

# District Disaster Management Plan Shajapur

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

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## **Preface**

Shajapur Disaster Management Plan is a part of multi-level planning advocated by the Madhya Pradesh State Disaster Management Authority (MPSDMA) under DM Act of 2005 to help the District administration for effective response during the disaster. Shajapur is prone to natural as well as man-made disasters. Earthquake, Drought, Epidemic (Malaria) are the major Natural Hazards and forest fire, rail/ road accidents etc. are the main man-made disaster of the district.

The Disaster Management plan includes facts and figures those have been collected from various departments. This plan is first attempt of the district administration and is a comprehensive document which contains various chapters and each chapter has its own importance. The plan consist Hazard & Risk Assessment, Institutional Mechanism, Response Mechanism, Standard Operating Procedure, inventory of Resources etc. Hazard & Risk Assessment is done on the basis of past thirty year disaster data & is collected from all departments.

It is suggested that the District level officials of different department will carefully go through the plan and if have any suggestions & comments be free to convey the same so that same can be included in the next edition.

It is hoped that the plan would provide concrete guidelines towards preparedness and quick response in case of an emergency and help in realizing sustainable Disaster Risk Reduction & mitigate/minimizes the losses in the district in the long run.

### **Acknowledgement**

I am grateful to the District Administration for the contribution in preparation of Shajapur Disaster Management Plan. I must place on record my sincere appreciation to Pramod Gupta, (Collector, Shajapur), Sohan Kanash (Deputy Collector), R.K Nagraj (Deputy Collector).

I am deeply indebted Mr. Promod Gupta (Collector, Shajapur) for administrative support, guidance during the project and giving me an opportunity to present the work in front of district officials from various departments.

I am also happy to acknowledge the support extended by Mr. R S Khinchi (Company Commandant, Shajapur) and concerned District administration officers for their assistance in the preparation of the plan.

I would also like to give by thanks to Dr. Rizvi (Director-SGPA), Mr. Gaurav Khare (Project Officer-SGPA) and other staff members of School of Good Governance and Policy Analysis, Bhopal for their valuable suggestion and help during each and every moment of this study along with Mr. Amit Tuteja and Mr. Sunish Jose (SEEDS Technical Services) for their technical guidance on the topic.

Last but not the least I am thankful to my parents who are the ultimate goal of my life, for their moral support and encouragement.

It is my first attempt to prepare this plan so errors & mistakes are bound to be happened. I shall be highly thankful for the valuable suggestions which shall make this plan more useful for mitigate the disasters in the District.

Anil Loat

## ABBREVIATIONS

°C: Degree Celsius

APL: Above Poverty Line

ASHA: Accredited Social Health Activists

BPL: Below Poverty Line

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

DEOC: District Emergency Operation Centre

EOC: Emergency Operation Centre

ESF: Emergency Support Functions

GP: Gram Panchayat

IAP: Integrated Action Plan

IAY: Indira Awaas Yojana

ICS: Incident Command System

ICT: Incident Control Teams

IDSC: Integrated Disease Surveillance Centre

IDSP: Integrated Disease Surveillance Project

ISP: Internet Service Provider

JNNURM: Jawahar Lal National Urban Renewal Mission

Kms: Kilometers

m: Meters

mm: Millimeters

NDCN: National Disaster Management Communication  
Network

NREGS: National Rural Employment Guarantee Scheme

NRHM: National Rural Health Mission

PHC: Primary Health Centre

PWD: Public Work Department

RD: Rural Development

SOP: Standard Operating Procedure

Sq.: Square

SSA: Sarva Shiksha Abhiyaan

UD: Urban Development

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## Structure of District Disaster Management Plan (DDMP)

### A . GENERAL

#### A 1 Overview

##### A 1.1 District Profile

In 1904, Shajapur is declared as a District. It is tribal dominated area and people survive mainly over agriculture as their primary occupation.

Shajapur was recognized at the time of Shahjahan. To observing the natural beauty of this place, shahjahan's army used to halt here. Total area of district is 6196 sq. km. The District lies between latitude 23.06 to 24.19 and longitude 75.41 to 77.02 degree. District height from sea level is 453 meters and maximum and minimum temperature are 45 and 3 degree respectively.

District has further divided into 9 blocks known as Moman Badodiya, Sujalpur, Kala Peepal, Agar, Badod, Sushner, Nalkheda, Gulana and Shajapur itself.

##### A 1.1.1 Location and administrative divisions

Table A 1.1.1

|                                      |   |
|--------------------------------------|---|
| <b>Location (in degrees) -</b>       | <b>Latitude – 23.06 to 24.19 degree<br/>Longitude – 75.41 to 77.02 degree</b>                         |
| <b>District Area (in sq. kms.) -</b> | <b>6196 sq. km</b>  |
| <b>Administrative information-</b>   | <b>01</b>   |
| <b>No. of sub divisions:</b>         | <b>04</b>   |
| <b>No. of Tehsils:</b>               | <b>09, Moman Badodiya, Sujalpur, Kala Peepal, Agar, Badod, Sushner, Nalkheda, Gulana and Shajapur</b> |
| <b>No. of Municipal Boards</b>       | <b>05</b>   |

|  |   |
|--|---|
| <b>No. of Blocks:</b>  | <b>09</b> , Moman Badodiya, Sujalpur, Kala Peepal, Agar, Badod, Sushner, Nalkheda, Gulana and Shajapur itself |
| <b>No. of Gram Panchayats:</b>                               | <b>554</b>  |
| <b>No. of Villages:</b>                                      | <b>1132</b>   |
| <b>No. of Police Stations, Police Chowkees (Block wise):</b> | <b>19</b>   |
| <b>No. of Post Offices(Block wise):</b>                      | <b>19</b>   |
| <b>Year of district formation:</b>                           | <b>1904</b>   |
| <b>Name of adjacent districts:</b>                           | <b>Manshor, Sinhor, Rajgad, Ujjain</b>  |

\*\*Source: Land Record as per 2011

### A 1.1.2 Geography and Topography

Shajapur has elevation of 453 meters from sea level. It has 6 rivers in which Parbati is main, where others are Newaj, Sindh, Lakhunder, Ahu and Au and Chhoti Kali Sindh. In forest, it covered 6917.046 hectare land.

**Table A 1.1.2**

|                                       |   |
|---------------------------------------|---|
| <b>Name of rivers and lakes:</b>      | <b>06</b> , Parbati, Newaj, Sindh, Lakhundar, Ahu and Au, Chhoti Kali Sindh |
| <b>No. of dams, embankments:</b>      | <b>02</b> Chillar Dam and Palsaval Dam                                      |
| <b>Highest elevation (in meters):</b> | <b>453</b> Meters   |
| <b>Forest cover in the district:</b>  | <b>6917.046</b> hectare   |

\*\*Source: Irrigation Dept as per 2011

### A 1.1.3 Demographic and socio economics

Shajapur is very dry place. Even with the name of forest it has only soil having sand and stone. It has total of 219796 household having 178444 household in Rural and 41352 in household in Urban area. Total population of the district is 1512353 and having 19.4% population density. Main occupation for the people is Agriculture, where the secondary is Govt. jobs.

**Table A 1.1.3**

|  |  |
|--|--|
| <b>Total household:</b>                            | <b>Total / Rural / Urban<br/>219796 / 178444 / 41352</b>   |
| <b>Total population:</b>                           | <b>1512353 / 1219002 / 293351</b>                          |
| <b>Male:</b>                                       | <b>779900 / 628763 / 151137</b>                            |
| <b>Female:</b>                                     | <b>732453 / 590239 / 142214</b>                            |
| <b>Population density:</b>                         | <b>19.4 % / 19.4 % / 19.4 %</b>                            |
| <b>Income -<br/>Total APL, BPL families:</b>       | <b>APL= 172016, BPL=134675, AAY=25189<br/>Total=331880</b> |
| <b>Occupation -<br/>Main occupation of people:</b> | <b>Agriculture</b>   |
| <b>Secondary occupation of people:</b>             | <b>Govt. jobs and Small Shops</b>                          |

\*\*Source: Census Book as per 2011

#### **A 1.1.4 Climate and weather**

In Shajapur, climate is quite Dry and maximum temperature in summer peaks to 45 degree. Still it has an 894.4 mm average rainfall.

**Table A 1.1.4**

|   |  |
|---|--|
| <b>Rainfall-</b>  |  |
| <b>Total annual rainfall of last year:</b>                    | <b>1240 mm</b>                           |
| <b>Average rainfall ( last 10 years):</b>                     | <b>Please find the below information</b> |
| <b>Temperature-</b>   |  |
| <b>Average Maximum Temperature:</b>                           | <b>45 degree</b>                         |
| <b>Average Minimum Temperature:</b>                           | <b>3 degree</b>                          |
| <b>Months of excess rainfall, leading to flood situation:</b> | <b>July and August</b>                   |

**Last Ten year Rainfall Information**

| <b>Year</b>      | <b>Rainfall</b>  |
|------------------|------------------|
| 2002-2003        | 599.8 mm         |
| 2003-2004        | 852.9 mm         |
| 2004-2005        | 950.8 mm         |
| 2005-2006        | 719.8 mm         |
| <b>2006-2007</b> | <b>1513.6 mm</b> |
| 2007-2008        | 926.1 mm         |
| 2008-2009        | 675.4 mm         |
| 2009-2010        | 822.1 mm         |
| 2010-2011        | 648.4 mm         |

**Average Rainfall in last 10 year is 894.9 mm and highest rainfall was 1513.6 mm in 2006-07**

\*\*Source: Land Record as per 2011

**A 1.1.5 Health (Medical)**

There are total 30 govt. medical, hospitals and health centres available in the district which are having 680 beds capacity with 9 Ambulance in total and total 307 person as a higher staff to take care of the people. Apart from this, Shajapur has 17 registered Private hospitals and health centres having 291 bed capacity in total in the different blocks. Please find the details as mentioned below

| S.No. | Block Name        | No. of Health Centres | No. of Hospital | No. of Community Health Centres |
|-------|-------------------|-----------------------|-----------------|---------------------------------|
| 1     | Sujalpur          | 1                     | 0               | 3                               |
| 2     | Kalapeepal        | 2                     | 0               | 1                               |
| 3     | Moman<br>Badodiya | 5                     | 0               | 1                               |
| 4     | Agar              | 2                     | 0               | 1                               |
| 5     | Badod             | 1                     | 0               | 1                               |
| 6     | Sushner           | 1                     | 0               | 1                               |
| 7     | Nalkheda          | 1                     | 0               | 1                               |
| 8     | Shajapur          | 5                     | 1               | 1                               |

\*\*Source: Chief Medical Officer as per 2011

#### A 1.1.6 Education

In Education State has good male (70.2%) educated population but still female has 56.4% to contribute in Literacy Rate. There in total 1301 Anganwaris and 166 mini anganwaris. They have total 233766 students and 890 people in staff to educate them.

**Table A 1.1.6**

|                                    |   |
|------------------------------------|---|
| <b>Literacy rate:</b>              | <b>Try to get all the information Block wise.</b>                                       |
| <b>Total Male:</b>                 | <b>70.2%</b>  |
| <b>Total Female:</b>               | <b>56.4%</b>  |
| <b>No. of Secondary schools:</b>   | <b>(Govt. + Private entities)<br/>51/45</b>   |
| <b>No. of High/Middle schools:</b> | <b>95/727</b>   |
| <b>No. of Primary schools:</b>     | <b>1540</b>   |
| <b>No. of Anganwaris:</b>          | <b>1301 Anganwaris and 166 Mini Anganwaris<br/>(Available with details in hardcopy)</b> |

|  |  |
|--|--|
| <b>No .of it is/ training centres:</b>                                       | <b>60 (ITIs and SDCs)</b>                            |
| <b>No. of Other colleges:</b>  | <b>Only one polytechnic is there in the district</b> |
| <b>Total (Aprox.) Students Strength in all the educational institutions:</b> | <b>233766</b>  |
| <b>Total (Aprox.) Staff Strength in all the educational institutions:</b>    | <b>890</b>   |

\*\*Source: District Education Officer, Mahila Baal Vikas, Colleges, Polytechnics and ITI Shajapur as per 2011

#### **A 1.1.7 Agriculture and Land use**

Most of the land has used for agriculture only in Shajapur. Farmer use to cultivate in all season and Soyabean, Jawar, Wheat, Channa, Raai, Alsi and Potato is among the major crops.

**Table A 1.1.7**

|  |  |
|--|--|
| <b>Cropping pattern -</b>              |  |
| <b>Type of major crops:</b>            | <b>Kharif: Soyabean Jawar<br/>Rabbi: Wheat, Channa, Raai, Alsi, Potato</b> |
| <b>Cropping seasons:</b>               | <b>All</b>   |
| <b>Land classifications-</b>           |  |
| <b>Forest land:</b>                    | <b>6917.046 hectare</b>  |
| <b>Barren &amp; Uncultivated land:</b> | <b>33748 km</b>  |
| <b>Cultivated land:</b>                | <b>9085 hetare</b>   |
| <b>Pasture land:</b>                   | <b>33690 km</b>  |

|                                  |                |
|----------------------------------|----------------|
| <b>Soil classifications</b>      |                |
| <b>Saline:</b>                   | <b>1500 Ha</b> |
| <b>Water logging:</b>            | <b>450 Ha</b>  |
| <b>Recurrent flood hit area:</b> | <b>1100 Ha</b> |
| <b>Drought hit area:</b>         | <b>4400 Ha</b> |

\*\*Source: Agriculture, Irrigation, Forest and Land Record Department as per 2011

#### **A 1.1.8 Housing Pattern:**

In Shajapur, majority of its population living in rural areas where majority of the construction is kachha. As per Indira Awas Yojna, total household number is 225504 where among it only 130000 are Pucca houses.

**Table A 1.8**

|   |  |
|---|--|
| <b>Housing pattern-</b>                       |  |
| <b>Type of housing construction:</b>          | <b>130000 are Pucca Houses/ 95504 are Kucha houses are there. These kucha houses are built of Soil. Clat and unburnt bricks which is quite risky in case of flood and earthquake..</b> |
| <b>Type of material used:</b>                 | <b>All kind of houses are there kuccha and pucca, and maximum are of ground floor only.</b>  |
| <b>Flooring types:<br/>(Ground and above)</b> | <b>20% (43595 approx) G+1 houses are there. Only 5% (10989 approx) of houses have G+2 and remaining (164847 approx) are the houses till ground level.</b>                              |

\*\*Source: Zila Panchayat as per 2001



**A 1.1.9 Industrial set ups**

Shajapur has Major industry related to Cement and Soyabean products. It is at small level. Shajapur also have PVC industry too. Till now, no accident has occurred in Shajapur which damaged the industry of people property. The industries are quite small level.

**Table A 1.1.9**

|  |  |
|--|--|
| <p><b>Total no. of industries (Govt., Semi Govt. and Pvt), Block wise</b></p> <p><b>a) No. of Major Accident Hazard Units/ Polluting industries/ Industrial Areas:</b></p> <p><b>Total workforce involved in these industrial units:</b></p> <p><b>b) No. of Medium and small scale industries :</b></p> <p><b>Total manpower involved in these units:</b></p> | <p><b>No Major Accident Hazard Unit exist in Shajapur. There should a seprate plan for District Industry disaster Management is required on central level.</b></p> <p><b>list of the industries is mentioned below</b></p> |
|--|--|

**Industries in Shajapur**

| <b>S. No.</b> | <b>Name and address</b>                           | <b>Owner</b>        | <b>Place</b> | <b>Name of Product</b> | <b>Working in Numbers</b> | <b>Starting date</b> | <b>Remark</b>     |
|---------------|---|---------------------|--------------|------------------------|---------------------------|----------------------|-------------------|
| 1.            | MP State Milk Dairy Milk Chilling Center, Agar    | Milk Dairy          | Agar         | Milk Products          | 22                        | 1.1.1980             |                   |
| 2.            | Shajapur Solvent ExPvt. Ltd. Soumpkhera, Shajapur | Manohar Singh Yadav | Soumpkhera   | Soya Oil DOC           | 139                       | 15.3.1980            |                   |
| 3.            | Ramco Industry Ltd. Industrial Area Makshi        | P. R. Subhramanyam  | Makshi       | Cement Pressure Pipes  | 625                       | 21.02.1983           | Given on Lease to |

|     |   |                            |          |  |     |            | others              |
|-----|---|----------------------------|----------|--|-----|------------|---------------------|
| 4.  | Ramco Industry Ltd.<br>Industrial Area<br>Makshi          | P. R.<br>Subhramana<br>yam | Makshi   | Cement<br>Asbestos<br>Sheet                | 151 | 01.03.1987 | Working             |
| 5.  | Sidarth Tubes Ltd<br>Village Lodhiya,<br>Shajapur         | Nanesh<br>Sandhvi          | Lodhihya | C.R<br>sheets                              | 325 | 15.11.1998 |                     |
| 6.  | Sidarth Tubes Ltd<br>Village Lodhiya,<br>Shajapur         | Nanesh<br>Sandhvi          | Lodhihya | C.R<br>sheets for<br>Non<br>Alloy<br>steel | 50  | 26.03.2001 |                     |
| 7.  | Ruchi Industries<br>Sujalpur                              |                            |          |  |     |            | Just<br>Starte<br>d |
| 8.  | Anirudh<br>Packaging                                      | Shyam<br>Nawab             | Makshi   | Corrugate<br>d Box                         | 6   | 30.12.2001 |                     |
| 9.  | Bansal Asbestos<br>Cement Products<br>Pvt. Ltd.<br>Makshi | Alok Bansal                | Makshi   | Cement<br>Asbestos<br>Pressure<br>Pipe     | 54  | 07.04.1999 |                     |
| 10. | Rajeshwari<br>Packwell Pvt. Ltd.<br>Makshi                | Shyam<br>Nawab             | Makshi   | Corrugate<br>d Box                         | 09  | 28.07.1997 |                     |
| 11. | Sidarth Marketing<br>Services Ltd.<br>Makshi              | Ashok<br>Shurana           | Makshi   | Rigid<br>P.V.C<br>pipe                     | 48  | 12.11.1998 |                     |
| 12. | Sagar Ice and<br>Cold Storage<br>Makshi                   | Tarachand<br>Agarwal       | Makshi   | Cold<br>Storage                            | 10  | 15.02.1998 |                     |
| 13. | Steel Casting of<br>Indian Pvt. Ltd.<br>Makshi            | Alok Bansal                | Makshi   | Steel<br>Castinng                          | 10  | 1.05.1985  |                     |
| 14. | Sudarshan<br>Construction Pvt.<br>Ltd. Makshi             | Murlidhar<br>Soni          | Makshi   | Cement<br>Pressure<br>pipes                | 25  | 1990       |                     |

\*\*Source: Industry Department as per 2011

**A 1.1.10 Transport and communication network**

Major transport in Shajapur is Rails and the Buses. As of now Madhya Pradesh don't have their own public road transport mode, which leads to the entrance of the private player in the market. Sometimes it create problem too for people.

**Table A 1.1.10**

|   |  |
|---|--|
| <p><b>1) Transport Connectivity of each block w.r.t. following networks:</b></p> <p><b>a) By Road</b></p> <p><b>b) By Rail</b></p>  | <p><b>Yes, PWD provided MAP</b></p> <p><b>Yes, Berchha, Sujalpur, Kalapipal, Shajapur, Maxi, Akodia</b></p>                            |
| <p><b>2) Communication network</b></p> <p><b>i) No. of wireless stations in the respective blocks</b></p> <p><b>ii) Availability of telephone, mobile services in each block</b></p> <p><b>iii) Availability of internet facility in the blocks</b></p> | <p><b>108</b></p> <p><b>Availability is quite good in each block.</b></p> <p><b>Available in each block and having 75 exchange</b></p> |

\*\*Source: Transport and BSNL as per 2011

**A 1.1.11 Power stations and electricity installations**

In Shajapur, every village and town is electrified. They have reach in whole district. They also have Wind Turbine as an alternate source to produce electricity which has been occupied by Private Firm which in turn provide produced energy to Madhya Pradesh Electricity Board.

**Table A 1.1.11**

|  |                         |
|--|-------------------------|
| <b>Electricity outreach in the district:</b> | <b>100% Electrified</b> |
|--|-------------------------|

|   |  |
|---|--|
| <p><b>Available sources of electricity in district, like DG sets etc:</b></p> | <p><b>Wind Turbines are used to generate electricity by some private firms. Its in Agar Division area which supplying electricity to MPSEB</b></p> |
|---|--|

\*\*Source: Madhya Pradesh State Electricity Board as per 2011

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

In Shajapur, Mainly 9 historical places are their and 9 religious centres in which Bheru Dongri, Grasia Shiv Mandir, Rudreshwari Mandir Omkareshwar Mandir, Arsi Dargah etc. They have three tourist spots in which Shahjahan’s fort and Chillar dam is centre of attraction. There are very less or no one visitor for Shajahan’s fort in Shajapur, because more care is required to improve number of count of visitors.

**Table A 1.1.12**

|   |   |
|---|---|
| <p><b>List of religious centres in the district:</b> Bheru Dongri, Grasia Shiv Mandir, Rudreshwari Mandir Omkareshwar Mandir, Arsi Dargah</p> | <p><b>Average presence of visitors per day</b><br/><b>On an average 20 visitors per day</b></p> |
|---|---|

\*\*Source: Land Record as per 2011

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

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

The Govt. of India, recognized the need to of a proactive, comprehensive, and sustained approach to disaster management to reduce detrimental effects of disasters on overall socio-economic development of country, and came out with Disaster Management (DM) Act 2005, and highlighted

the role and importance of District Disaster Management Plan. The Govt. of Madhya Pradesh (GoMP) also believes that there is a need for a Disaster Management Plan in every district that articulates its vision and strategy for disaster management in the state. In this context the Madhya Pradesh State Disaster Management Authority (MPSDMA) provides guidelines to various entities involved in disaster management in the state to discharge their responsibilities more effectively.

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

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

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

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

### **A 1.3 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 and
- Mainstreaming DM concerns into the developmental planning process.
- Encouraging mitigation measures based on state-of-the-art technology and environmental sustainability.
- To address gender issues in disaster management with special thrust on empowerment of women towards long term disaster mitigation
- Developing contemporary forecasting and early warning systems backed by responsive and fail-safe communications and Information Technology support.
- Encourage training and create awareness, rehearsals, dissemination of knowledge, and information on DM among all the citizens living in the district.
- Ensuring relief/assistance to the affected with care, without any discrimination of caste, creed, community or sex
- Undertaking reconstruction as an opportunity to build disaster resilient structures and habitat.
- Undertaking recovery to bring back the community to a better and safer level than the pre-disaster stage
- To develop disaster management as a distinct management discipline and creation of a systematic and streamlined disaster management cadre

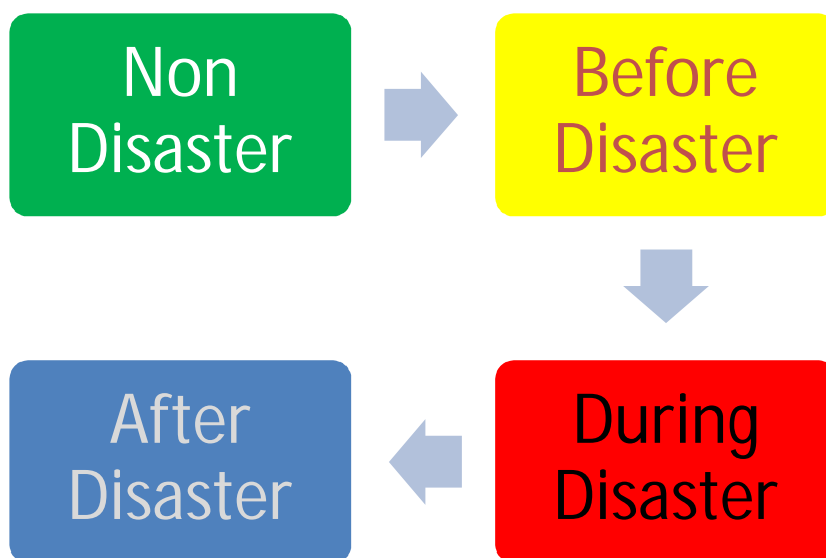
### **A 1.5 District Plan Approach**

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

Institutional Arrangements includes different committees and societies to deal with the disaster at the different level. These committees are mentioned below and also their presence and different people involved in it are explained in the table.

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

Table A 2.1

|   |  |
|---|--|
| <b>Date of inception of DDMA</b>  | <b>05 Sept 2007</b>  |
| <b>Members of DDMA, their name, along with actual designations, and current position in DDMA like Chairman, Secretary or Member etc</b> | <p>There are 7 members. List is provided along with the document.</p> <ul style="list-style-type: none"> <li>▪ <b>President: Collector</b></li> <li>▪ <b>President of Dist. Panchayat or Mayor</b></li> <li>▪ <b>Supt. Of Police</b></li> <li>▪ <b>Chief Medical officer</b></li> <li>▪ <b>Executive Engineer, PWD</b></li> <li>▪ <b>CEO Dist. Panchayat</b></li> <li>▪ <b>Secretary: Upper Collector (ADM)</b></li> </ul> |
| <b>Roles and responsibilities of DDMA</b>   | <ul style="list-style-type: none"> <li>▪ <b>Preparing Management plan for Disaster</b></li> <li>▪ <b>Implementing, Controlling and Maintaining National, State or District Plan</b></li> <li>▪ <b>Point out all hazard prone areas</b></li> <li>▪ <b>Ordering and preparing all govt. and private Agencies</b></li> </ul>  |

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

It is suggested that this kind of committee should exist a District Disaster Management or Advisory Committee.

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

Table A 2.3

|   |   |
|---|---|
| <b>Location of the DEOC / DCR:</b>  | <b>Collector Office, Shajapur</b>   |
| <b>Involved agencies in DEOC / DCR, Roles and responsibilities of the officials / nodal persons (phase wise):</b> | <b>Sup of Police, Chief Medical officer, PWD, CEO of District Panchayat, Home Guard Dept.</b> |



|  |  |
|--|--|
| <p><b>Roles and responsibilities of DDMA</b></p> | <ul style="list-style-type: none"> <li>▪ <b>Implementing, Controlling and Maintaining National, State or District Plan</b></li> <li>▪ <b>Point out all hazard prone areas</b></li> <li>▪ <b>Ordering and preparing all govt. and private Agencies</b></li> </ul> |
|--|--|

### A 2.4 District Disaster Information Management System

All information is collected by the Collector Office in which Land record and Revenue Department plays major role. In Shajapur, there is no concrete institution for Information management system. They have Public Relation Office (PRO) to collect or spread any kind of information. Along with that NIC also play a major role to make information available online.

### A 2.5 Urban Area Disaster Management Committee

Table A 2.5

|  |   |
|--|---|
| <p><b>Date of inception of Urban DDMC, Location</b></p>  | <p><b>25 July 2011</b></p>  |
| <p><b>Members of Urban DDMC, their name, along with actual designations, and current position in DDMC like Chairman, Secretary or Member etc</b></p> | <p><b>Total 5 members are there.</b></p> <ul style="list-style-type: none"> <li>▪ <b>President, Muncipal Corp, Sajapur</b></li> <li>▪ <b>Chief Medical Officer, Muncipal Corp, Sajapur</b></li> <li>▪ <b>Health Officer Sajapur</b></li> <li>▪ <b>Sub Engineer, Sajapur</b></li> <li>▪ <b>Two Wards Members</b></li> </ul>                  |
| <p><b>Roles and responsibilities of Urban DDMC</b></p>   | <ul style="list-style-type: none"> <li>▪ <b>Implementing Disaster Plan</b></li> <li>▪ <b>Ordering and Controlling all departments</b></li> <li>▪ <b>Create awareness about disaster</b></li> <li>▪ <b>At ward level create different committees</b></li> <li>▪ <b>District level website creation and maintenance or updates</b></li> </ul> |

### A 2.6 Block Level Disaster Management Committee

It is suggested that there should exist a disaster management committee in each and every block. By this, we can respond to any crises immediately.

### A 2.7 Gram Panchayat Disaster Management Committee

Table A 2.7

|   |   |
|---|---|
| <b>Date of inception of Gram Panchayat level DMC, Location</b>  | <b>25 July 2011</b>   |
| <b>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</b> | <p><b>There is 6 members team.</b></p> <ul style="list-style-type: none"> <li>▪ Sarpanch</li> <li>▪ Deputy Sarpanch</li> <li>▪ Secretary Panchayat</li> <li>▪ Patwari</li> <li>▪ Head Master from Middle or Primary School</li> </ul>   |
| <b>Roles and responsibilities of Gram Panchayat DDMC</b>  | <ul style="list-style-type: none"> <li>▪ Point out the different disasters</li> <li>▪ Preparing list of disaster prone areas and families</li> <li>▪ Maintaining machines and human resources</li> <li>▪ Creating awareness about Do's and Don'ts</li> <li>▪ Creating committees as per need</li> </ul> |

**\*\*All Above information is gathered from Revenue Department as per 2011.**

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

### B 1. Hazard Assessment

Hazard assessment deals with the past history records of the damaged caused by various Disasters and it helps to prepare the proper plan and take the preventive steps in future to deal with the same situation.

Shajapur lies as below mentioned zone:

| Type of Hazard | Zone                                     | Blocks   |
|----------------|--|--|
| Earthquake     | Zone II                                  | Makshi, Sujalpur, Kalapeepal, Moman Badodiya, Agar, Badod, Sushner, Nalkheda, Shajapur |
| Flood          | Area which is near to river and dams     | Shajapur, Shujalpur, Kalapipal   |
| Cyclone        | Moderate Damage Risk Zone-B (Vb= 39 m/s) | All  |
| Landslide      | Marginally Affected                      | All  |

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

**Hail Strom Happened in 2006 and Frost in 2011.**

| Type of hazard | Year of occurrence | Area affected (Population Affected in lakh)                          | Impact on life | Livelihood                               | Livestock    | Hazard prone zone in district |
|----------------|--------------------|--|----------------|--|--------------|-------------------------------|
| Hail Strom     | 2006               | Shajapur, (6195)<br>Agar(701.47)<br>Nalkheda(624.9)<br>Gulana(551.3) | No             | 5 houses destroyed due to the Hailstrom  | 84.37 Lakh   | Please see the table below    |
| Frost          | 2011               | All blocks of the district got equally affected (1512353)            | No             | No livelihood get affected due to frost. | 7096.37 Lakh | Shajapur                      |

**Loss in Hail Strom in 2006.**

| S.No. | Name of the Block | Date of Hailstrom | Villages affected | Affected Area | Crop lost Rupee(in Lakh) | Livelihood lost | Animal Lost  | Given Money |
|-------|-------------------|-------------------|-------------------|---------------|--------------------------|-----------------|--------------|-------------|
| 1     | Shajapur          | 3.3.2006          | 42                | 73334 Hec.    | 61.24                    | 55              | 1 (.03 Lakh) | 4.15 Lakh   |
| 2     | Gulana            | 3.3.2006          | 9                 | 69648 Hec.    | 12.93                    | 12              | 1 (.02 Lakh) | 1.91 Lakh   |
| 3     | Nalkheda          | 9.3.2006          | 15                | 59694 Hec.    | 10.2                     | 0               | 2 (.10 Lakh) | 3.46 Lakh   |

|       |  |  |    |                |       |    |                 |                |
|-------|--|--|----|----------------|-------|----|-----------------|----------------|
| Total |  |  | 66 | 202676<br>Hec. | 84.37 | 67 | 4 (.15<br>Lakh) | 10.021<br>Lakh |
|-------|--|--|----|----------------|-------|----|-----------------|----------------|

**\*\*All Above information is gathered from Land Record Department as per 2011.**

**Table B.1.2 Major applicable hazards**

| Type of Applicable Hazard   | Hazard Prone Blocks  |
|-----------------------------|--|
| <b>Flood</b>                | Due to Chillar Dam, Shajapur, Shujalpur, Kalapeepal are prone to flood   |
|                             | Due to Palsaval Dam, Shajapur, Shujalpur, Kalapeepal are prone to flood  |
| <b>Forest Fire</b>          | All blocks are equally prone to the forest fire.   |
| <b>Stampede</b>             | Areas having historical and religious places are very much prone to this hazard. On these places, Melas do occur time to time at these places and visitors arrived there for religious worship. In these cases Stampede might be faced by the people or visitors and need to plan for it. In Shajapur, Bherav Dongri is one place which is famous for Guru Purnima Mela. |
| <b>Earthquake</b>           | Makshi, Sujalpur, Kalapeepal, Moman Badodiya, Agar, Badod, Sushner, Nalkheda, Shajapur   |
| <b>Drought</b>              | Moman Badodiya, Agar, Badod, Sushner, Nalkheda   |
| <b>Hail Storm</b>           | Shajapur, Gulana, Agar, Nalkheda   |
| <b>Paala</b>                | All blocks are equally prone to the frost because in MP, frost equally affect the each and every block during winter. It affects crops.  |
| <b>Road, Rail Accidents</b> | Makshi, Sujalpur, Kalapeepal, Moman Badodiya, Agar, Badod, Sushner, Nalkheda, Shajapur   |
| <b>Fire</b>                 | Makshi, Sujalpur, Kalapeepal, Moman Badodiya, Agar, Badod, Sushner, Nalkheda, Shajapur   |
| <b>Epidemic</b>             | Makshi, Sujalpur, Kalapeepal, Moman Badodiya, Agar, Badod, Sushner, Nalkheda, Shajapur   |

**\*\*All Above information is gathered from Land Record Department as per 2011.**

**Table B.1.2 Seasonality of hazards**

| Hazard                              | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec |
|-------------------------------------|-----|-----|-----|-----|-----|------|------|-----|------|-----|-----|-----|
| <b>Flood</b>                        |     |     |     |     |     | Yes  | Yes  | Yes |      |     |     |     |
| <b>Earthquake</b>                   | Yes | Yes | Yes | Yes | Yes | Yes  | Yes  | Yes | Yes  | Yes | Yes | Yes |
| <b>Loo</b>                          |     |     | Yes | Yes | Yes | Yes  |      |     |      |     |     |     |
| <b>Fire</b>                         |     |     | Yes | Yes | Yes | Yes  |      |     |      |     |     |     |
| <b>Accident</b>                     | Yes | Yes | Yes | Yes | Yes | Yes  | Yes  | Yes | Yes  | Yes | Yes | Yes |
| <b>Frost</b>                        | Yes | Yes |     |     |     |      |      |     |      |     |     | Yes |
| <b>Insect attack</b>                |     |     |     |     |     |      | Yes  | Yes | Yes  | Yes |     |     |
| <b>Hailstorm</b>                    | Yes | Yes | Yes |     |     |      |      |     |      |     |     | Yes |
| <b>Epidemic</b>                     | Yes | Yes | Yes | Yes | Yes | Yes  | Yes  | Yes | Yes  | Yes | Yes | Yes |
| <b>Others (like Snakebite, etc)</b> | Yes | Yes | Yes | Yes | Yes | Yes  | Yes  | Yes | Yes  | Yes | Yes | Yes |

**\*\*All Above information is gathered from Land Record Department as per 2011.**

**B 2 Vulnerability Analysis**

Vulnerability may result due to underlying causes such as limited access to resources, disability, gender and age, poverty or due to dynamic pressure like the lack of institutional support, training centres, education, population expansion and environmental degradation.

**Table B.2 Block wise vulnerability**

| <b>Name of block</b> | <b>Physical/ Infrastructural vulnerability</b>  | <b>Environmental/ Natural vulnerability</b>  | <b>Social vulnerability</b>   | <b>Economic vulnerability</b>  | <b>Institutional vulnerability</b>  |
|----------------------|---|--|---|--|---|
| Makshi               | Roads, houses, hospitals, and other public infrastructure   | Animals got affected. Air and ground water got contaminated due to industrial establishment. Poor Waste Management System Leads to epidemic. | Many people are illiterate and thus are unaware of the various hazards and thus without proper awareness they may land themselves in trouble. | Daily work life of people gets affected.   | Absence of DDMC, No Disaster Management Plan, Industrial Dept should plan single plan for whole industries to meet with disasters |
| Shujalpur            | Floods due to river, pose a severe threat to the Vulnerable bridges and roads that are prone to get damaged during rains & also earthquake.<br><br>Since most of houses walls are made up of mud/unburnt brick, | Poor Waste Management System Leads to epidemic. Loss of productive soil and further loss of crops.   | Population got affected due to floods and they use to migrate from their homes.   | Houses near river area are at risk. Farmers and Agricultural labors both lose their jobs for a | Need to establish separate blockwise home guard offices to respond immediately  |

|                |   |   |   |   |  |
|----------------|---|---|---|---|--|
|                | they are vulnerable to floods, rains and earthquakes.   |   |   | long time and thus the govt. needs to seek some way to restore their livelihoods.   | to flood situations.   |
| Kalapeepal     | Floods due to river, pose a severe threat to the Vulnerable bridges and roads that are prone to get damaged during rains & also earthquake. Roads, houses, hospitals, and other public infrastructure | Poor Waste Management System Leads to epidemic. Loss of productive soil and further loss of crops. Spoil the water resources. | Short term migration is a common practice that the people have to do because there is no option left with them. | Houses near river area are at risk. Farmers and Agricultural labours both lose their jobs for a long time and thus the govt. needs to seek some way to restore their livelihoods. | Need to put Home Guards office in each block to respond immediately.         |
| Moman Badodiya | Roads, houses, hospitals, and other public infrastructure   | Loss of Animals lives and also loss of environmental food chain balance.  | Short term migration is a common practice that the people have to do because there is no option left with them. | Daily work life gets affected.  | Need to maintain the departments to deal with transport and road facilities. |

|         |   |  |   |   |   |
|---------|---|--|---|---|---|
| Agar    | Roads, houses, hospitals, Industries,   | Animals got affected. Air and ground water got contaminated due to industrial establishment. Poor Waste Management System Leads to epidemic. | People got diseases due to pollution done by the industries and it may spread in fast pace. | The block suffers from loss of industrial production and thus severe losses are incurred in business. | No Disaster Management Plan, Industrial Dept should plan single plan for whole industries to meet with disasters. Need to take pollution measures |
| Badod   | Floods due to river, pose a severe threat to the Vulnerable bridges and roads that are prone to get damaged during rains. | Poor Waste Management System Leads to epidemic. Loss of productive soil and further loss of crops. Spoil the water resources                 | People got diseases due to poor Waste Management System which leads to epidemic.            | Daily life of people gets affected and there Is no mean for livelihood due to flood.                  | Need to establish separate blockwise home guard offices to respond immediately to flood situations.   |
| Sushner | Roads, houses, hospitals, and other public infrastructure   | Leads to pollution problem and   | Road Accidents and poor   | Daily life got affected due to big road   | Absence of DDMC and need to   |



|          |   |   |   |  |   |
|----------|---|---|---|--|---|
|          |   | pollute the environment.  | transport facilities leads to disaster, which cause human casualty.   | accidents.   | establish proper town planning and road establishment.  |
| Nalkheda | Roads, houses, hospitals, and other public infrastructure   | Pollution due to more small scale industries located in this block.   | People got diseases due to pollution done by the industries and it may spread in fast pace.   | Daily transport and good exports from district got affected if any accident occurred.  | Absence of DDMC and need to establish proper town planning and road establishment.                                      |
| Shajapur | Floods due to river, pose a severe threat to the Vulnerable bridges and roads that are prone to get damaged during rains & also earthquake. Roads, houses, hospitals, and other public infrastructure<br>Roads, houses, hospitals, bridges, Historical places, Temples, Schools | Animals got affected. Air and ground water got contaminated due to industrial establishment.<br>Poor Waste Management System Leads to epidemic. | Many people are illiterate and thus are unaware of the various hazards and thus without proper awareness they may land themselves in trouble. | Houses near river area are at risk.<br>Farmers and Agricultural labours both lose their jobs for a long time and thus the govt. needs to seek some way to restore their livelihoods. | Water outreach and Need to establish separate block wise home guard offices to respond immediately to flood situations. |

**\*\*All Above information is gathered from Land Record Department as per 2011.**

### B 3. Capacity Analysis

Availability of equipment like Bulldozers, Hydra, Crane, for clearance, JCB is not there in Shajapur, But these facilities has taken from private firms on time. They don't have any fixed contracts with any firm to get all these kind of equipment.

**Table B 3.1 Resource inventory, Block wise**

| Resource Type   | Details  | Number                           | Govt, Private | Contact no. of nodal person/s |
|---|--|----------------------------------|---------------|-------------------------------|
| Equipment used for cutting, Search & Rescue (S&R), grinding m/c etc.  | Oxygen mask and small equipment are there, but no big machines are available   | 07364-227841<br>Or<br>9425462538 | Govt.         | R S Khinchi                   |
| Emergency Search lights   | Available With Home Guards   | 07364-227841<br>Or<br>9425462538 | Govt.         | R S Khinchi                   |
| Trained manpower, professionals available in specific domain like S&R ,First Aid, Response Warning, Swimming etc. | List is mentioned as below of this table.  | 07364-227841<br>Or<br>9425462538 | Govt.         | R S Khinchi                   |
| First Aid / Medical emergency requirements, equipment to be used  | All Medical help is provided by the CMO office on the district level and to distribute those Medical aids, each and every health and Hospitals responsibility. | 9425034077                       | Govt.         | Dr. J. Atulkar<br>CMO         |
| Location of key hospitals, blood banks, Doctors, medical stores   | Hospital availability in the district is mentioned in the above list. There are two Blood storage banks are available in the district.                         | 9425034695                       | Govt.         | Dr. S D<br>Jaiswal<br>BTO     |

|  |  |  |       |   |
|--|--|--|-------|---|
|  | <ol style="list-style-type: none"> <li>1. Blood Storage Centre, Civil hospital, Sujalpur</li> <li>2. Blood Storage Centre, Civil hospital, Agar</li> </ol> |  |       |   |
| Transportation(Fit Vehicles available with nodal agencies, in emergency)         | RTO Office Shajapur  | 07364-226749<br>Or<br>9425669997<br>Or<br>9425379710 | Govt. | R. S Khandelwal                           |
| Total no. of boats (with info about capacity, size, contacts of Orgn./owner etc) | Not available. But collector was interested to purchase a boat and metioned the same in TL meeting.  | 07364-227800 (Office)                                | Govt. | Promod Gupta<br>Collector<br>07364-226500 |
| Availability of fire fighting equipment, Fire tenders                            | Yes, Muncipal Corporation is there for taking care of fire brigade.  | 07364-228716   | Govt. | Bhupender Dixit                           |
| Veterinary Hospitals   | Veterinary Shajapur  | 07364-229772   | Govt. | K.C Mudgal<br>90099555597                 |
| Telephone Exchange   | BSNL   | 07364-227601   | Govt. | Anil TDM<br>BSNL                          |

#### List of the Home Guards who can swim

| S. No. | Name          | Designation | Id  |
|--------|---------------|-------------|-----|
| 1      | Bhanvar Nata  | Nayak       | 30  |
| 2      | Om Prakash    | Sainik      | 215 |
| 3      | Bhagvan Singh | Sainik      | 217 |
| 4      | Vikram Singh  | Sainik      | 209 |
| 5      | Kamal Patel   | Sainik      | 290 |
| 6      | Santosh kumar | Sainik      | 317 |

|    |                    |        |     |
|----|--------------------|--------|-----|
| 7  | Rajesh Gayand      | Sainik | 319 |
| 8  | Shiv Narayan       | Sainik | 92  |
| 9  | Babu Lal           | Sainik | 93  |
| 10 | Kumer              | Sainik | 169 |
| 11 | Mohan laal         | Sainik | 145 |
| 12 | Makhan Singh       | Sainik | 182 |
| 13 | Maangi laal        | Sainik | 132 |
| 14 | Kailash<br>Chander | Sainik | 279 |
| 15 | Kamal Singh        | Sainik | 233 |
| 16 | Chain Singh        | Sainik | 234 |
| 17 | Gheshu laal        | Sainik | 236 |
| 18 | Ajab Singh         | Sainik | 263 |
| 19 | Ganpat Bhilala     | Sainik | 323 |
| 20 | Gopal Singh        | Sainik | 118 |
| 21 | Har Laal           | Sainik | 194 |
| 22 | Gopal Krishan      | Sainik | 222 |
| 23 | Promod Singh       | Sainik | 282 |
| 24 | Madan Laal         | Sainik | 69  |
| 25 | Girish Kumar       | Sainik | 204 |
| 26 | Kaalu Singh        | Sainik | 33  |
| 27 | Kanti Laal         | Sainik | 221 |
| 28 | Vikram Singh       | Sainik | 172 |
| 29 | Raam Chander       | Sainik | 223 |
| 30 | Narendera<br>Kumar | Sainik | 175 |

\*\*Source: Home Guard as per 2012

### List of Equipment for Disaster

| S. No. | Name          | No. of Items |
|--------|---------------|--------------|
| 1      | Life Jacket   | 95           |
| 2      | Life Buoy     | 47           |
| 3      | Search Light  | 3            |
| 4      | Siren (1 Km)  | 1            |
| 5      | Anchor        | 1            |
| 6      | First Aid Box | 5            |
| 7      | Loud Healer   | 1            |

|    |               |    |
|----|---------------|----|
| 8  | Helmet        | 15 |
| 9  | Gum boot      | 16 |
| 10 | Snake Catcher | 2  |
| 11 | Stretcher     | 5  |
| 12 | Ear plug      | 50 |

\*\*Source: Home Guard as per 2012

#### List of Equipment required

| S. No. | Name                               | No. of Items |
|--------|------------------------------------|--------------|
| 1      | Motor Boat (Fibre)                 | 1            |
| 2      | Nylon Rope (1 Inches) and 100 feet | 20           |
| 3      | Extension Ladder                   | 1            |
| 4      | Portable Generator                 | 1            |
| 5      | Iron Cutter                        | 1            |
| 6      | Rope (40 feet)                     | 10           |

\*\*Source: Home Guard as per 2012

#### Fire Station in blocks

| S. No. | Block Name | Total No. Of Fire Brigade |
|--------|------------|---------------------------|
| 1      | Shajapur   | 2                         |
| 2      | Shujalpur  | 2                         |
| 3      | Agar       | 1                         |
| 4      | Sushner    | 1                         |
| 5      | Soyatkalan | 1                         |
| s6     | Nalkheda   | 1                         |

\*\*Source: Reserve Department as per 2012

#### B 4. Risks Assessment

Risk assessment is carried out to find out and calculate the risk and damage before, during and after disaster.

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

| Type of hazard            | Vulnerable areas *                             | Vulnerability   | Potential Impact   |
|---------------------------|--|---|--|
| <b>Flood</b>              | Shajapur, Shujalpur, Kalapeepal                | The total population which got affected if a flood occurred is 112043 approx. Livestock, Potable Water, sanitation, Communication Failure | Loss of lives; Loss of crop, livestock; Damage to infrastructure. 112043 approx people lives are on stake in such situation. |
| <b>Drought</b>            | Moman Badodiya, Agar, Badod, Sushner, Nalkheda | Population, Livestock, Potable Water. Total Household affected 94378 approx.  | Loss of crop, livestock  |
| <b>Forest Fire</b>        | All Blocks                                     | Population living near forest areas, Livestock. People got affected 20% of total population is 302470 approx.                             | Loss of lives; Loss of Crop, Trees   |
| <b>Stampede</b>           | All Blocks                                     | Population depend on the tourist place.   | Loss of lives  |
| <b>Earthquake</b>         | All Blocks                                     | Population, Infrastructure, Communication failure, Livestock. Effected people can be 207032 approx in the most vulnerable areas.          | Loss of lives, loss of livelihood  |
| <b>Hail storm / Palla</b> | Shajapur, Gulana, Agar, Nalkheda               | Population , livestock. People got affected are 152063 approx.  | Loss of crops  |

**\*\* Source : population is calculated as per census book and it is an approx. calculative data.**

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

As we see the past history of Shajapur, we noticed that there is no major incident in the past history. Most of the blocks are rarely vulnerable to major disaster like flood, cyclone etc. Shajapur is basically more prone to drought, Hailstrom, frost, epidemic and flood due to the presence of the Dams.

#### **Earthquake:**

Being a part of the central state of India, Shajapur comes under zone-II. So all the building in Shajapur district head quarter is vulnerable but not at very high risk. But in case of earthquake there may be chances that everything goes inside and huge loss of life and properties also saving life will be very difficult in this situation. So there should be preparedness plan for this hazard.

Earthquake risk assessment is all the more difficult in Shajapur district because of the lack of seismic instrumentation in large parts of the district. In addition to the nature of earthquake and the site (such as the magnitude, duration, soil type), there is big? Whether the buildings in Shajapur are Earthquake resistant? Whether the technology of earthquake-resistant was used for establishing these Schools, hospitals and others government buildings buildings? If used then, were our PWD and RES engineers trained enough to use the technology for the construction of the infrastructure? Are the buildings being constructed by following national building code? Is the standard material used for the construction? Is frame work of building by-laws is in place?

### **Flood**

Flood is more prone to Shajapur, Shujalpur and Kalapeepal districts because these areas are more close to the rivers and Dams are also situated in these districts only. Till now there are major flood disaster occurred in these areas but these areas are vulnerable to the flood and may impact hard during disaster stage.

### **Drought**

Due to this uncertain rainfall pattern the entire district may receive drought. As the impact of draught is mainly felt by farmers because it majorly harms crops. Also scarcity of water is felt by the people of Shajapur during draught specially problems of drinking water.

### **Forest Fire**

Some year during fire-season i.e. March to May, some of the forest areas of Shajapur district experience the incidence of Forest fires. Apart from this sometimes during the above season crops also caught fire due to electric spark in rural areas. There are few incidents occurred in the Shajapur Town because of spark but it had controlled on time without losing much.

## **Blockwise Risk Profiling**

| S.n<br>o. | Name       | Hazard and Vulnerability  |
|-----------|------------|---|
| 1         | Makshi     | Makshi is very known for industrial area in Shajapur district. Industries established there leads to more use of road and trains in the Block, which make it more prone towards these accidents. So it is needed that SOP shouldbe prepared for those industries on central level and along with that time to time audit is required to keep proper check over the industries which may in future leads to the Disaster |
| 2         | Shujalpur  | Shujalpur is more close to the rivers and mostly prone to the floods too. Heavy rainfall sometimes leads to the breakage of the boundaries of the river and water overflows leads to hazard. This may cause damage of property and life.  |
| 3         | Kalapeepal | Kalapeepal and Shujalpur are close to the rivers and due to which it is prone to the floods. Heavy rainfall sometimes leads to the breakage of the boundaries of the river and water overflows leads to hazard. This may cause damage of property and life.   |
| 4         | Sushner    | Sushner is backward area and most of the population is tribes. This area is more prone to Earthquake and need to take care. It should require to work and manage well with PWD to make good home and earthquake resistive home for the people so that it can bear any kind of disaster and wouldnot lead to another Bhuj incident.  |
| 5         | Agar       | Agar is very known for industrial area in Shajapur district. Industries established there, leads to more use of road and trains in the Block, which make it more prone towards these accidents. So it is needed that SOP shouldbe prepared for those industries on central level and along with that time to time audit is required to keep proper check over the industries which may in future leads to the Disaster  |
| 6         | Badod      | Badod is on highway which leads it to prone to the more road accidents. Road should need to maintain at high level and should need to take care of bridges and roads time to time. Along with that it is required to maintain proper road rules and staff to avoid the road   |



|   |                |  |
|---|----------------|--|
|   |                | accidents.   |
| 7 | Moman Badodiya | Momanbadodiya is more close to the rivers and mostly prone to the floods too. Heavy rainfall sometimes leads to the breakage of the boundaries of the river and water overflows leads to hazard. This may cause damage of property and life.   |
| 8 | Nalkheda       | Nalkheda is on highway which leads it to prone to the more road accidents.It is equally prone to the earthquake too. Road should need to maintain at high level and should need to take care of bridges and roads time to time. Along with that it is required to maintain proper road rules and staff to avoid the road accidents.  |
| 9 | Shajapur       | Due to the presence of two big dams i.e Chillar and Palval Dams in the town it make it prone towards flood which can lead to worst situation. Sometimes any breakage in dam or excess in rainfall leads to the overflow of the water which leads to big hazard and loss of property and life in the district. So it is required to make a proper plan to deal with any kind of disaster. Time to time audit is required. |

**C . DISTRICT DISASTER MANAGEMENT FRAMEWORK**

**C 1 District Action Plans**

**C 1.1 Mitigation Plan**

Disasters often disrupt progress and destroy the hard-earned fruits of painstaking developmental efforts, often pushing nations, in quest for progress, back by several decades. Thus, efficient management of disasters, rather than mere response to their occurrence, has in recent times, received increased attention both within India and abroad. This is as much a result of the recognition of the increasing frequency and intensity of disasters, as it is an acknowledgement that good governance in a caring and civilized society, needs to deal effectively with the devastating impact of disasters. On 23 December 2005, the Government of India (GOI) took a defining step by

enacting the Disaster Management Act, 2005, (hereinafter referred to as the Act) which envisaged the creation of the National Disaster Management Authority (NDMA), headed by the Prime Minister, State Disaster Management Authorities (SDMAs) headed by the Chief Ministers, and District Disaster Management Authorities (DDMAs) headed by the District Collector or District Magistrate or Deputy Commissioner as the case may be, to spearhead and adopt a holistic and integrated approach to DM. There will be a paradigm shift, from the erstwhile relief-centric response to a proactive prevention, mitigation and preparedness-driven approach for conserving developmental gains and to minimize loss of life, livelihood and property. Unlike man-made disasters, natural hazards like floods, earthquakes, and cyclones cannot be avoided. However, with mitigation measures along with proper planning of developmental work in the risk prone area, these hazards can be prevented from turning into disasters. A multi-pronged approach needs to be adopted to undertake mitigation measures:

### **1) Risk Assessment and Vulnerability Mapping-**

As a first step towards addressing disaster vulnerabilities, the District disaster Management Authority (DDMA), Shajapur need to carry out risk and vulnerability assessment of all disaster prone areas of the District Shajapur. Hazard zone mapping and vulnerability analysis based on state vulnerability map should be prepared with past disaster experience mandatorily include a ground check component. As there is no chemical industry in Shajapur but there is one coal mining industry called South Eastern Coal Limited, Pali and a power plant called SGTPS(Sanjay Gandhi Thermal power Plant), Birsingpur which may be hazardous by taking consideration of industrial disaster. So SECL and SGTPS should have their mitigation & preparedness plan ready for any industrial disaster. As Shajapur district is mainly prone to flood and drought. It is necessary to identify the villages of Manpur block of the district which comes under low lying area and prone to flood. Also Shajapur comes under the earthquake zone-III which is most likely to be in danger zone and simultaneously coal mining is running in the district. so it is important to identify the sensitive part of district through GIS and mining area, which is becoming hollow in underground and no major public infrastructure should be constructed on these areas. The increasing use of **GIS**, remote sensing and applications of Global Positioning Systems (GPS) in DM, has made it imperative to set up a mechanism for sharing thematic and spatial data through a designated electronic clearing house. The NSDI has been set up by the Survey of India (SOI), to collect, compile, analyse and prepare value-added maps for use by various agencies in the field of DM for management of natural resources, industrial applications etc.

### **2) Structural Mitigation Measures**

Structural damage, collapse of buildings or infrastructure is common consequences of earthquake. Structural mitigation aims to reduce this damage and eventually save lives. Structural mitigation is a science that requires the expertise of civil engineers. It includes both the design of new buildings,

roads, canals, dams, and other infrastructure and the strengthening and retrofitting of old structures. It is most important to ensure good maintenance of structures as poor maintenance is often the cause of indirect damage. The district shall take steps for structural mitigation of disaster management. The departments that are associated with development of residential and commercial plots shall strict the NOC norms. The Building codes shall be strictly enforced in the district. Only seismically oriented engineers, contractors and masons shall be given certificates for multi story constructions and real estates. Simultaneously retrofitting is to be promoted with the expert advice. The possible two structural measures for disaster protection are Repair & Retrofitting of the existing building and Earth Quake Resistant new construction

- **Critical Infrastructure**

It is of utmost importance that critical infrastructures of Shajapur District like collectorate, hospitals, schools bridges, police station, roads, railway lines, power station, water storage towers, irrigation canals and other civic utilities should be constantly monitored for safety standards in consonance with safety benchmarks and strengthened where deficient. As road is very critical infrastructure of the district so it is very important to Identify/repair of main and alternative routes .The public works department will be primary agency responsible of conducting structural assessment , retrofitting and renovation of important building. So as per the identification of road there should be timely repair of identified vulnerable points. Simultaneously it is highly important that the entire critical infrastructure should be earthquake resistant. From now onwards all the building and houses should be constructed earthquake resistant by following proper guidelines. Nagarpalika will be primary agency to monitor all these construction otherwise it should not allow the new construction in future.

- **Retrofitting**

For an existing building, Retrofitting or Seismic Strengthening is the only solution to make it disaster resistant. In Shajapur District, all lifeline buildings such as major hospitals, Schools with large space for storage, district administration offices and other vital installations shall be retrofitted in the first phase. In the second phase all other significant buildings shall be given priority for seismic strengthening. Before carrying retrofitting, a panel of experts shall be approached for assessing the structure and to suggest the type of retrofitting required

### **3) Environmentally Sustainable Development**

The Madhya Pradesh Pollution Control Board, Shajapur need to go hand in hand for ensuring sustainability with environmental and developmental efforts. Restoration of ecological balance in Bandhavgarh regions and raising Plantations need to be incorporated by the forest department, Development & Panchayat Departments. As Bandhavgarh national park is one of the most important national park of the country so it is highly important to maintain the conservation of forest and its environment. Eco systems of forests, agricultural, urban and industrial environment are also to be considered for restoration of ecological balances and sustainable development. Department of

Pollution & Forest must ensure the preservation of natural habitats. All roads in the rural areas should be converted in to Pucca road. Irrigation department should concentrate on Strengthening and raising the height of weak embankments, points. It should have facility of Storage of flood fighting materials like sandbags, bamboo's mats etc. There should be also provision of regular maintenance of bridges.

#### **4) Guidelines for new construction**

As Shajapur district comes under seismic zone-III for earthquake so it is important that there should be strict guidelines issued from the district administration to construct earthquake resistant building. PWD department should also follow the guidelines for earthquake resistant construction of any government Building. From now onwards all the building and houses should be constructed earthquake resistant by following proper guidelines. Nagarpalika will be primary agency to monitor all these construction otherwise it should not allow the new construction in future.

#### **5) Forecasting and Early Warning Systems**

It is most essential to establish, upgrade and modernise the forecasting and early warning systems for all types of disasters. The nodal agencies responsible for monitoring and carrying out surveillance, for specific natural disasters, will identify technological gaps and formulate projects for their up gradation, in a time-bound manner.

#### **6) Communications**

Communication and sharing of up-to-date information using IT infrastructure remain important of effective implementation of the disaster management strategy. Reliable, up-to date and faster sharing of geo-spatial information acquired from the field or the affected areas is a pre-requisite for effective implementation of disaster management strategies. Efforts should be made for setting up IT infrastructures consisting of required IT processes, infrastructure and skills for quick up gradation and updating of data sets from the PRIs or the block. **The DIO, Shajapur** will insure the above said work with the help of Govt. of India.

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

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

- Under the National Rural Employment Guarantee Act, provide for strengthening and maintenance of such physical features that may vitally protect/help in rescue of communities during disaster situations. Under this act maintenance and strengthen of dam, ponds etc. will take place and also it will provide the job to unemployed youth. Especially under the construction of smaller dam, stop dam, rural road rural youth can work under MNREGA and reduced the vulnerability. Addition to this during the time of disaster like flood or drought if any plan has been taken by Zila Panchayat for relief and construction of drains for reducing the impact of flood so this job can be implemented under MNREGA. Apart from this Unemployed youth can also work during disaster for relief work under MNREGA so that rescue & relief will be fast.
- Under Indira Awaas Yojana (IAY) all the houses should be advised and instructed to construct earthquake resistant. Special instruction should be provided by district administration to block level and block will guide and instruct to Gram Panchayat for the construction of houses under Indira Awaas Yojana (IAY) for earthquake resistant house construction. Thre training should be provided at gram Panchayat level for construction of small earthquake resistant houses under this scheme. This vulnerability due earthquake can be reduced.
- Under SSA (Serva Siksha Abhiyan) whatever schools are being constructed should be earthquake resistant by following the proper guidelines. This should be instructed from the district SSA office. Also awareness should be spread at Gram Panchayat level about earthquake-resistant house by education department.
- PDS system should be made very efficient and should play a critical role during the time of disaster. As the PDS have sufficient foods in stock for providing food during crisis.
- Under NRHM special attention should be given to the diseases like Falaria, Dengu, Chickengunia and jaundice in Shajapur district so that epidemics can be avoided. Under this scheme proper vaccination should be carried out by the district health administration through CHC and PHC. Apart from Special camp should be arranged at block level or Gram Panchayat level about awareness of diseases and how to be safe. Dotors should be trained to tackles the epedimic in that region. Under this scheme there should be doctors and stock of medicines related to the epidimics by which generally people of these areas are affected.
- The same way, under PMGSY (Pradhanmantri gram Sadak Yojna), proper communication should be established in Akash Koh area of Manpur block where transportation become vulnerable during rainy seasons. It should give special attention to the water logging area

which is more affected during the rainy seasons. Roads should be constructed under this scheme in rural area for the proper communication from village to block. There are some are more affected during rainy seasons transportation become very difficult so these areas should get priority.

- In order to deal with the severe cases of Drought, the components of National Food Security Mission (NFSM) should also to be linked based on the relevance and according to the needs of the sufferers, in line with the criteria of the mission.

### **C 1.1.2 Training & Capacity Building**

Reliability of plans and Standard Operating Procedures (SOPs) are tested and refined through training, seminars and mock drills. The community awareness and training activities will basically be carried out in the form of training programmes through NGOs, Private Sector, and Government Training Institutions. Apart from spreading awareness of disasters, the focus will essentially be on community capacity building. The DDMA, Shajapur with the help of NDMA should conduct mock drills in Shajapur. The DDMA, Shajapur shall be encouraged to generate a culture of preparedness and quick response by periodically organising training simulation and mock-drills in future. An institutional arrangement is required to ensure that in the long term, contractors and mason ensure safe construction practices.

There should be provision of training on disaster management in school and college level for students so that young boys and girls can understand the importance of disaster management and they should be equipped to handle it primarily and can take right move.

Primary agencies for community level training and public awareness are:

- Environment, scientific & technology department
- Technical Education Department
- NGO
- Private sectors

### **C 1.1.3 Community Initiatives**

During any disaster, communities are not only the first to be affected but also the first and foremost responders. Community participation ensures local ownership addresses local needs, and promotes volunteerism and mutual help to prevent and minimize damage. The community needs to be encouraged to reduce the impact of the next disaster. Demonstration housing units indicating the various technology features and options will be built by the Government or NGOs or Community. This should prioritize buildings like village offices, primary health centres, community centre, schools etc. The needs of the elderly, women, children and differently abled persons require special attention.

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**

This section will address the short & long term funding provisions for proposed mitigation activities, under the overall objective of risk management at district level.

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

Please check with district administration, about the all the funding provisions, short & long term.

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

It has been observed that the damage to life and property due to a disaster can be significantly reduced if the communities and local authorities are well prepared. This section will primarily focus on preparedness of the communities and local authorities in order to safeguard lives, protecting assets and efficiently utilize resources by taking appropriate actions in the face of any disaster. It will also ensure that response agencies are capable of reaching out to the affected areas in a prompt and coordinated manner. Preparedness also includes the formulation of viable emergency plans, the development of warning systems, the maintenance of inventories and the training of personnel. All preparedness planning should be supported by appropriate legislation with clear allocation of responsibilities and budgetary provisions.

Each Dept. has also given their separate preparedness plan. Please find it in SOP which elaborates it.

### **C.1.2.1 Preparedness before response**

#### General Preparedness Measures

1. Establishment of the DEOC (District Emergency Operation Centre) & Control rooms.  
The district administration should ensure the operation of DEOC at all times. Presently in Shajapur flood emergency operation centres are established in all the line departments temporarily for the flood season. Only one control room by Police department runs throughout the year. Hence, a DEOC needs to be established in the District which runs throughout the year.

#### 2. Plan Updation

Yearly updation of DDMP is very important. All resource inventory needs to be updated in the DDMP and on the website of India Disaster Resource Network ([www.idrn.gov.in](http://www.idrn.gov.in)). All the contact numbers needs to be updated regularly.

#### 3. Communication System

During any major natural disaster communication system is the first casualty. Hence, it is very important for the concerned departments to prepare themselves for such a scenario. Provisions should be made for real time dissemination of advance warnings and information to the concerned authorities at various levels and threatened community. Broadcasting mediums such as television and radio shall be used for dissemination of advance warning and information as it has higher geographical reach.

Wireless sets should be available in all the blocks. Satellite phone and other emergency communication devices should be available at district level. Also SMS groups should be formed for various departments and at various levels, so as to dissipate information swiftly.

Also the DEOC must be equipped with proper software and hardware, and must have well trained staff so as to make proper use of the latest NDCN (National Disaster Management Communication Network).

#### 4. Training for Disaster Management Team Members

The DDMA must select and train Disaster Management Teams at district, block and village level. DMTs will comprise both male and female volunteers who will be trained by DDRF. They should be trained in all the major areas including First-aid, Search & Rescue, Evacuation, etc. These DMTs will be the first respondents to any disaster and shall be provided proper and periodic training. Help of various NGOs, NCC/ NSS, Aasha Karyakarta, etc., can be taken.

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



It is most essential to establish, upgrade and modernise the forecasting and early-warning systems for all types of disasters. The nodal agencies responsible for monitoring and carrying out surveillance, for specific natural disasters, will identify technological gaps and formulate projects for their up-gradation, in a time bound manner. Reception and dissemination of information swiftly and effectively is very important. Hence, the DEOC must be well equipped. The existing control rooms for flood relief can be used for other disasters with proper modifications. Here the information desk of the ICS system (explained later) will play an important role. It should be ensured that the warning system is easy to operate and take little or no maintenance at all. If any electrical equipment is involved, power supply should be ensured and there should be provisions for backup supply. Also, it should be checked at regular interval to ensure its working at the time of need.

**Table C. 1.2.2**

| Hazards                     | Prediction Agencies   | Mode of communication, info. dissemination at district level |                            |
|-----------------------------|---|--|----------------------------|
|                             |   | Present  | Proposed                   |
| <b>Flood</b>                | Central Water Commission, IMD, PHE, Irrigation Department and The Flood Relief Cell | Newspaper  | Radio, T.V.,Newspaper, SMS |
| <b>Drought</b>              | IMD   | Newspaper  | Radio, T.V.,Newspaper, SMS |
| <b>Industrial accidents</b> | Department. of Industry, SPCB   | N/A  | Radio, T.V.,Newspaper, SMS |
| <b>Epidemics</b>            | Health department, Agriculture department and Veterinary Division                   | Newspaper  | Radio, T.V.,Newspaper, SMS |
| <b>Landslides</b>           | Landslides Geological Survey of India, Mining department                            | N/A  | Radio, T.V.,Newspaper, SMS |
| <b>Forest Fires</b>         | Forest Department   | SMS alerts   | SMS alerts                 |
| <b>Hail Storm</b>           | IMD   | Newspaper  | Radio, T.V.,Newspaper, SMS |

Presently all the major communication between the prediction agencies and administration is done through telephones and letters, this process is very slow. Hence, the communication system needs to be revamped. Whenever information is to be shared with multiple recipients SMS alerts should be used to save time and instead of conventional posts, e-mails should be used to communicate.

### **C.1.2.3 Evacuation preparedness**

The following steps are recommended for evacuation:

A special Search and Rescue team consisting of the police department personnel, Home guards, PWD workers and the person having past experience in dealing with disasters should be constituted.

The procedural steps for evacuation of people under threat or likely to be affected by the disasters are as follows:

- Evacuation team should separate into smaller groups targeting individually on different level of casualties.
- The unconscious and severely hurt will be given the top most priority and sent for medical aid in the ambulances
- The people needing first aid comes next and should be treated promptly.
- Activate all the emergency communication mechanisms
- Logistics should be contacted immediately for making the provisions for transportation.
- Temporary relief centres should be set up as soon as possible to house all the affected people or they should be immediately sent for the existing relief centres.
- If possible, heli-ambulance should be arranged for evacuating unconscious and severely hurt people.

### **C.1.2.3 Organizing mock drills**

Efficacy of plans and Standard Operating Procedures (SOPs) is tested and refined through mock drills. Mock drill is an integral part of the Community based disaster management plan. Mock drills must be organized at district, block and village level to condition all the residents to respond to any disaster in an effective manner. Mock drills should also be conducted in all the main public buildings with high occupancy including schools, hospitals and other government and private buildings. All the concerned departments must participate in the drills to ensure safety of the participants. It should be conducted once in six months as per the seasonality calendar of natural disaster.

## **C 1.3 Response Plan**

The onset of an emergency creates the need for time sensitive actions to save life and property, reduce hardships and suffering, and restore essential life support and community systems, to mitigate further damage or loss and provide the foundation for subsequent recovery. 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. A response plan essentially outlines the strategy and resources needed for search and rescue, evacuation, etc.

Response Plan has separately given by each department.

### **C 1.3.1 Incident Command System (ICS)**

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

The Incident Command System (ICS) is a management system and an on-scene, all risk, flexible modular system adaptable for natural as well as man-made disasters. The ICS has a number of attributes or system features. Because of these features, ICS has the flexibility and adaptability to be applied to a wide variety of incidents and events both large and small. The primary ICS management functions include:

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

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:**

#### **1. Incident Commander**

The Incident Commander is responsible for all incident activity. Although other functions may be left unfilled, there will always be an Incident Commander.

#### **2. Operations Section**

Develops tactical organization and directs all the resources to carry out the Incident Action Plan.

#### **3. 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.

#### **4. Logistics Section**

It provides resources and all other services needed to support the organization.

#### **5. Finance / Administration Section**

Monitors costs related to the incident, provides accounting, procurement, time recording, cost analysis, and overall fiscal guidance.

- a) Incident command : Command has given by Collector

- b) Planning section: Planning department take care of it after getting order from collector (Dpty. Collector Sohan Kanash and Mr. Nagraj).
- c) Operations section: Taken care by the respective departments like revenue, land record, media etc.
- d) Logistics section: Money has been allocated to the various departments to purchasing the equipment and then these departments (for example Home Guard) purchased the equipment. Sometimes these departments provide the required equipment list directly to collector office which in turn purchase the same for them. Recently Home guard asked for Oxygen gas mask and they provided list to collector office, which in turn purchased by collector.
- e) Finance/ Admin section: Revenue dept. play major role to allocate the money to purchasing equipment and for various management works.

### **District Level Incident Response**

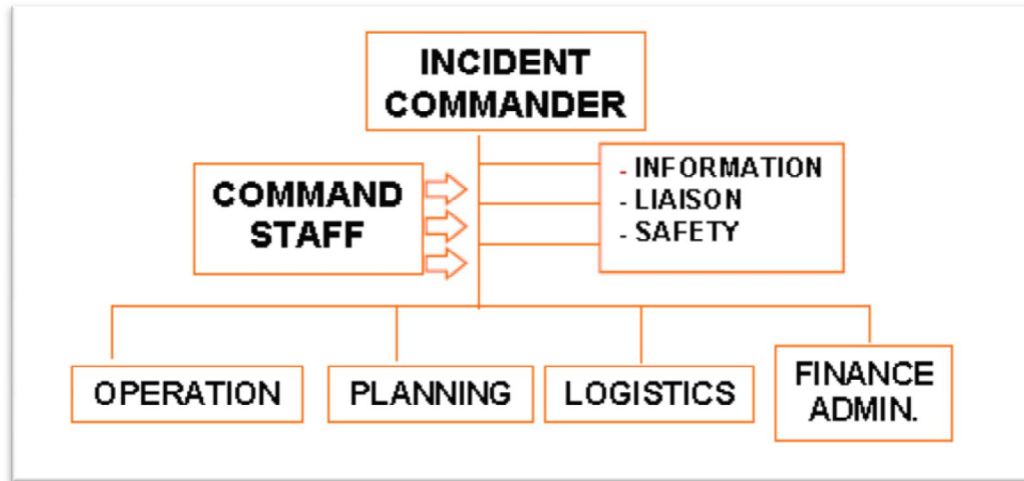
At the district level, there will be one District Headquarters Team with the primary function of assisting the District Collector in handling tasks like general co-ordination, distribution of relief materials, media management and the overall logistics. Suitable officers from the district administration 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

The following represents the major responsibilities and duties of the 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.

### Incident Commander

#### Major responsibilities and duties of Incident Commander

1. Assesses the situation and/or obtain a briefing from the prior Incident Commander.
2. Determine incident objectives and strategy.
3. Establish the immediate priorities.
4. Establish an incident command post.
5. Establish an appropriate organization ensure planning meetings are scheduled as required.
6. Approve and authorize the implementation of an Incident Action Plan.
7. Ensure that adequate safety measures are in place.
8. Co-ordinate activity for all Command and General Staff.
9. Coordinate with key people and officials.
10. Approve requests for additional resources or for the release of resources.
11. Keep agency administrator informed of incident status.
12. Approve the use of students, volunteers, and auxiliary personnel.
13. Authorize release of information to the news media.
14. 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.

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

## 2. Establish the Immediate Priorities

First Priority is always safety of:

1. People involved in the incident
2. Responders
3. Other emergency workers
4. Bystanders

Second Priority: Incident Stabilization.

Stabilization is normally tied directly to incident complexity.

When considering stabilizing the Incident Commander must:

1. Ensure life safety
2. Ensure Protection of life and property
3. Stay in Command
4. 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.

1. Release all hostages safely with no further casualties.
2. Stop any further flow of toxic material to riverbed.
3. Contain fire within existing structures.
4. 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.

1. Public Information and media relations
2. Maintaining liaison with assisting and co-operating agencies
3. 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**

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

### **Reasons for the IC to designate a Liaison Officer**

1. When several agencies send, or plan to send, agency representatives to an incident in support of their resources.



2. When the IC can no longer provide the time for individual co-ordination with each agency representative.
3. When it appears that two or more jurisdictions may become involved in the incident and the incident will require on-site liaison.

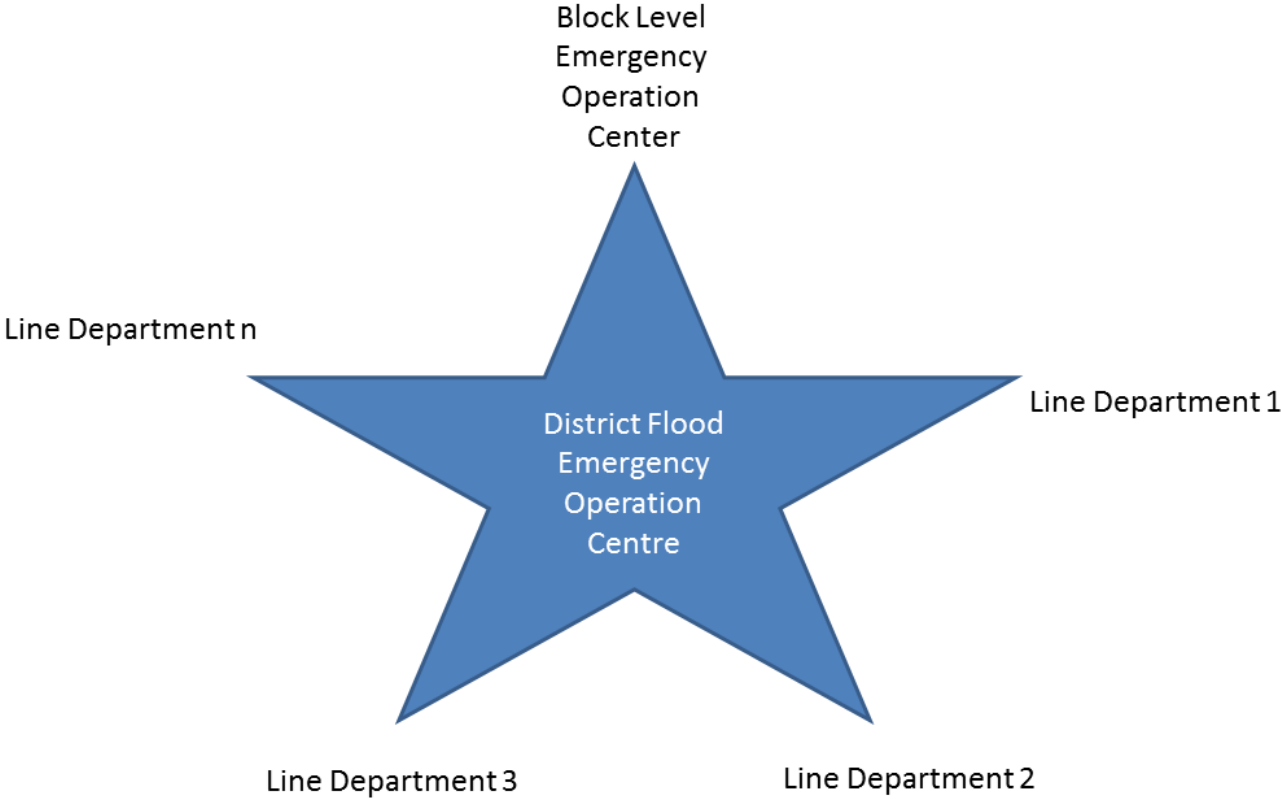
### **Safety Officer**

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.

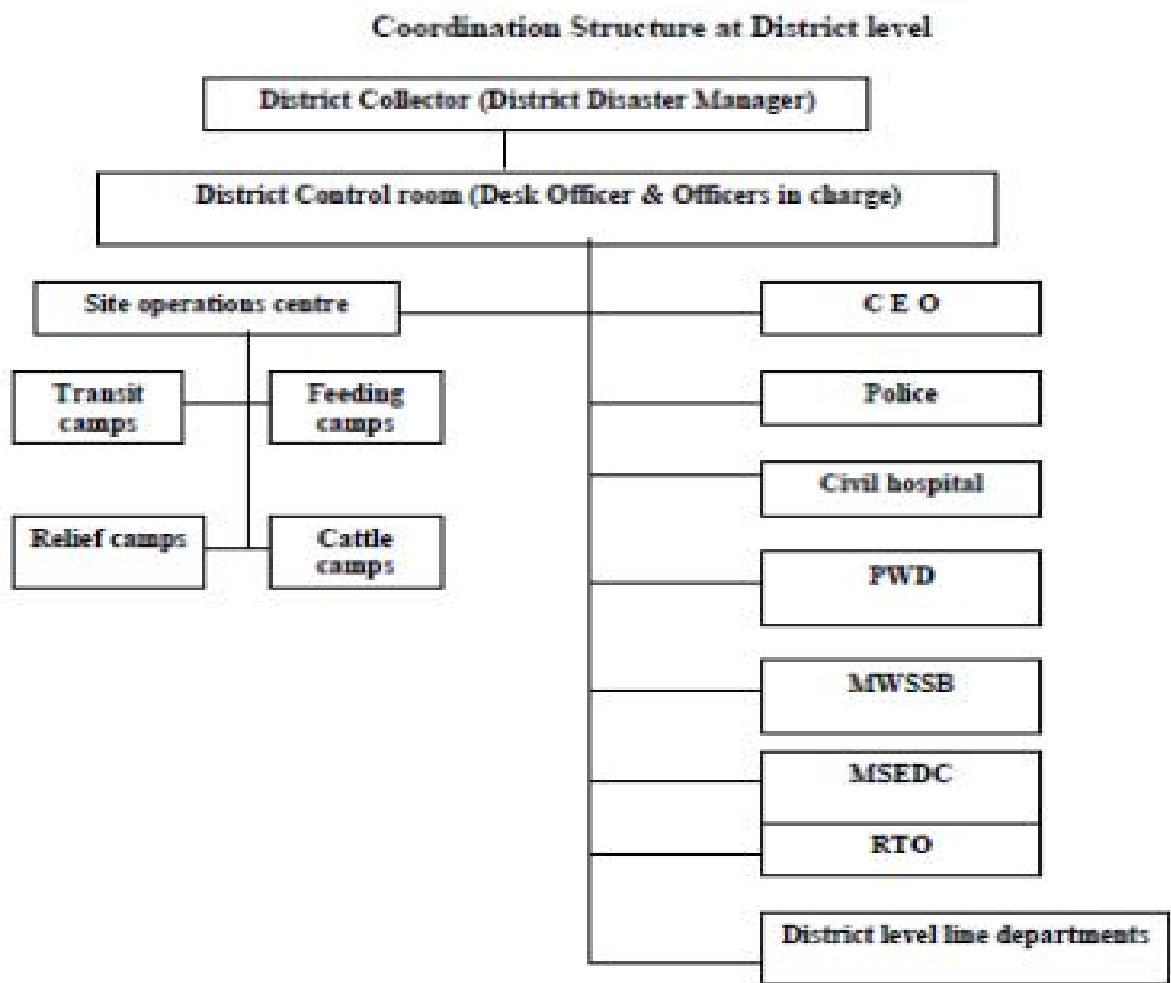
### **C 1.3.2 Crisis management direction & coordination**

DC office issue the orders to Home Guards and home guards further take action on the issue. In this case DC office also contacts Police dept. and SP or IAS took part in any case of crises.

Presently there is a Flood Emergency operation centre at district level, which stays connected with all the line departments and Block emergency operation centre. If any situation arises the concerned department informs the Flood Emergency operation centre at district, which then dissipates the information to the various blocks and concerned departments. All the communication is carried through telephone.



*Present Structure*



*Proposed Structure*

**C 1.3.3 Disaster Emergency Response Force**

No special force has been made for this. Only a few Home guard and Police personnel have received training (Waterman ship, S&R etc).

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

**C 1.3.4 Rapid damage assessment & reporting**

No Special format of information is available. Only Land Record dept. has limited information and it has been provided by them in detail (block wise).

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.

### **C 1.3.5 District Search & Rescue Team**

Presently there is no dedicated search and rescue team in Shajapur. Police and home guard do the search and rescue operation whenever needed. So dedicated teams to be formed to lead the search and rescue operations. The following is recommended:

| S.No. | Team Member   |
|-------|---|
| 1.    | Policemen   |
| 2.    | Sniffer Dogs  |
| 3.    | Home guard  |
| 4.    | Civil Engineers   |
| 5.    | Disaster Management Specialist  |
| 6.    | Swimmers  |
| 7.    | Doctors   |
| 8.    | Fireman   |
| 9.    | Local community people who are ready to volunteer for Search & Rescue operation |

The rescuers efficiency level to be maintained through practice and demonstrations / mock-drills during the non-disaster period. The rescue team should undergo standard training from time to time. Proper state of the art equipment required for S&R operations to be procured and adequate training must be given to the S&R team for operating the same.

### **C 1.3.6 Medical response**

Medical response has to be quick and effective. The specialized medical care shall be required to help the affected population. At the district level, dedicated medical teams will be activated at the time of emergency, which will consist of the doctors, nurses, pathologists, etc. The following measures shall be taken by the District Administration:

1. A mechanism for quick identification of factors affecting the health of the affected people shall be established for surveillance and reporting.

2. An assessment of the health and nutritional status of the affected population shall be done by experts with experience of emergencies and, if possible, local knowledge.
3. The voluntary deployment of the nearest medical resources to the disaster site, irrespective of the administrative boundaries, will be warranted.
4. Mobile medical hospitals and other resources available should be deployed immediately.
5. Adequate supply of medicines, disinfectants etc. shall be made.
6. Where necessary inoculation shall be done.
7. Vaccination of the children & pregnant women shall be undertaken.
8. Vector-borne diseases are a major cause of sickness and death in many disaster situations. IDSC should be involved and vector control measures shall be undertaken.
9. Water borne diseases may cause sickness and deaths and therefore adequate measures shall be taken to prevent such outbreaks.

There are combat teams in Shajapur in every block, which can be used in case of disaster for providing health care. These teams are headed by BMO (Block Medical Officer) and have MPW, ANM, Staff Nurse, Ward boy as members. DDMA must ensure their proper training and retraining on triage, advance life support, well versed with golden hour-platinum minute's concept, quick steps of first aid response, etc.

**Table C.1.3.6**

| S.No. | Name of team member   | Designation           | Contact no (off.) | Contact no (Res.) |
|-------|-----------------------|-----------------------|-------------------|-------------------|
| 1.    | Dr. J. Atulkar<br>CMO | CMO                   | 9425034077        |                   |
| 2.    | Sunita Yadav          | Mahila Baal<br>Vikash | 9425365313        |                   |

### **C 1.3.7 Logistic arrangements**

It is recommended that a separate list of vehicles that are in good working condition and are easily available at the time of disaster should be compiled so that it can be called during emergency. Also vehicle owners should be motivated to have regular maintenance of their vehicles. Home guard has their own vehicle including one Tata 407 truck and a Mahindra Bolero car in case of an emergency. The number of vehicles in the list should be increased and it should be updated regularly. Roadways transportation has closed in MP, so there are no government vehicles available. So contract should make with private agencies so that they can provide their vehicles during disaster stage.

### **C 1.3.8 Communications**

Presently only means of communication is telephone, and all the documentation is done manually on papers. Hence proper arrangements should be done for Data collection, record keeping, assistance in locating missing persons, etc. A proper IN-message and OUT-message register should be maintained and all the information should be routed through the information officer. The latest NDCN (National Disaster Management Communication Network) should be utilized and arrangements should be made for last mile connectivity. The Communication room must have the following:

- Telephones
- Fax
- Intercom units
- VSAT connection
- PC with modem and printer
- Mobiles
- Photocopying machine
- Wireless sets
- Satellite Phone
- Power Backup

### **C 1.3.9 Water and Sanitation (WATSAN)**

Water supply is invariably affected in natural disasters. Safe drinking water might not be available particularly in hydro-meteorological disasters. Water and Sanitation is under PHE and they provided their solution during the disaster management. They use to take care of water supply and repair the pump before or during the floods so that pure drinking water availability should be there. The following measures shall be taken by district administration:

- The State Governments shall identify alternative sources of water and make necessary arrangements for supply to the affected population.
- The State Governments shall ensure that affected people have adequate facilities and supplies to collect, store and use sufficient quantities of water for drinking, cooking and personal hygiene.
- It shall be ensured that drinking water supplied conforms to the prescribed quality standards
- It shall be ensured that water made available for personal and domestic hygiene should not cause any risk to health.

Sanitation services are crucial to prevent an outbreak of epidemics in post disaster phase. Therefore a constant monitoring of any such possibilities will be necessary.

- It should be ensured that disaster-affected households have access to sufficient hygiene measures.

- Soap, detergents, sanitary napkins and other sanitary items should be made available to ensure personal hygiene, health, dignity and well-being.
- In the relief camps, toilets should be sited, designed, constructed and maintained in such a way as to be comfortable, hygienic and safe to use.
- Procure and maintain mobile toilets which can be deployed swiftly in affected areas (Presently there are no mobile toilets available with Municipal Corporation, though they are in a process of procuring one set).

The primary agency responsible for WATSAN is Municipal Corporation.

### **C 1.3.11 Law & order, Police and Fire Services**

Maintaining Law and Order is the main responsibility of Police Dept. and Home guards. They must stay prepared and should act promptly in case of a disaster. Following are the main functions:

- The Police Department and Home guards shifts the people to the safer places.
- They help the Revenue Department to carry out relief work without any hindrance during disaster period and safeguard the properties of the victim.
- They arrange law and order against theft in the disaster-affected area and co-ordinate with the search and rescue operation through NCC /NGO.
- They also arrange for security at the relief camps/relief material storages.
- They also maintain law and order at the time of distribution of relief material.
- They make due arrangements for post mortem of dead persons, and legal procedure for speedy disposal.
- They specially protect the children and the women at the shelter places.
- They make all possible arrangements to find out the family members of the deceased. They are responsible to make suitable arrangement for keeping the dead bodies.

The police force and Home guards should be trained in disaster management skills and should be upgraded to acquire multi-hazard rescue capability.

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

A committee at the district level has to be constituted under the chairmanship of the District Collector to address the grievances of the public regarding missing persons. Media management is under Dist. Communication Department and they do take care to make people aware about the disaster and play major role in warning and alert phase.

The search and rescue team should search for the missing persons living or dead.

The dissemination of accurate information through electronic and print media is very important.

Regular press briefings shall be made by District Magistrate/Collector or his authorized representative i.e. Information Officer (explained in ICS) at pre-designated time as a single source of information from Government.

**C 1.3.13 Animal care**

Animals both domestic as well as wild are exposed to the effects of natural and man-made disasters. It is necessary to devise appropriate measures to protect animals and find means to shelter and feed them during disasters and their aftermath, through a community effort, to the extent possible. The Veterinary Department/ Department of Animal Husbandry is formed a eight doctors members team to carry out its activities in Shajapur. This Relief teams are constituted during flood season only. Though the department takes care of treatment and vaccination of animals, there is no provision for proper disposal of carcass. Hence, the department must formulate an adequate strategy for proper disposal of carcass and must ensure periodic vaccination of animals for various diseases. The department should stay in touch with the IDSC (Integrated Disease Surveillance Centre), to keep themselves updated about any disease outbreak.

**C 1.3.14 Management of deceased**

Health department work for people after disaster and help to prevent spreading deceases in the area. They provide medical treatment and medicine on time.

The District authorities must constitute a Carcasses Disposal team which will be responsible for disposal of bodies in event of mass causalities. The team must ensure timely disposal of the dead bodies in order to avoid spread of any disease. They must preserve the bodies and shall carry the process of identification and handing over to the next of kin. Mass burial/disposal of bodies shall be done as a last resort and local religious & cultural practices shall be honoured while disposing dead bodies. Proper documentation is to be done and death certificates should be issued to the next of kin.

**C 1.3.15 Civil Defense and Home Guards**

Civil defence works with police to maintain peace in the district. They take orders from the collector and work accordingly during the disaster phase.

The Police and the Home Guards will be deployed for emergency response, community preparedness and public awareness. At district level, a culture of voluntary reporting to duty stations in the event of any disasters will be promoted. Also, SMS groups will be formed for both police personnel and home guards. These SMS groups can be used to send message (in regional language) to all the personnel as and when required, asking them to report for duty immediately.



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

No Private security is there. As per the recent private security bill introduced by the State Govt., the private guards and security agencies have to play a very vital role in disaster management, and especially in the disaster response stage. Hence, private security guards must be trained for S&R and first-aid, so that they can provide a helping hand during a disaster.

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

NGOs and CBOs play an important role in disaster response. They have better knowledge of the area and can reach the disaster site swiftly due to proximity. They should select and train young volunteers to help the government agencies at the time of a disaster. They can help in the following ways:

- Providing psycho-social support and mental health services to the survivors of the disasters.
- By acting as a communication link between the communities and government agencies.
- By helping senior citizens, handicaps, ladies and children in various manners.
- By organising local groups for assisting the government agencies in the S&R and relief work.
- By maintaining a healthy environment in relief shelters.

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

Done in the collector office and various departments play their role to plan for Relief management. Main departments are Media, Revenue, Land record, Planning etc. Decision has made there and then responsibilities are allocated by the Land Record dept. to various other dept.

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. Though it is clearly mentioned in the ICS, still the specific functions of the various desks are given below:

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

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

#### **Functions of Logistics Desk**

1. Issue Village relief tickets to the affected families
2. Organize distribution of Relief Supplies

3. Receive, store, secure, relief materials for relief camps and affected villages
4. Co-ordinate supplies distributed directly by NGOs and other organizations including private donors
5. Ensure proper maintenance of vehicles and equipment
6. Ensure optimum utilization of resources such as fuel, food, and other relief materials
7. Mobilize and co-ordinate the work of the volunteers ensuring community participation
8. Organize facilities for staff and volunteers

**Functions of Health Desk**

1. Disposal of dead bodies
2. Disposal of carcasses
3. Disposal of waste and waste water
4. Treatment of the injured and the sick
5. Preventive medicine and anti-epidemic actions
6. Inspection of food, water supplies, sanitation and disposal of waste

**Functions of Communication and Information Management Desk**

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

**Functions of Operation Desk**

1. Salvage operations
2. Feeding centres for two weeks to be set-up at the earliest

**Co-ordination with**

1. Site Operations Centre
2. District Control Room
3. District administration staff in the area
4. NGOs
5. Private donors

**B. Manage**

1. Dispatch of all information (as per the formats) and subsequent demands to DCR/Site Operations Centre
2. Organize shifts for staff and Supervision of the same

**C. General**

1. Maintenance of records (date of joining, period of service, leave record, overtime, etc) for all the persons deployed for relief work at operations centre.
2. Get sanction for expenses for reimbursement from the DDM through Site Operations Centre.

**Functions of Services Desk**

1. Relief supplies to families or to households including water, clothing, and food.
2. Arrangements for dry rations and family kits for cooking within two weeks of the disaster.
3. Promote services for mental health.
4. Restoration of family (including locating missing children, relatives, friends.)
5. Assistance in locating missing cattle.
6. Assisting students to continue with their studies.
7. Services for the orphans.
8. Assisting individuals with special needs (pregnant women, infants, handicapped, old etc).
9. Counselling services.

### **Functions of Resources Desk**

#### **Maintenance of**

1. Books of account for all cash receipts
2. Books of account for all cash disbursements
3. Stock register for all relief materials
4. Issue register for all relief materials
5. Dead stock register for all non-consumables (inventory)
6. Record of all personnel payment on TA&DA, daily wages and other incidentals made to relief personnel.
7. Records of all transfer of funds (as advances) to other government departments
8. (suspense account)
9. Records of all cash vouchers and credit vouchers.
10. Records of all gratuitous relief.
11. Records of all compensation paid.
12. Preparation of records relating to finance and accounts as per the formats for dispatch to Emergency Operations Centre.

#### **General**

1. All cash donations must be deposited with District Control Room and a receipt for the same should be obtained.
2. All material donations must be entered in stock register and made available for inspection to officer from the District Control Room or Site Operations Centre.
3. Maintain record of all issue of cash vouchers and credit vouchers for petrol and diesel.

### **C 1.3.19 Media Management**

Dist. Communication dept remain in regular touch with DDMO and collector office and publish the awareness plans and spread information among the people. They use Television, Radio and newspaper.

At Present the Public Relation Officer is responsible for providing information to the media in case of a disaster. It is his responsibility to ICS, the Information Officer will act as the spokesperson and will deal with media.

The various aspects of media management planning will include:

- The spokes persons will be given comprehensive training in dealing with the media. Correct reporting of the situation is an important confidence-building measure for the community.
- The messages to be delivered prior to, during, and after an incident will be meticulously planned, including the listing out of the probable clarifications that one can anticipate in disaster situations.
- Identify crucial information and incorporate the same precisely in the initial message so that prompt and appropriate public response is forthcoming during and after the disaster.
- Press and electronic media will be associated throughout the period of response and the post-disaster phase for early and accurate dissemination of information released by the authorities.
- The Information Officer will determine the modes of dissemination of relevant information. An authorised press release should always be written and handed over to the press so that correct and authentic news is disseminated to the public.
- The district authority will issue continuous and regular updates of the situation for media personnel and agencies.
- Adequate awareness will be generated in the print and electronic media about the various aspects of disaster.
- The media will play a supportive role especially for mobilisation of resources and dissemination of useful information that can help the community in managing the effects of disasters.
  - a) Providing information about relief and rehabilitation measures, medical support sites, routes to be followed or avoided, dos and don'ts for the public.
  - b) Organising relief material and their proper distribution.
  - c) Disseminating the latest information on the status of casualties, based on authentic information from hospitals.
- The entire exercise will be done without impinging upon the independent functioning of the media. The media shall be encouraged to disseminate authentic information only to prevent rumours and panic.

### **C 1.3.20 Fire Brigade**

*As of now there is no separate dedicated Fire Service department in Shajapur district. In case of any incidence of fire it is the work of Municipal Department. Also no training has been given to the firemen. There are only 6 fire brigades in working condition in the district. The Department of Fire Services is one of the crucial responders to disasters. Therefore a dedicated fire department should be in place. The staff of Fire Services should be trained, retrained in disaster management skills, and should be further upgraded to acquire multi-hazard rescue capability, in order to tackle any emergency related to fire or the allied disaster. Also there should be fire brigades in each block. Also it is recommended that there should be fire fighting motorbike in each block so that they can go in narrow roads. The firemen must be provided with fire suits, masks, and other cutting and drilling equipment. Regular maintenance of fire equipment and fire brigades should be done.*

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

The approach to the reconstruction process has to be comprehensive so as to convert adversity into opportunity. Incorporating disaster resilient features to 'build back better' will be the guiding principle. This phase requires the most patient and painstaking effort by all concerned. The administration, the stakeholders and the communities need to stay focused on the needs of this phase as, with the passage of time, the sense of urgency gets diluted. The appropriate choice of technology and project impact assessment needs to be carried out to establish that the projects contemplated do not create any side effects on the physical, socio-cultural or economic environment of the communities in the affected areas or in their neighbourhood. Systems for providing psycho-social support and trauma counselling need to be developed for implementation during reconstruction and recovery phase.

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

Guards from home department work hard to restore the infrastructure. They are basically trained for the same purpose. Based on the degree of damage to the existing structures of houses and other infrastructure, the victim will be issued funds for carrying out the restoration activity.

The PWD will be the nodal agency and also the housing board will take care of the reconstruction plans. Adherence to the zoning laws and other necessary precautions depending on the type and degree of disaster will be ensured while the infrastructure is being restored. IAY (Indra Awas Yojana), PMGSY and NREGA will play an important role here.

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

PWD work as per the order given by the collector office. They don't have their separate plan for it, because all the vulnerability analysis has been done by collector office only. Where Urban planning department is collaborated with Dewas Dist.

Reconstruction plans and designing of houses need to be a participatory process involving the government, affected community, NGOs and the corporate sector. After the planning process is over, while owner driven construction is a preferred option, contribution of the NGOs and corporate sector will be encouraged. Reconstruction program will be within the confines and the qualitative specifications laid down by the Government. Essential services, social infrastructure and intermediate shelters/camps will be established in the shortest possible time. For permanent reconstruction, ideally, the work including the construction of houses must be completed within two to three years. Advance Tools like insurance, short-term loans, etc., should be made use of.

### **C 1.4.3 Restoration of livelihoods**

After the damage assessment, Revenue and Relief Department releases compensation to help victims in restoring their livelihoods. Help of NGOs both national and international should be taken. Various schemes like SGSY, NREGA, PMGSY, etc can be used to provide livelihood to the victims. Loans should be offered at very less interest, so as to assist the victims in restoring their livelihood. Special attention to be given to the needs of women-headed households, artisans, farmers and people belonging to marginalized and vulnerable sections.

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

Presently, there is no trauma centre in Shajapur. However, trauma centre at the district hospital has been approved and is under construction. Doctors at the disaster site should try to give preliminary treatment for such cases. Help can be taken from various NGOs and CBOs. The provision of trauma handling and social rehabilitation is very necessary from the point of view of restoration to normal life and should be specifically given priority in the after disaster recovery plan.

## **C 1.5 Cross cutting elements**

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

Communities are always the first responders and hence the DDMA will ensure Community participation to promote local ownership, address local needs, and promote volunteerism. The DDMA will prepare the district level plan, by incorporating the information, needs and local vulnerability of the Gram Panchayats of the district. The Gram Panchayats will prepare their own disaster management plans and submit it to the respective Block Disaster Management Committee, which will in turn prepare their own block level plan and submit it to the district for preparation of final district level plan addressing all the local specific needs.

Help of local NGOs and CBOs can be taken, in order to have a realistic assessment.

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

Apart from Psycho-Social help, special needs of highly vulnerable groups including differently able persons, aged, children and women, should be taken care of while addressing the preparedness and relief requirements of the disaster victims. A specific strategy for addressing the risk reduction needs of these vulnerable groups will be developed by every line department in the district. These include:

#### **Disabled persons**

- Artificial limbs fitted to affected persons.

- Modern wheelchairs, supportive devices provided.

#### **Children**

- Orphaned children are fostered.
- Day centres set up
- Orphanages established.
- Child help lines established.

#### **Paraplegics**

- Pension scheme introduced for paraplegics.
- Physiotherapy under continuous supervision of doctors.

#### **Old Persons**

- Aged persons given pensions.
- Old Age Homes established.

#### **Women**

- Pension sanctioned.
- Women's Livelihood Restoration Project started.
- Self-employment Schemes for Women.

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

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

#### **Nodal Agencies:**

##### **1. Environmental Planning and Coordination Organisation (EPCO)**

Paryavaran Parisar, E- 5, Arera Colony,  
Bhopal, Madhya Pradesh,  
PIN 462016, India  
Phone: +91 755 2466859 , 2466970  
Fax: +91 755 2462136  
E-mail: epcobpl@sancharnet.ins

## **C 2 Standard Operating Procedures**

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

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

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

- **Non Disaster Stage– Mitigation:** To identify the existing and potential risks and to reduce potential casualties and damage from disasters.
  
- **Before Disaster Stage– Preparedness:** To build the capacities of local communities in order to safeguard their lives 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.

**Department of Revenue and Relief:**

| <b>Non Disaster Time</b>   |
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| <ul style="list-style-type: none"> <li>• To appoint a nodal officer in the DEOC.</li> <li>• Establish infrastructure for DEOC and maintain in state of readiness with all equipment in working order and all inventories updated.</li> <li>• Train personnel on operations of DEOC.</li> <li>• Ensure basic facilities for personnel who will work at district level for disaster response.</li> <li>• To coordinate the preparedness functions of all line departments.</li> <li>• Establish disaster management funding mechanisms to ensure adequate resources for preparedness work, and quick availability of resources for relief and rehabilitation when required.</li> </ul> |



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| <ul style="list-style-type: none"> <li>• Ensure that all the Gram Panchayats, urban bodies and blocks prepare their disaster management plan.</li> <li>• Coordinate with other state departments of state and centre for their disaster management plan at the district level and synchronise the same with the district disaster management plan.</li> <li>• Help District Administrators with additional resources for disaster preparedness, if necessary.</li> <li>• On annual basis report to the SEC of the preparedness activities.</li> <li>• To ensure that funds are being allocated under the District Disaster Mitigation Fund.</li> <li>• To ensure that structural and non-structural mitigation measures are taken by all its department offices.</li> </ul> |
| <p><b>Warning Time</b></p> <ul style="list-style-type: none"> <li>• Maintain contact with forecasting agencies and gather all possible information regarding the alert.</li> <li>• Ensure activation of District EOC in standby mode.</li> <li>• Instruct all ESFs remain in readiness for responding to the emergency.</li> <li>• Advice concerned District collectors to carry out evacuations where required, and to keep transport, relief and medical teams ready to move to the affected areas at a short notice.</li> <li>• Dispatch field assessment teams, if required.</li> <li>• Provide assessment report to the DDMA.</li> </ul>   |
| <p><b>During Disaster</b></p> <ul style="list-style-type: none"> <li>• Activate DEOC in full form.</li> <li>• To coordinate and plan all activities with the ESFs.</li> <li>• Conduct Rapid Assessment and launch Quick Response.</li> <li>• Conduct survey in affected areas and assess requirements of relief.</li> <li>• Distribute emergency relief material to affected population.</li> <li>• Coordinate all activities involved with emergency provisions of temporary shelters, emergency mass feeding, and bulk distribution of coordinated relief supplies for victims of disasters.</li> <li>• Coordinate NGO, INGO and international agencies interventions/support.</li> </ul>   |
| <p><b>After Disaster</b></p> <ul style="list-style-type: none"> <li>• Organise initial and subsequent technical assessments of disaster affected areas and determine the extent of loss and damage and volume and nature of relief required.</li> <li>• Keep the DDMA informed of the situation.</li> <li>• Ensure supply of food, drinking water, medical supplies and other emergency items to the affected population.</li> <li>• Visit and coordinate the implement of various rehabilitation programmes.</li> <li>• Coordinate the activities of NGOs in relief and rehabilitation programmes.</li> <li>• Allocate funds for the repair, reconstruction of damaged infrastructure after considering their overall loss and damage</li> </ul>                           |

**Department of Home:**

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

### Department of Health:

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| <b>Non Disaster Time</b>  |
| <ul style="list-style-type: none"> <li>• Check on the tasks done at Zila, Tehsil &amp; Block level</li> <li>• Demarcate areas prone to epidemics and other similar disasters.</li> <li>• Coordination with private health organisations</li> <li>• Demarcate areas where medical camps can be set.</li> <li>• Take regular inputs from Swastha Kendras about any unwanted/hostile conditions in terms of endemic/epidemic diseases.</li> <li>• Awareness among people about diseases &amp; how can they be prevented from spreading.</li> <li>• Generators to be made available in all major hospitals.</li> <li>• Prepare a list of inventories required in case of disaster(vehicles/equipments/medicines)</li> </ul> |
| <b>Warning Time</b>   |
| <ul style="list-style-type: none"> <li>• Construction &amp; repair of IEC inventory.</li> <li>• ORS &amp; other important medicines to be procured as requirement.</li> <li>• Training of employees and people regarding the basic treatment in case of flood/loo/minor bruises</li> </ul>  |

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| <p>etc.</p> <ul style="list-style-type: none"> <li>• Procure necessary medicines for cases that are otherwise rare like snake bite, chlorine for cleaning water etc.</li> <li>• Prepare mobile units for sensitive &amp; prone to be hit areas.</li> <li>• Identification of sites in probable disaster areas for site operation areas</li> </ul>   |
| <p><b>During Disaster</b></p> <ul style="list-style-type: none"> <li>• Send task force with necessary medicines to affected areas.</li> <li>• Procure required medical equipments &amp; medicines in case they fall short of it.</li> <li>• Strong emphasis to be given to sensitive areas.</li> <li>• Ensure that appropriate no of Staff/Doctors are present at the affected areas.</li> <li>• Ensure cleanliness at the medical camps.</li> <li>• Frequent checks on the Staff/Doctors on duty.</li> <li>• Postmortem of dead bodies.</li> </ul> |
| <p><b>After Disaster</b></p> <ul style="list-style-type: none"> <li>• Monitoring against spreading of diseases</li> <li>• Continuous medical aid &amp; proper arrangements till situation is under control</li> <li>• Dead/Injured counselling</li> <li>• Injured/handicapped to be treated and arrangement for healthy living facilities</li> <li>• Provide healthy rehabilitation to disaster affected people.</li> </ul>   |

**Department of Transport:**

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

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

### Department of Public Works:

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| <b>Non Disaster Time</b>  |
| <ul style="list-style-type: none"> <li>• Designate one Liaison Officer in the department as the Disaster Preparedness Focal Point. The Chief Executive Engineer will be the liaison.</li> <li>• Take precautionary steps for the protection of government property against possible loss and damage during disaster.</li> <li>• Formulate guidelines for safe construction of public works.</li> <li>• Prepare list, with specifications and position, of heavy construction equipment within the district.</li> <li>• Organize periodic training of engineers and other construction personnel on disaster resistant construction technologies.</li> <li>• 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.</li> <li>• 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.</li> <li>• Emergency tool kits should be assembled for each division, and should include:</li> <li>• The designation of routes strategic to evacuation and relief should be identified and marked, in close coordination with police and district control room.</li> <li>• Prepare mitigation plan for the department and enforce the same.</li> <li>• Advise the district disaster management authority on structural mitigation measures for the district.</li> <li>• Repair, Maintenance and retrofitting of public infrastructure.</li> <li>• Identify / prioritize mitigation activities of lifeline buildings and critical infrastructure and coordinate with the DDMA for its implementation.</li> <li>• Place danger sign boards in the areas highly prone to specific type of disasters, such as road accidents etc.</li> </ul> |
| <b>Warning Time</b>   |
| <ul style="list-style-type: none"> <li>• Establish radio communications with DEOC.</li> <li>• Depute one representative at the DEOC as per the directions from DDMA.</li> <li>• Instruct all officials at construction sites to keep manpower and materials prepared for protection</li> </ul>  |

and repair of public works.

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

**During Disaster**

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

**After Disaster**

- Carry out detailed technical assessment of damage to public works.
- Assist in construction of temporary shelters.
- Organize repairs of buildings damaged in the disaster

- Prepare detailed programs for rehabilitation of damaged public works.
- Arrange technical assistance and supervision for reconstruction works as per request.

### Department of Irrigation and Water Resources:

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

- Surveillance for protection of people.
- Share experiences with the department.
- Formulate a checklist and re-prepare an emergency plan.
- Training of staff to minimize the loss of life/property.

**Department of Agriculture:**

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

- Assist farmers to re-establish their contacts with agriculture produce market and ensure that appropriate prices be offered to them.

**Department of Rural Water Supply & Sanitation:**

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

**Department of Veterinary:**

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| <b>Non Disaster Time</b>   |
| <ul style="list-style-type: none"> <li>• Communication establishment with district and Block / Tehsil control rooms and departmental offices within the division.</li> <li>• Listing of club houses, schools, community centers that can be used as shelter for animals.</li> </ul>  |
| <b>Warning Time</b>  |
| <ul style="list-style-type: none"> <li>• Collect information from different areas and to act accordingly (Assignment of duties).</li> <li>• Preparation of shelters in clubs, Schools, Halls etc, for animals and shifting them if necessary.</li> <li>• Tagging the animals to avoid mix up and chaos.</li> <li>• Getting proper stock of fodder for cattle.</li> </ul> |



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| <b>During Disaster</b>   |
| <ul style="list-style-type: none"> <li>• Veterinary Hospital &amp; Veterinary Dispensary at every important place (thickly cattle populated areas) headed by the Veterinary Assistant/ Surgeon.</li> <li>• Regular collection of situation report of the risk and vulnerable areas from the officers assign for the purpose.</li> <li>• Replacement of affected cattle in the shelters/camps, collection of fecal waste and cleaning etc.</li> <li>• Feeding the animals.</li> </ul> |
| <b>After Disaster</b>  |
| <ul style="list-style-type: none"> <li>• Veterinary First Aid centre/stockman sub-centre at most of the areas to be made and all the wings should be ready to combat the situation.</li> <li>• Getting the animals back to their owners and returning the stray ones to Nagar Maha Palika.</li> <li>• Cleaning of temporary shelters.</li> </ul>   |

**Department of Fire Service:**

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

**Department of Telecommunications:**

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

**Home Guards:**

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| <b>Non Disaster Time</b>  |
| <ul style="list-style-type: none"> <li>• Get details of the staff with their address and phone numbers</li> <li>• Arrange for details of fuel arrangement for ships-mechanized launches at the time of emergency.</li> <li>• Do's and Don'ts to be observed during emergencies and details of priorities should be given to the staff.</li> <li>• Set up for evacuation of people from affected area of the river side area.</li> <li>• Details of buildings, vehicles and equipments and list of contractors with vehicles and equipments should be procured.</li> <li>• Prepare map showing rivers and the important routes</li> <li>• Maintain communication equipments, telephone line, telex lines, megaphone and amplifiers with statistical data.</li> <li>• Make a list of details of important telephone numbers of water supplies, control room, hospitals, drainage system, railway stations, bus depots, strategically important places, Army Air force Navy camps and other sensitive places, major industrial units, and other communication channels which can be used during emergency.</li> <li>• Ensure the arrangement for transportation &amp; evacuation of people from the affected areas.</li> <li>• Prepare the action plan regarding repairs and alternative ways in case of disruption of transportation.</li> <li>• Prepare plan showing the alternative routes and arrangement for transportation of goods etc; during</li> </ul> |

emergencies.

- Inspect the garages and control point etc; which are damage prone.
- Make due arrangement for materials to restore the facilities in case the movement of the materials and goods on the ports are damaged.
- Prepare an action plan to avail on temporary bases, the technical personnel from the nearby district which is not affected.
- Collect the details of swimmers in the district.
- Make arrangement for sufficient fuel during emergency.

#### **Warning Time**

- Maintain the equipments available such as cranes, diesel generator, earth mover machines, de-dusting pumps, cutters, tree cutters, ladders, ropes, flood lights, shovels, axes, hammers, RCC cutters, etc. which can be used during emergency and will ensure that those are in the working conditions.
- Take due care to see that the transportation at shelters and emergency hospital is not disrupted during calamities.
- Prepare a list of public properties related to transport department, which are in the damage prone area and will arrange in advance to minimize the damage.
- Specifically take action to ensure that the fishermen do not move out for fishing as well as sailing during the final warnings of flood, etc.
- Evacuate the fishermen to a safe place and if they deny, to get it done forcefully.
- Ensure that the warning signals are received in time and shown immediately to the people.

#### **During Disaster**

- Undertake the work of search and rescue and also the relief work
- Set up a temporary special control room and information centre at the main bus station.
- Immediately contact the district control room and will assist in the work
- Ensure that the staff is on duty at the headquarters.
- Assign the work to be done by the subordinate officers and staff regarding transportation under DDMP and to send them to their sites.
- Ensure the availability of resources included in the DDMP and will make due arrangements to get those during emergency.
- Consult the liaison officer to close the ports and sailing in the rivers, which is damage prone or dangerous for the safety of the people as well as the property.
- Assist the administration to send the messages regarding warning to the remote area

#### **After Disaster**

- Follow the instructions of District Liaison Officer.
- Carry out the duty assigned for search and rescue work.
- Engage the resources and manpower available to manage the disaster.
- Review the matters regarding closing of movement at the port for safety measures and will ensure that it is restarted very soon.
- To contact the district control room if additional equipments, vehicles, manpower, technical personnel are necessary to restore the port related activities.

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

### Rural Development Department:

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

- Take up repair/reconstruction work of infrastructure damaged by disaster

**Panchayat Raj:**

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| <b>Non Disaster Time</b>   |
| <ul style="list-style-type: none"> <li>• Develop a disaster management plan for the department at district level &amp; update it annually.</li> <li>• Analyze the training needs of the department's personnel, which include its officials and elected representatives of Gram Panchayat, Panchayat samiti's and Zila Panchayat and organize trainings with the help of HIDM or other agencies.</li> <li>• Conduct gram Panchayat level mock drills as part of preparedness.</li> </ul> |
| <b>Warning Time</b>  |
| <ul style="list-style-type: none"> <li>• Prepare &amp; implement department's mitigation plan</li> <li>• Ensure that all the development schemes of the department have a mitigation component as an integral part</li> </ul>  |
| <b>During Disaster</b>   |
| <ul style="list-style-type: none"> <li>• Coordinate with local authorities and support the response efforts.</li> <li>• Coordinate the support from unaffected gram Panchayats.</li> </ul>   |
| <b>After Disaster</b>  |
| <ul style="list-style-type: none"> <li>• Ensure proper distribution of reconstruction schemes and monitoring of the same during Block development committee and Zila Parishad meetings</li> </ul>  |

**Forest Department:**

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

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| <b>During Disaster</b>   |
| <ul style="list-style-type: none"> <li>Respond within the department as per the department disaster management plan</li> <li>The liaison officer will coordinate with DEOC for information exchange &amp; also for requirements of resources to &amp; from DEOC</li> </ul> |
| <b>After Disaster</b>  |
| <ul style="list-style-type: none"> <li>Damage assessment and sharing of reports with DEOC</li> </ul>   |

### Department of Food & Civil Supplies:

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

### Electricity Department:

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| <b>Non Disaster Time</b>   |
| <ul style="list-style-type: none"> <li>Prepare and manage inventory for emergency operations.</li> <li>Training of electricity department workers and make sure that proper norms are being followed at the time of installation of various electric units/instruments.</li> <li>Make various applicable and implementable schemes regarding the setup and examination of electrical units/instruments.</li> <li>Make people aware so as to minimize the damage to life/limb caused due to electricity.</li> </ul> |
| <b>Warning Time</b>  |
| <ul style="list-style-type: none"> <li>Make provisions for providing electricity to rehabilitation centers in disaster hit areas &amp; to cut off</li> </ul>   |

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| <p>electric supply from risky areas in case of emergency.</p> <ul style="list-style-type: none"> <li>• Follow proper regulations monitor continuously so that in case of wire breakage the current does not spreads.</li> <li>• Make proper arrangements and follow stringent norms such that in case of a natural calamity, (like earthquake, flood, cyclone etc) the high tension line does not get damaged.</li> </ul>   |
| <p><b>During Disaster – Response</b></p> <ul style="list-style-type: none"> <li>• Cut off electricity immediately after receiving information about any disaster so as to minimize the damage caused.</li> <li>• Survey the spot and estimate (also help in estimation) the damage caused.</li> <li>• Be ready to provide electricity in areas where it is needed and can be provided safely.</li> <li>• Make a plan about how to re supply electricity to important areas, site operation centers, Industries, etc.</li> <li>• Examine and repair major poles, transformers &amp; wires necessary for getting electricity supply back to areas needed.</li> <li>• Minimize the damage caused to life by demarcating dangerous areas and cutting electricity in time.</li> <li>• Restore the electricity facility in affected areas.</li> </ul> |
| <p><b>After Disaster – Recovery and Rehabilitation</b></p> <ul style="list-style-type: none"> <li>• Repair of damaged poles, transformers and conductors etc as soon as possible to restore electricity in the district.</li> <li>• Surveillance for protection of people.</li> <li>• Share experiences with the department.</li> <li>• Formulate a checklist and re-prepare an emergency plan.</li> </ul>  |

**Department of Education:**

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

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| <ul style="list-style-type: none"> <li>• Ensure that earthquake resistant features are included in new school buildings.</li> </ul>  |
| <b>During Disaster – Response</b>  |
| <ul style="list-style-type: none"> <li>• In the event of disaster, place required number of education institutions and their buildings, under the DEOC for use as emergency shelter and relief centre, if necessary.</li> <li>• Students and staff trained as task forces as part of the school disaster management planning’s can provide local voluntary assistance for distribution of relief material and assistance to special needy people in the locality.</li> </ul> |
| <b>After Disaster – Recovery and Rehabilitation</b>  |
| <ul style="list-style-type: none"> <li>• Determine the extent of loss in educational institutions and submit the report to DDMA and state education department.</li> </ul>   |

### Department of Industrial Health and Safety:

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



**Department of Urban Development:**

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

**Indian Red Cross and NGOs:**

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

### C 3 Financial Provisions for Disaster Management

According to ACT No. 53 of 2005 – the Disaster Management Act, 2005, Chapter IX, Finance, Account and Audit , the following Funds are recommended to be established for fulfilling the needs during disasters:

- The State Government shall immediately after notifications issued for constituting the

State Authority and the District Authorities establish for the purposes of this Act the following funds, namely:-

- a) The fund to be called the District Disaster Response Fund
- b) The fund to be called the District Disaster Mitigation Fund
- Where by reason of any threatening disaster situation or disaster, the National Authority or the District Authority is satisfied that immediate procurement of provisions or materials or the immediate application of resources are necessary for rescue or relief, -
  - a) It may authorize the concerned department or authority to make the emergency procurement and in such case, the standard procedure requiring inviting of tenders shall be deemed to be waived;
  - b) A certificate about utilization of provisions or materials by the controlling officer authorized by the National Authority, State Authority or District Authority, as the case may be, shall be deemed to be a valid document or voucher for the purpose of accounting of emergency, procurement of such provisions or materials.

The State Disaster Response Fund (SDRF) and Chief Minister's Relief Funds are also available to meet any emergency requirement, at the district level.

*In Shajapur, District every year Rs 1,00,000 is issued for the purpose of maintenance and procuring materials for making arrangements in case floods occur.*

**C 3.1 District Disaster Response Fund** will basically cover the disaster response, relief, and rehabilitation part. It is allocated by the collector office to respond during the disaster.

**C 3.2 District Disaster Mitigation Fund** will basically cover the disaster mitigation and preparedness activities. This fund is allocated by the collector before disaster or during planning phase.

The State Disaster Response Fund (SDRF) and Chief Minister's Relief Funds are also available to meet any emergency requirement, at the district level.

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

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

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

**Public Sector:** There are no major industries in Shajapur. However, there is a Power Grid located in Shajapur block, which has its own fire fighting team and latest equipment.

**Private Sectors:** The following private sectors can play an important role in disaster management:

- **Media:** Media has to play an important role during time of disasters to provide important information as well as stop rumours.

- Private contractors who own JCB machines/buses/trucks/tractors can be useful in the face of disaster or for post disaster reconstruction works.

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

As per the information received, there are no NGO’s or CBO’s working exclusively in the area of disaster management. However, promotion of such local NGO’s forms one of the major Non-disaster time activities of this plan. Due to their proximity to community, they can act as a vital link between government and community particularly during emergencies.

**Role of NGO’s in Disaster Preparedness:**

NGOs can play a very important role in developing, piloting, validation, implementation, review and updating disaster management plans at various levels. Some of the roles to be played by NGOs at district level with respect to the key components are:

| Key Component  | Roles and Key Actions of NGOs to facilitate and support  |
|--|--|
| Institutional Arrangements                                 | <ul style="list-style-type: none"> <li>• Facilitate formation and participate in district level task forces</li> <li>• Advocate for establishment of DDMANGO Advisory Committee</li> </ul>   |
| Co-ordination Mechanisms                                   | <ul style="list-style-type: none"> <li>• Assist in developing and participate in district level GO- NGO and Inter Agency Coordination mechanisms</li> </ul>  |
| Contingency Planning                                       | <ul style="list-style-type: none"> <li>• Assist in development, piloting, validation and updating of the district level contingency and preparedness plans</li> </ul>  |
| Capacity Needs Analysis and Standardized Capacity building | <ul style="list-style-type: none"> <li>• Facilitate detailed assessment of current needs and capacities at district levels</li> <li>• Facilitate Training and mock drills of different stakeholders</li> </ul>   |
| Hazard Monitoring, Forecasting and Early Warning (EW)      | <ul style="list-style-type: none"> <li>• Establish linkages with multiple stakeholders for hazard monitoring and provide last mile connectivity for EW dissemination</li> </ul>  |
| Information & Knowledge Management & communication         | <ul style="list-style-type: none"> <li>• Facilitate and establish mechanisms for public information dissemination before during and after disasters</li> <li>• Collect, Manage and Process Data during and after disaster</li> <li>• Research,develop,document and disseminate best</li> </ul> |

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|  | practices for replicability and scale up |
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### **Role of NGOs in Disaster Mitigation:**

Some of the roles that can be played by NGOs are:

- 1) Disasters cause long term and secondary impacts through their impact on livelihoods, and thus this needs to be a priority for mitigation action. NGOs can play a critical role for identification of options and supplementary livelihoods to enhance overall livelihood security. Sensitization and training of local groups, formation of SHGs, establishing linkages with financial institutions, material suppliers and markets are priority
- 2) NGOs can play an extremely important role in mobilizing youth for DRR in their neighbourhood by carrying out appropriate capacity building efforts through Nehru Yuva Kendra Sangathan (NYKS), National Cadet Corps (NCC), Scouts and Guides, etc.
- 3) Water and sanitation are critical infrastructure elements that are needed to mitigate disasters, and are also priority needs of a community in the aftermath of a disaster. Major areas of work in the water and sanitation sector are based in the local context, and can be addressed by NGOs to a very significant extent.
- 4) Education of field officials and practitioners is indispensable for achieving disaster mitigation, and can be directly taken up by NGOs. It should be designed to address the specific vulnerabilities of the local area, identify vulnerabilities and capacities, link local disaster management plans with development plans, and ensure disaster risk reduction mainstreaming in all development projects.
- 5) Basic awareness and sensitization of the general public is also a primary need under disaster mitigation capacity building, and is a key area of work for NGOs. Awareness campaigns on safe construction and habitat development, and on sustainable development and environment friendly lifestyles are important.

### **Role of NGOs in Disaster Response:**

Some of the roles that can be played by NGOs are:

- 1) In short term, the purpose of NGO response is to prevent an increase in mortality and morbidity due to inadequate nutrition and likely outbreak of communicable diseases such as Diareheas and Malaria, and spread of Respiratory diseases and skin infections.

Some of the sectors for NGO response in temporary relief camps may be:

- **Water:**

- Providing clean potable water;
- Drilling wells, capping springs, gravity supply water systems
- Chlorination of bore wells and hand pumps, pumping water from rivers into tanks for treatment with alum and Chlorine

- 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.

- **Sanitation:**

- Construction of field latrines and soak pit latrines at relief camps and final disposal of excreta.
- Design and commissioning of drainage facilities.

- **Public Health Promotion**

- Dissemination of information on public health risks
- Distribution of items essential for maintenance of health e.g blankets, clothes, soap, hygiene kits, water containers, ORS.
- Community mobilisation for efficient use of water and sanitation facilities & distributed items
- Promote early detection & treatment of primary diseases
- Monitoring health trends

- **Vector Control:**

- Solid Waste disposal
- Drainage of waste water
- Insecticide spraying against flies & mosquito's & promotion activities to encourage further use
- Distribution of Mosquito Nets and education on use

- **Food Security and Nutrition:**

- Food Distribution
- Food monitoring / Nutrition monitoring including promotion of breast-feeding
- Cash interventions
- Supplementary feeding centres
- Distribution of cooking kits

- **Shelter:**

- Distribution of the emergency shelters / plastic sheeting and other local material
- Provision of appropriate access to electricity in temporary relief camps, especially in bath rooms and toilets
- Distribution of Blankets
- Distribution of Clothes
- Distribution of fuel for cooking

2) Controlling rumours and panic behaviour and undertaking confidence building activities.

- 3) Organizing local work teams for immediate rescue, and relief e.g. cooked food, first aid, and assistance in law and order.
- 4) Assisting the handicapped that need special help.
- 5) Guarding major installations and evacuated properties till the administration takes over.

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

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

Garsia Shiv Mandir, Rudreshwari Mandir, Omkareshwar Mandir, Zarenshwar Shiv Mandir, Jama Masjid, Varsi Dargah, Mahadeo Ghat Shiv Mandir, Pandu Khoh, Dwarkadhish Mandir, Hanuman Mandir Girwar, Someshwar Shiv Mandir, Ganesh Mandir, Gaytri Shakti Peeth, Muradpura and Danci Hanuman Mandir

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

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

The flood cell enlists many of the schools as relief centres for flood prone areas.

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

The following agencies can be contacted for further expertise:

1. Centre of Excellence in Disaster Management & Mitigation ,IITRoorkee.
2. 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

1. ALL INDIA DISASTER MITIGATION INSTITUTE  
411, Sakar Five, Near Nataraj Cinema, Ashram Road, Ahmedabad - 380009, Gujarat, India  
Phone : +91-79-26586234, 26583607, Fax : +91-79-26582962  
E-mail : bestteam@aidmi.org
2. NIDM (National Institute of Disaster Management), New Delhi

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

There are only one NGO available which works on the international level, i.e. Red Cross Society. Here in Shajapur, This society occupied with one ambulance which is used along with the CMO office. The contact person for the Red Cross Society is Dr. J Atulkar (Mob. 9425034077) because Red Cross works with CMO in Shajapur.

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

The responsibilities of all the key stakeholders include:

1. Develop a strong governance framework through legislation and policies
2. Mainstream disaster risk management and capacity building into decision making, the budget process, and sector, provincial and community development plans
3. Understand and recognize that disaster management and disaster risk reduction are environmental, humanitarian and developmental issues, so there is a need to coordinate the implementation, monitoring and evaluation of the approach.

#### **During disaster situation:**

1. Coordinating with the Search and rescue team
2. Providing all the available facilities with them to the disaster affected victims
3. Volunteering to organize and maintain the relief centres
4. Working with the Disaster team in restoration of livelihoods
5. Being actively connected with the restoration and reconstruction process



### C 5 Inter- District Coordination Mechanisms

During emergencies district may require support from other adjoining districts, which are not affected by disasters. For this the District EOC head can seek help from other districts through Divisional Commissioner or State EOC. Shajapur EOC stays in constant touch with the EOC of neighbouring Districts i.e. **Manshor, Sinhor, Rajgadh, Ujjain**.

Information related to flood, opening / closing of flood gates, etc., are passed on to the concerned districts. All these communications are carried through telephone or by Fax.

### C 6 Intra- District Coordination Mechanisms

- The recommended “integrated disaster management plan” follows ‘Top to Bottom’ approach i.e. the communities are the first one to respond.
- Then there are disaster management committees on gram panchayat level and block level up to the district level.
- On each stage, the nodal contact people are appointed who will ensure the adequacy of resources in dealing with disasters.
- The roles and responsibilities of various officers are clearly mentioned upon activation of the ICS in the Response planning section.

### C 7 Dissemination of DM Plan

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

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

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

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

### **C 7.1 Plan Evaluation**

The purpose of monitoring & evaluation of DDMP is to:

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

Individuals and agencies assigned specific responsibilities within this plan will prepare appropriate supporting plans and related standard operating procedures, periodically review and update alerting procedures and resource listings, and maintain an acceptable level of preparedness.

### **C 7.2 Plan Update**

The District Disaster Management Plan is an on-going document and the Collector along with all line departments will update it every year taking into consideration

- The resource requirements
- Update of human resources
- Technology to be used
- Co-ordination issues

Apart from it, the plan will be updated when shortcomings are observed in Organizational structures; Technological changes, Response mechanism following reports on drills or periodic exercises, and specific assignments of state agencies.

An annual conference for DDMP update will be organized by the Collector. All concerned departments and agencies would participate and give recommendations on specific issues. The new plan should be handy and precise. It should be so designed that it will definitely help the officials to take quick actions during the disaster.

**C 8 Annexure****C 8.1 District profile**

In 1904, Shajapur declared as District. Total area of district is 6196 sq. km. The District lies between latitude 23.06 to 24.19 and longitude 75.41 to 77.02 degree. District height from sea level is 453 meters and maximum and minimum temperatures are 45 and 3 degree respectively. District has further divided into 9 blocks known as Moman Badodiya, Sujalpur, Kala Peepal, Agar, Badod, Sushner, Nalkheda, Gulana and Shajapur itself.

**Details of Hospitals and Health centres:**

| S. No | Block Name      | Institution Name                   | No. Of Medical officer | No. of Nurses | No. of Compounder | Medical and Paramedical Staff | No. of Ambulances | No. Of Beds |
|-------|-----------------|------------------------------------|------------------------|---------------|-------------------|-------------------------------|-------------------|-------------|
| 1     | <b>Shajapur</b> | Distt. Medical Shajapur            | 12                     | 36            | 2                 | 16                            | 2                 | 200         |
|       |                 | Health Centre, Bercha              | 2                      | 5             | 0                 | 12                            | 0                 | 6           |
|       |                 | Health Centre, Makshi              | 1                      | 1             | 0                 | 1                             | 0                 | 0           |
|       |                 | Health Centre, Jhonkar             | 1                      | 2             | 0                 | 1                             | 0                 | 6           |
|       |                 | Health Centre, Shemli              | 0                      | 1             | 1                 | 1                             | 0                 | 0           |
|       |                 | Health Centre, Makodi              | 0                      | 1             | 0                 | 1                             | 0                 | 0           |
|       |                 | Community Health Centre, Sundarshi | 1                      | 1             | 0                 | 1                             | 0                 | 30          |
|       |                 | Community Hospital, Sujalpur City  | 5                      | 8             | 3                 | 8                             | 1                 | 120         |
| 2     | <b>Sujalpur</b> | Community Hospital, Sujalpur Mandi | 2                      | 4             | 1                 | 3                             | 0                 | 26          |

|   |                       |   |   |   |   |    |   |     |
|---|-----------------------|---|---|---|---|----|---|-----|
|   |                       | Community Health Centre, Polayekala     | 2 | 2 | 0 | 11 | 1 | 30  |
|   |                       | Health Centre, Akodiya                  | 2 | 3 | 0 | 2  | 0 | 12  |
| 3 | <b>Kalapeepal</b>     | Community Health Centre, Kalapeepal     | 4 | 5 | 1 | 12 | 1 | 30  |
|   |                       | Health Centre, Teelavdmena              | 0 | 1 | 0 | 2  | 0 | 0   |
|   |                       | Health Centre, Arniyakalan              | 1 | 1 | 0 | 3  | 0 | 0   |
|   |                       | Health Centre, Khokrakalan              | 1 | 1 | 1 | 0  | 0 | 0   |
| 4 | <b>Moman Badodiya</b> | Community Health Centre, Moman Badodiya | 2 | 5 | 0 | 4  | 1 | 30  |
|   |                       | Health Centre, Mohna                    | 1 | 1 | 1 | 0  | 0 | 0   |
|   |                       | Health Centre, Dupada                   | 1 | 3 | 1 | 0  | 0 | 0   |
|   |                       | Health Centre, Bulai                    | 1 | 1 | 0 | 0  | 0 | 0   |
|   |                       | Health Centre, Gulana                   | 1 | 2 | 1 | 0  | 0 | 0   |
|   |                       | Health Centre, Chhotipulaye             | 1 | 1 | 1 | 1  | 0 | 0   |
| 5 | <b>Agar</b>           | Community Health Centre, Agar           | 7 | 9 | 2 | 9  | 1 | 100 |
|   |                       | Health Centre, Kanad                    | 2 | 1 | 0 | 0  | 0 | 0   |
|   |                       | Health Centre, Chandangaon              | 1 | 9 | 0 | 1  | 0 | 0   |

|   |                  |                                   |   |   |   |   |   |    |
|---|------------------|-----------------------------------|---|---|---|---|---|----|
| 6 | <b>Badod</b>     | Community Health Centre, Badod    | 1 | 4 | 1 | 7 | 0 | 30 |
|   |                  | Health Centre, Beejanagari        | 0 | 1 | 0 | 1 | 0 | 0  |
| 7 | <b>Sushner</b>   | Community Health Centre, Sushner  | 2 | 4 | 1 | 8 | 1 | 30 |
|   |                  | Health Centre, Soyatkalan         | 1 | 1 | 0 | 1 | 0 | 0  |
| 8 | <b>Nalkhed a</b> | Community Health Centre, Nalkheda | 1 | 6 | 0 | 5 | 1 | 30 |
|   |                  | Health Centre, Badagaon           | 1 | 1 | 0 | 1 | 0 | 0  |

### Private Hospitals Information

| S. No. | Name of Hospital  | No. of Beds |
|--------|---|-------------|
| 1      | Murlidhar Kripa hospital and research centre, Makshi                | 50          |
| 2      | Bhagvantidevi SardarmalBhnadari Sawasthya Mandir (Sewa Bharti) Agar | 65          |
| 3      | SDM Hospital 164 Ambika Bazar Sujalpur                              | 20          |
| 4      | Arogya health care centre, A B Road, Shajapur                       | 10          |
| 5      | Vyas Nurshing Home, Nai Sadak , Shajapur                            | 10          |
| 6      | Dr. Dilip Jain, Shajapur  | 10          |
| 7      | Surana Nurshing Home, 162 M G Road Shajapur                         | 10          |
| 8      | J J Nurshing Home, Ram Mandir Road Sujalpur                         | 10          |
| 9      | Patidar Nurshing home, Veer Shavarkar Road, Shajapur                | 14          |
| 10     | Dr. R C Sharma , New Road Shajapur                                  | 10          |
| 11     | Sewa Dham hospital, Agar  | 10          |
| 12     | Amit Health and Research Centre, Nalkheda                           | 10          |
| 13     | Balaji Health and Research Centre, Kota Road, Agar                  | 10          |
| 14     | Omni Hospital, Sujalpur   | 12          |
| 15     | Annapurna Hospital, New Road Shajapur                               | 10          |
| 16     | City Hospital, Shajapur   | 20          |
| 17     | Vardaan Hospital, Shajapur  | 10          |

**C 8.2 Resources**

Useful equipment are mentioned as below

| <b>S. No.</b> | <b>Name</b>   | <b>No. of Items</b> |
|---------------|---------------|---------------------|
| 1             | Life Jacket   | 95                  |
| 2             | Life Buoy     | 47                  |
| 3             | Search Light  | 3                   |
| 4             | Siren (1 Km)  | 1                   |
| 5             | Anchor        | 1                   |
| 6             | First Aid Box | 5                   |
| 7             | Loud Healer   | 1                   |
| 8             | Helmet        | 15                  |
| 9             | Gum boot      | 16                  |
| 10            | Snake Catcher | 2                   |
| 11            | Stretcher     | 5                   |
| 12            | Ear plug      | 50                  |

**C 8.3 Media and information management**

| <b>S. No.</b> | <b>Name and Designation</b>                      | <b>Landline Office</b> | <b>Mobile</b>         |
|---------------|--|------------------------|-----------------------|
| 1             | Pankaj Mittal<br>PRO<br>Khel Prashal<br>Shajapur | 226387/227661          | 9301209255/9424511451 |

**C 8.4 Important Contact numbers**

| <b>S. No.</b> | <b>Name and Designation</b> | <b>Landline Office</b> | <b>Mobile</b> |
|---------------|-----------------------------|------------------------|---------------|
| 1             | Promod Gupta<br>Collector   | 22650                  |               |

|    |   |               |                       |
|----|---|---------------|-----------------------|
| 2  | Sohan Kanash<br>Deputy Collector<br>(Revenue)       |               | 9424048009            |
| 3  | R K Nagraj<br>Deputy Collector<br>(Disaster)        | 226379        | 9755029997            |
| 4  | M K Katakwaar<br>SP Shajapur                        | 226432        | 9826290291            |
| 5  | Ajay Kulkarni<br>NIC Shajapur                       | 226597        | 9425428746            |
| 6  | Sunita Yadav<br>Mahila baal vikas<br>and Aanganwari | 226639        | 9425065313            |
| 7  | R S Khandelwal<br>RTO Shajapur                      | 226749        | 9425379710            |
| 8  | Pankaj Mittal<br>PRO Shajapur                       | 226387/227661 | 9301209255/9424511451 |
| 9  | R D Sharma<br>Forest<br>Department<br>Shajapur      | 227157        | 9424794885            |
| 10 | R S Khinchi<br>Home Guard<br>Shajapur               | 227841        | 9425462538            |
| 11 | J Atulkar<br>CMO Shajapur                           | 227767/226894 | 9425034077            |
| 12 | Alok Meena<br>Agriculture<br>Shajapur               | 228936        | 9826364078            |
| 13 | K C Mudgal<br>Veterinary<br>Shajapur                | 229772        | 9009955557            |

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

#### Do's and Don'ts at different disasters and levels

#### 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**



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

### **Help your community get ready**

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

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

### **What to Do during an Earthquake**

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

### **If indoors**

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

- Be aware that the electricity may go out or the sprinkler systems or fire alarms may turn on.
- DO NOT use the elevators.

**If outdoors**

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

**If in a moving vehicle**

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

**If trapped under debris**

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

**After an earthquake**

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

## Flood

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

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

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

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

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

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

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

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

### Driving Flood Facts

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

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

### After a Flood

The following are guidelines for the period following a flood:

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

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

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

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

## **You and Your Family**

### **Dos**

- Educate your children wife and other family member in respect of natural and manmade disasters and other crises. In case of your being unaware, take help of Civil Defense and Home Guard organization and other NGOs. Develop habit in you and your children to spare 1% of you busy time to think about Individual security and security interests.
- Keep the phone numbers of the local police station, police control rooms, fire stations, and schools, colleges, TV station, All India Radio, ambulance services and Chemists for emergency use.
- Guide children to remain at schools in emergency.
- Prepare an emergency kit of items and essentials in the house including essential documents and valuables.
- Store food and water for survival in case you had a pre-warning.

- Any suspicious incidents observed be reported to police on 100. Callers do not have to give their identity on the phone. Information of immediate use be conveyed to control rooms to help early relief.
- Carry your identity card, residential telephone number or address or personal card with you. Have your blood group and any medical allergies recorded with you.
- Check information in case of disasters and crises from Ward, Civil Defense / Home Guard, and BMC, TV and All India Radio Control room.
- Learn to fight such emergencies untidily.
- Support authorities and NGOs.
- Identify scooters, cars, vehicles parked in society and identify vehicles which are unknown and parked for long.
- Organize societies and muhalla committees to educate people.

#### **Don'ts**

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

### **Your Place of Work**

#### **Dos**

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

### **During Transit**

#### **Dos**

- 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.

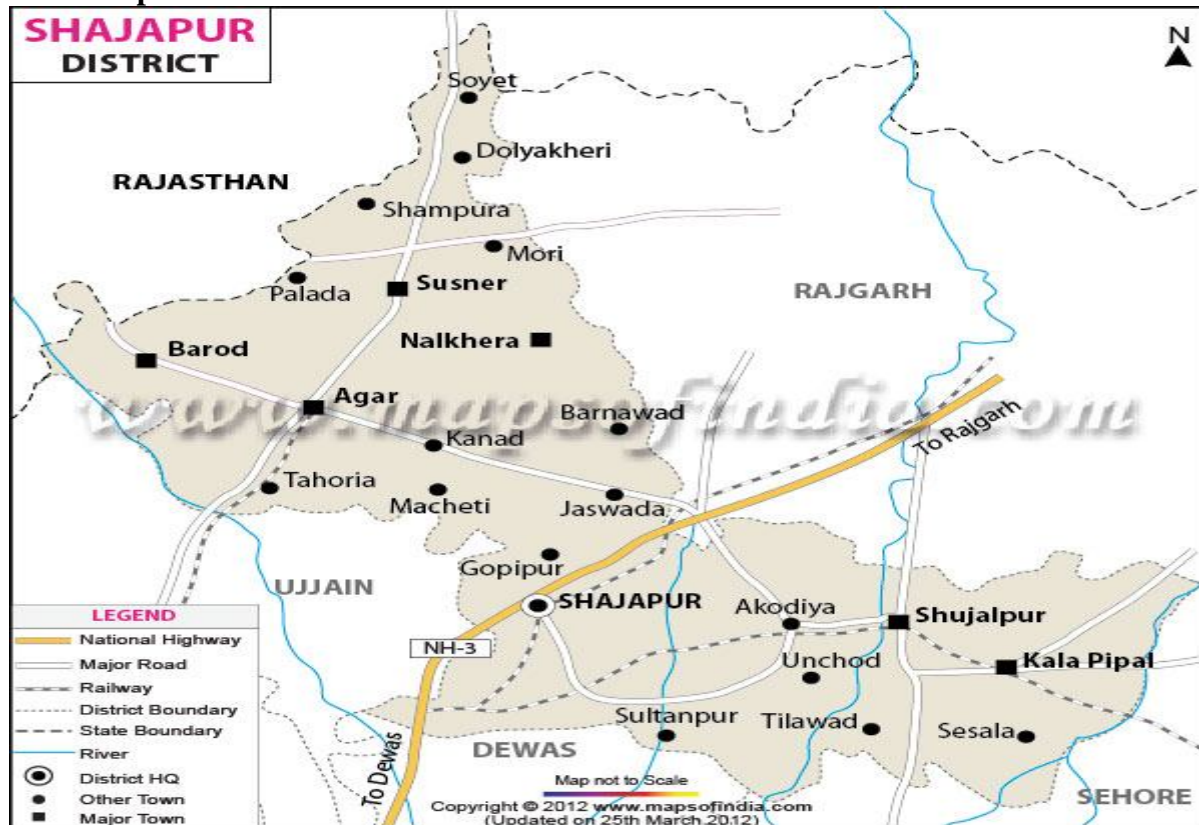
#### Don'ts

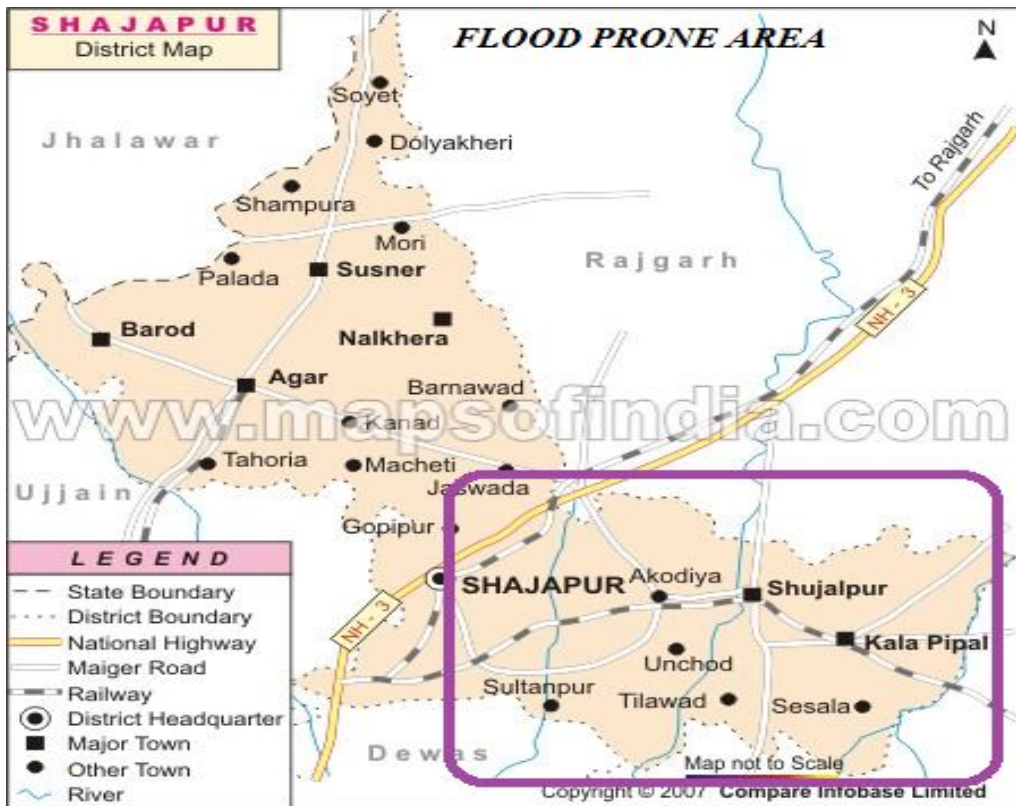
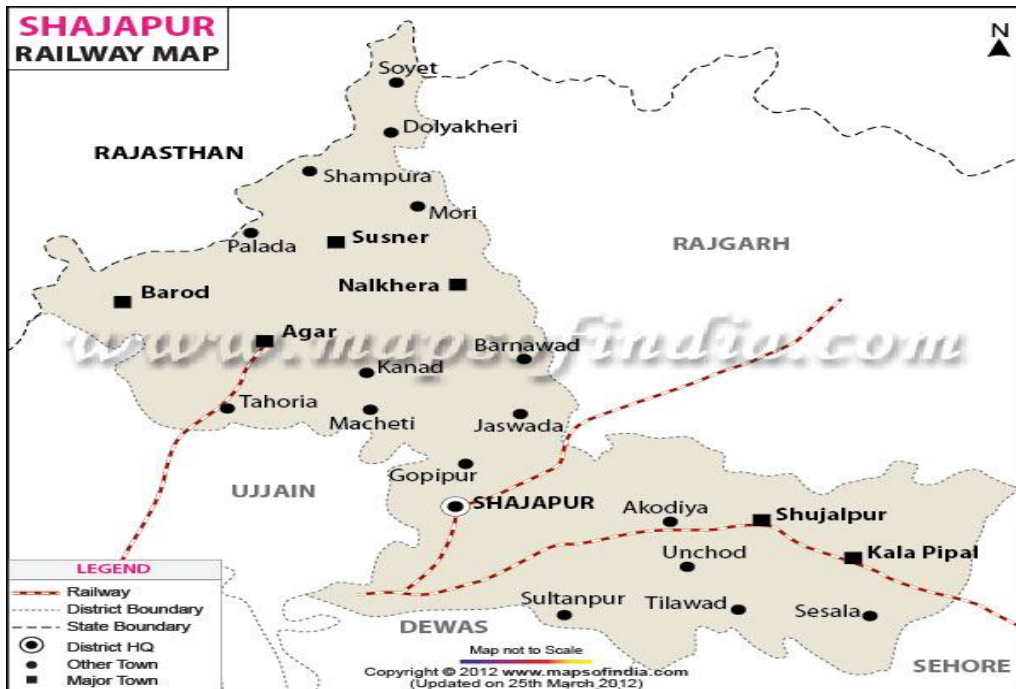
- Do not touch any suspicious object. Report to concerned people.
- Do not crowd the object.
- Passengers should not accept parcels from unknown persons in hurry while boarding train or bus.

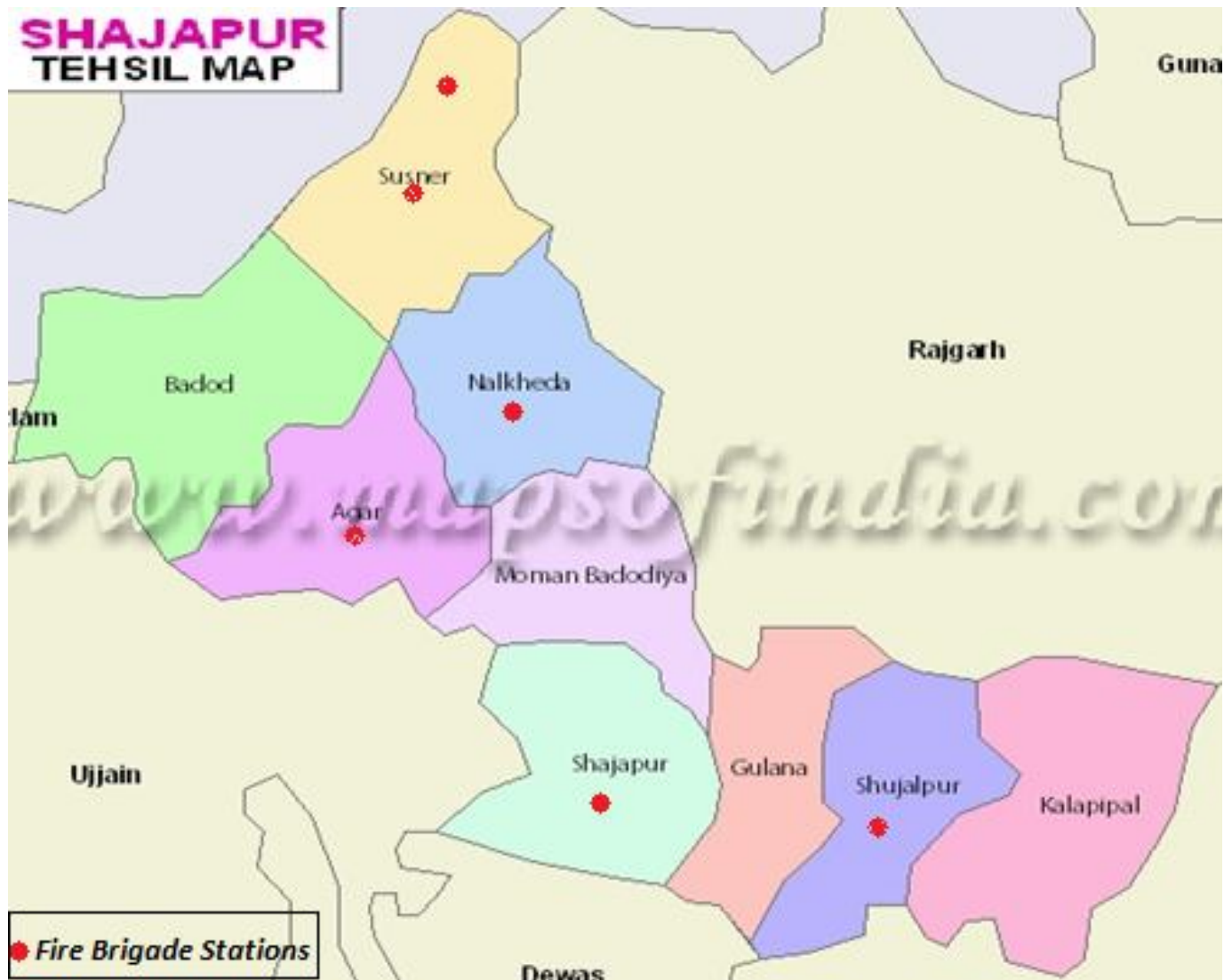
## 8.6 Detailed Maps

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

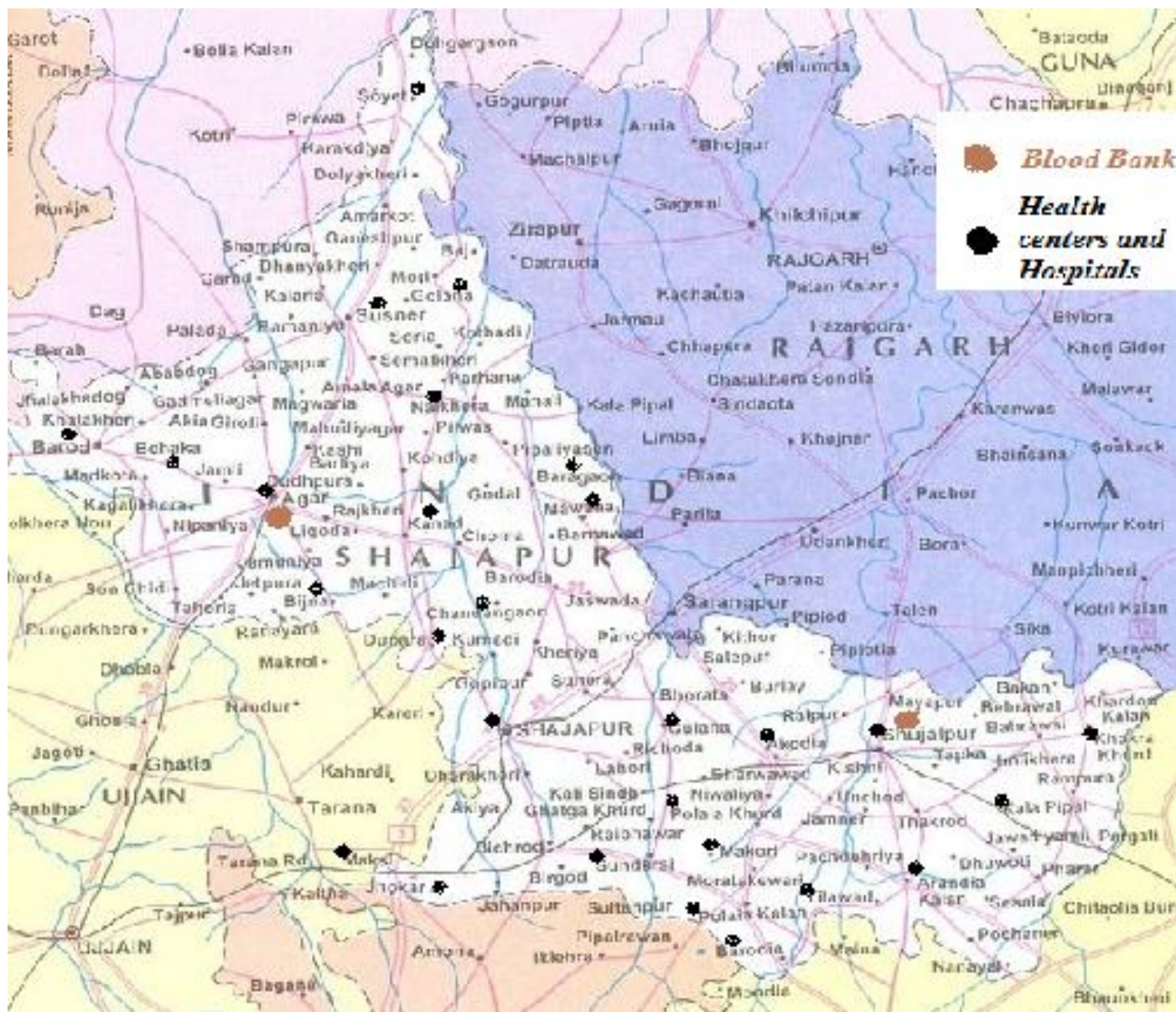
### Road Map





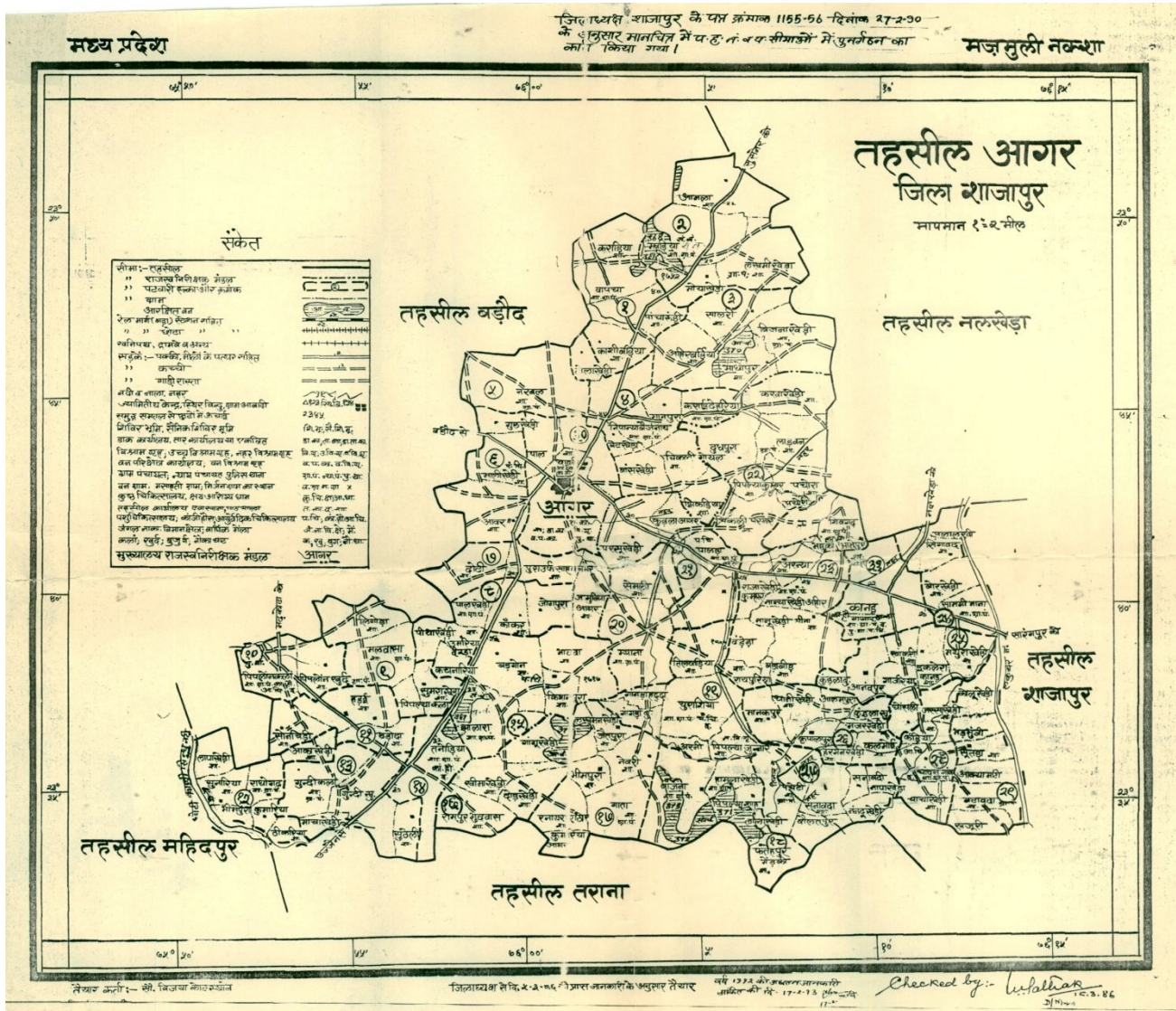




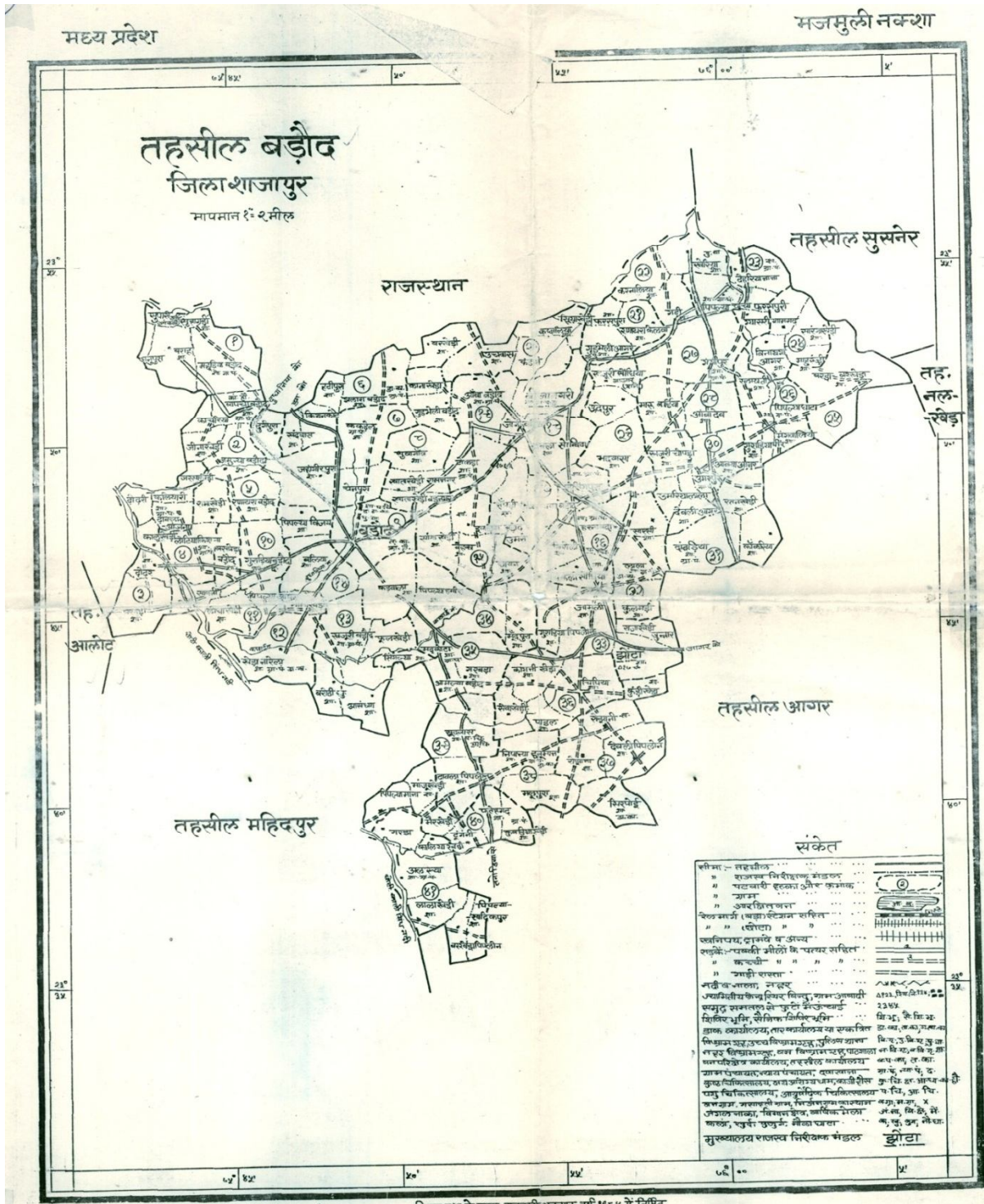


**Block wise Maps**

**Agar**



Badod



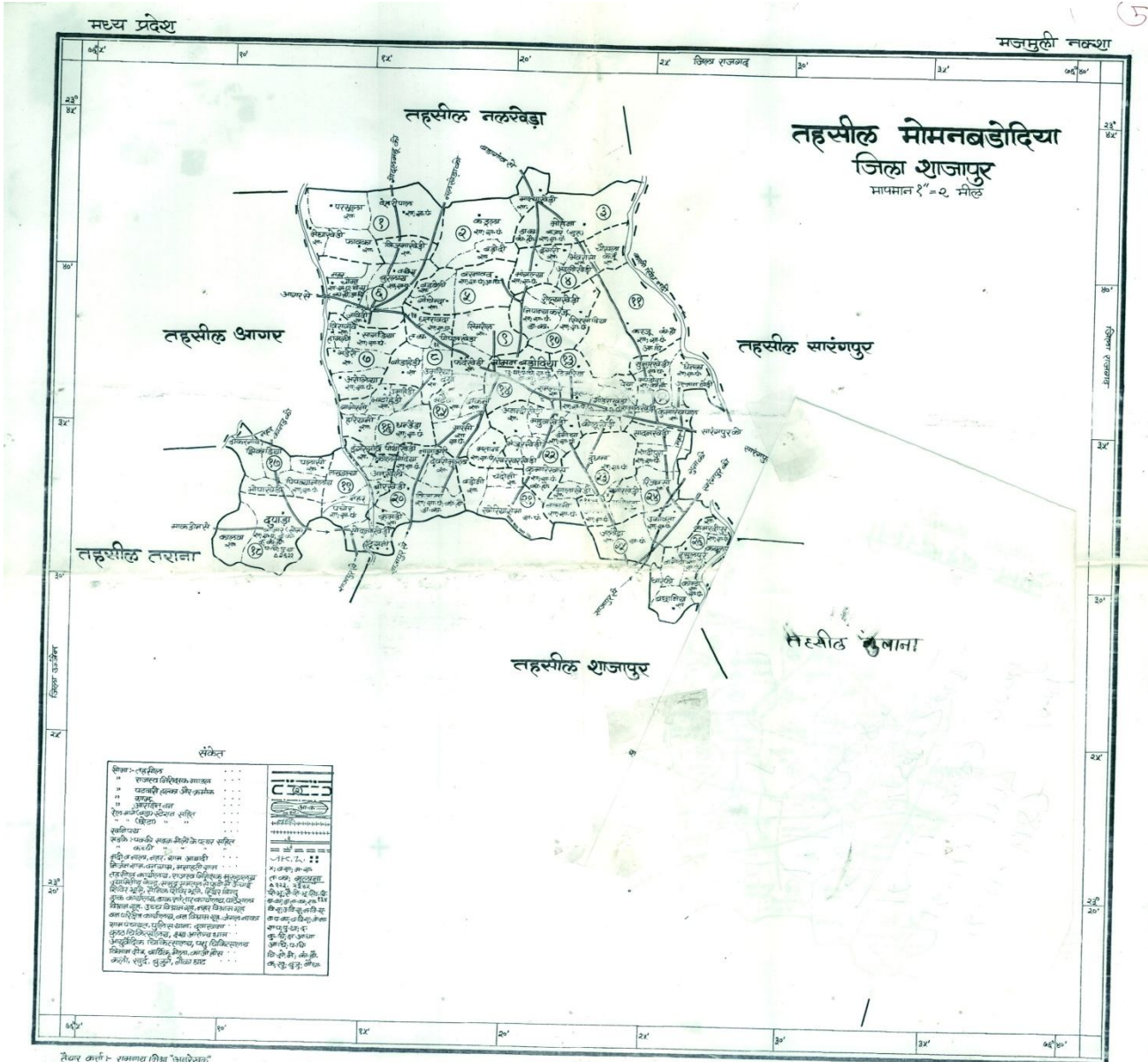
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 (पि. १-१-८६ की जानकारी के अनुसार)

Checked by: *haldar*  
 20.2.84  
 Shajapur





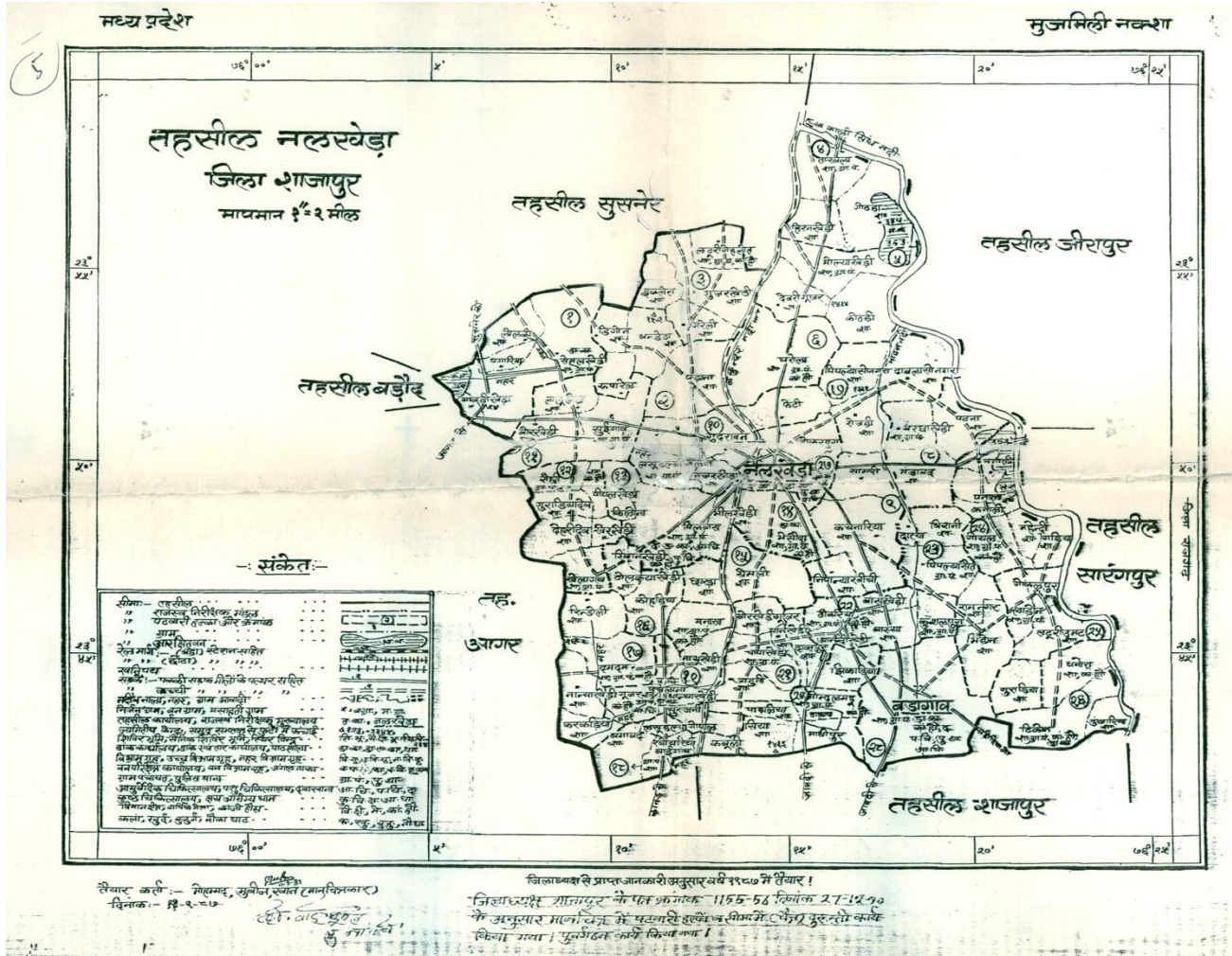
Moman Badodiya



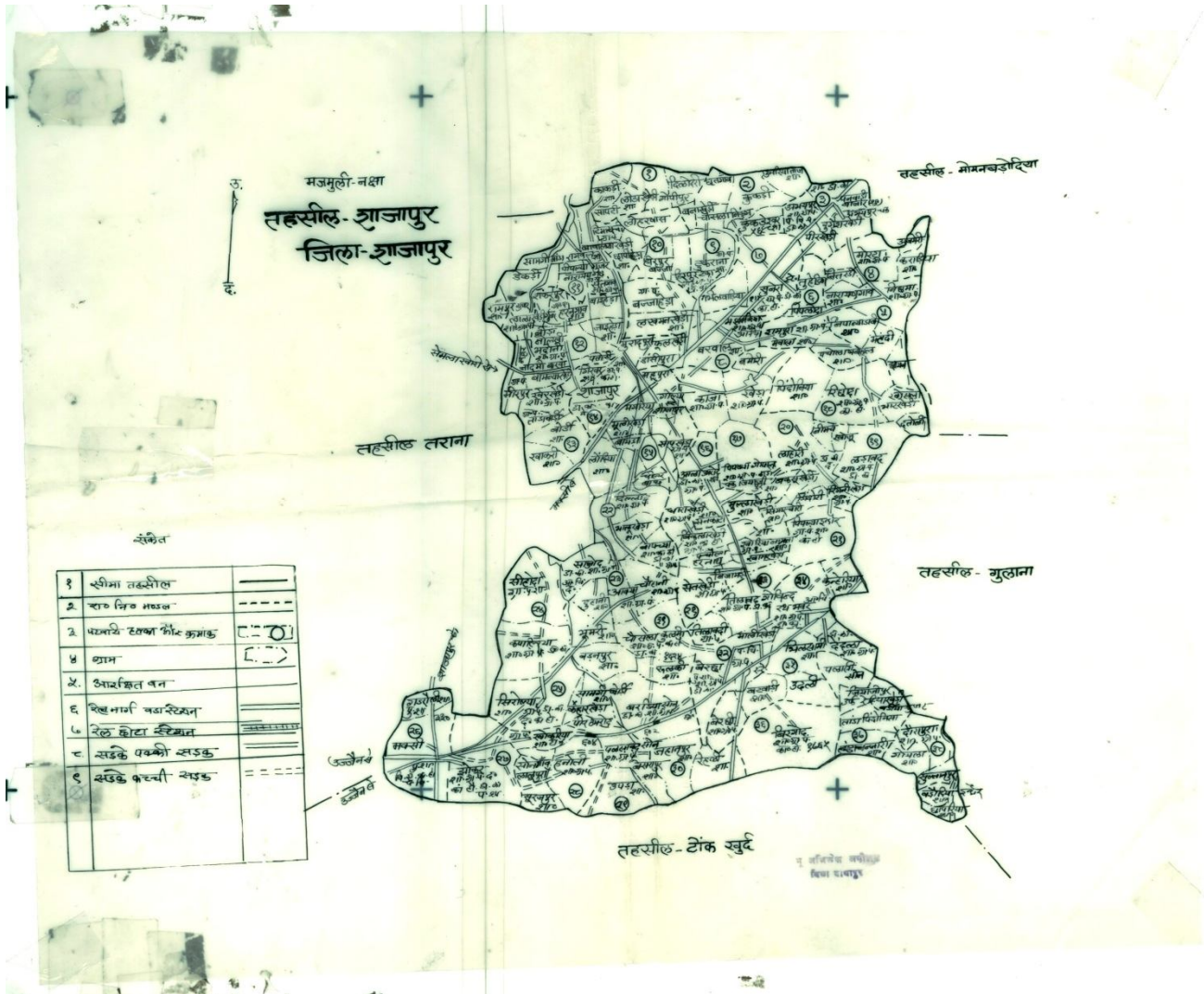
चेकर करी - रमणराव शिमा 'अभियुक्त'  
 Checked by: *Ramnaray Shima*  
 2.8.93

पत्र क्र.मं.क्र/640/मू-अ.मि./स.नि./17/93 शजपुर दिनांक 21.8.93  
 के अंतुसार अद्यतन जानकारी अंकित की गयी।  
 प्र.मं.क्र/640/मू-अ.मि./स.नि./17-93  
 द्वारा तय की गई अनुसार कार्यविधिनुसार की कार्यक्रिया।  
*Ramnaray Shima*  
 2.8.93

Nalkheda

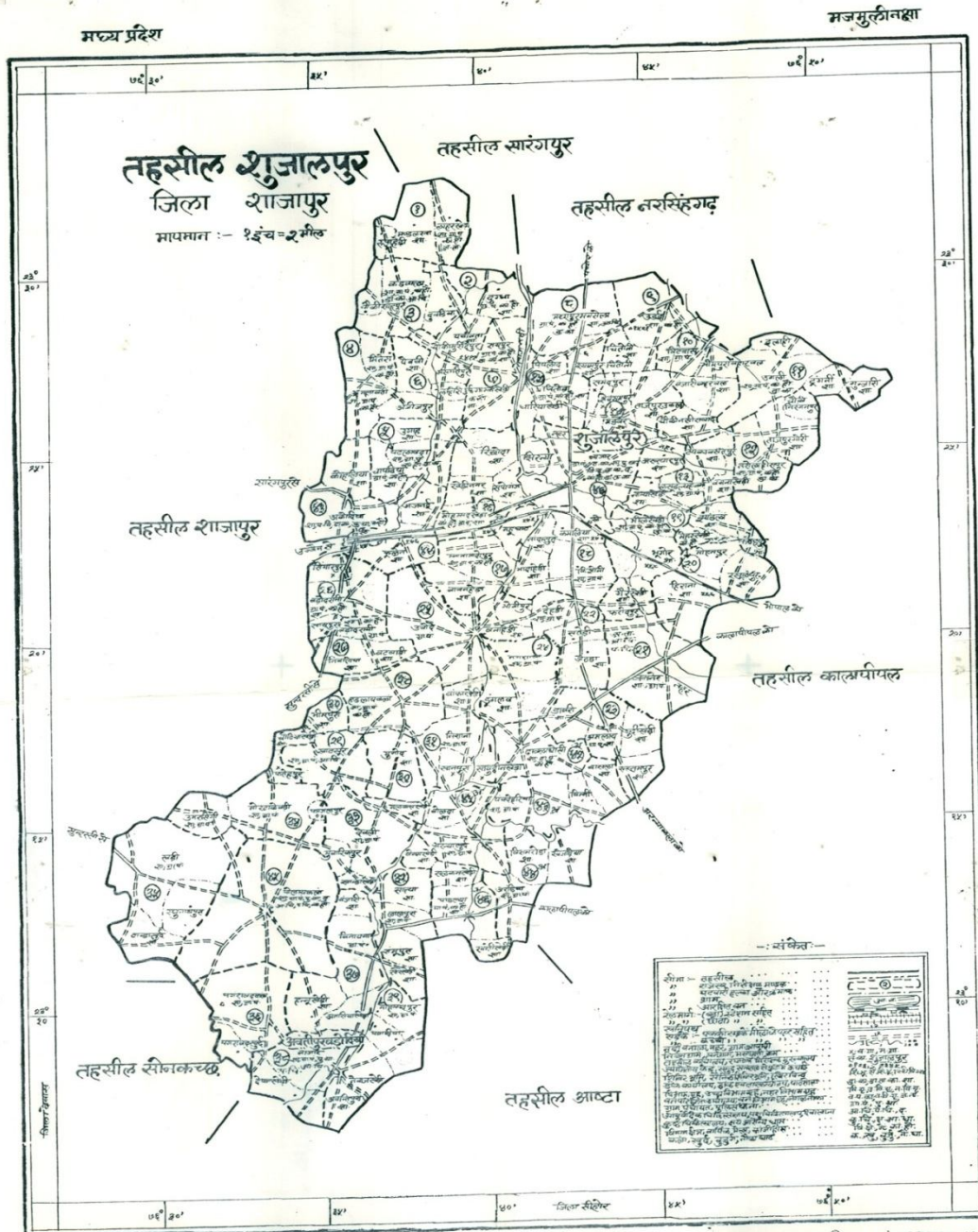


Shajapur Town





Shujalpur



संपादन - श्री सुधीरराव (डीएमओ)  
दिनांक - 28-11-2019

जिलाधिकारी श्री राजेंद्र कुमार शर्मा के आदेश पर तैयार।  
जिलाधिकारी, शजपुर के पत्राचार संख्या 1156-56 दिनांक 27-12-2019 के अनुसार पुनर्गठन मातापिता के पत्राचार के तहत नए पत्राचार संख्या 1201, 1202 के तहत तैयार किया गया।

जिलाधिकारी, शजपुर के राजेंद्र कुमार शर्मा के आदेश पर तैयार।  
दिनांक - 20-11-2019

Sushner

