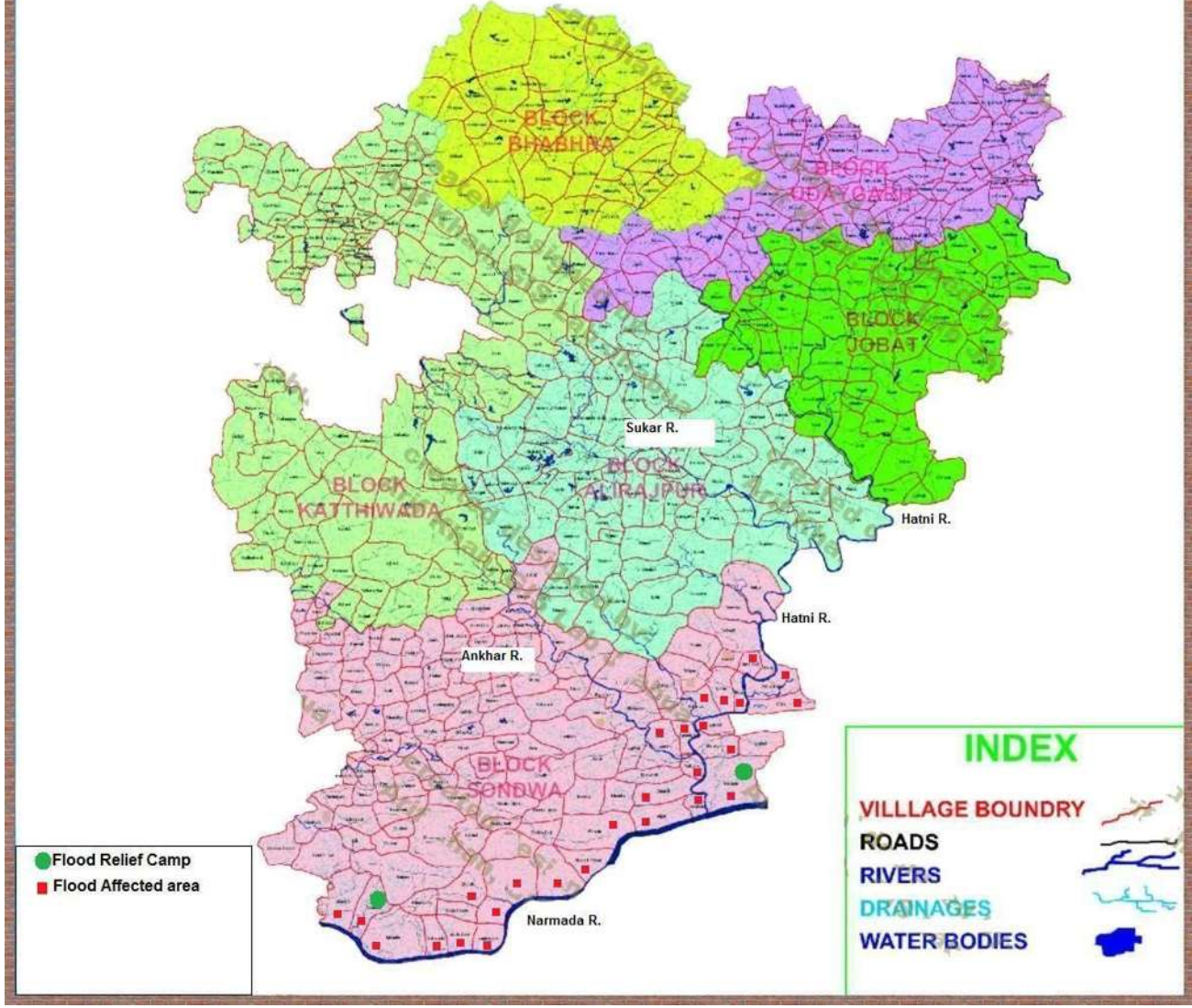
- | | | | |
|--|------------------|-------------------|-----------|
| | District Hq | TALUK NAME | |
| | Towns | | |
| | National Highway | | ALIRAJPUR |
| | District Roads | | BHAVRA |
| | Other Roads | | JOBAT |
| | Urban Area | | |
| | PHC's | | |
| | Sub Centres | | |

Vulnerability Map of Madhya Pradesh



In the above map, *Alirajpur* has been classified as “*Very Highly*” Vulnerable in the current, mid century and end century scenario. As been seen from *Socio Economic Vulnerability* and *Environmental vulnerability* maps, *Alirajpur* has been shown as Highly Vulnerable in Socio Economic factors in all scenerios and in terms of Environmental factors, its condition would be worsen by end of the century.

FLOOD AFFECTED AREA IN ALIRAJPUR



Blood Bank and Fire Station

