



**Relief & Rehabilitation Department**

**Govt of Maharashtra**



**स्वातंत्र्याचा अमृत महोत्सव**

# **District Disaster Management Plan**

**2023**

**District Disaster Management Authority**

**Collector office**

**Yavatmal**

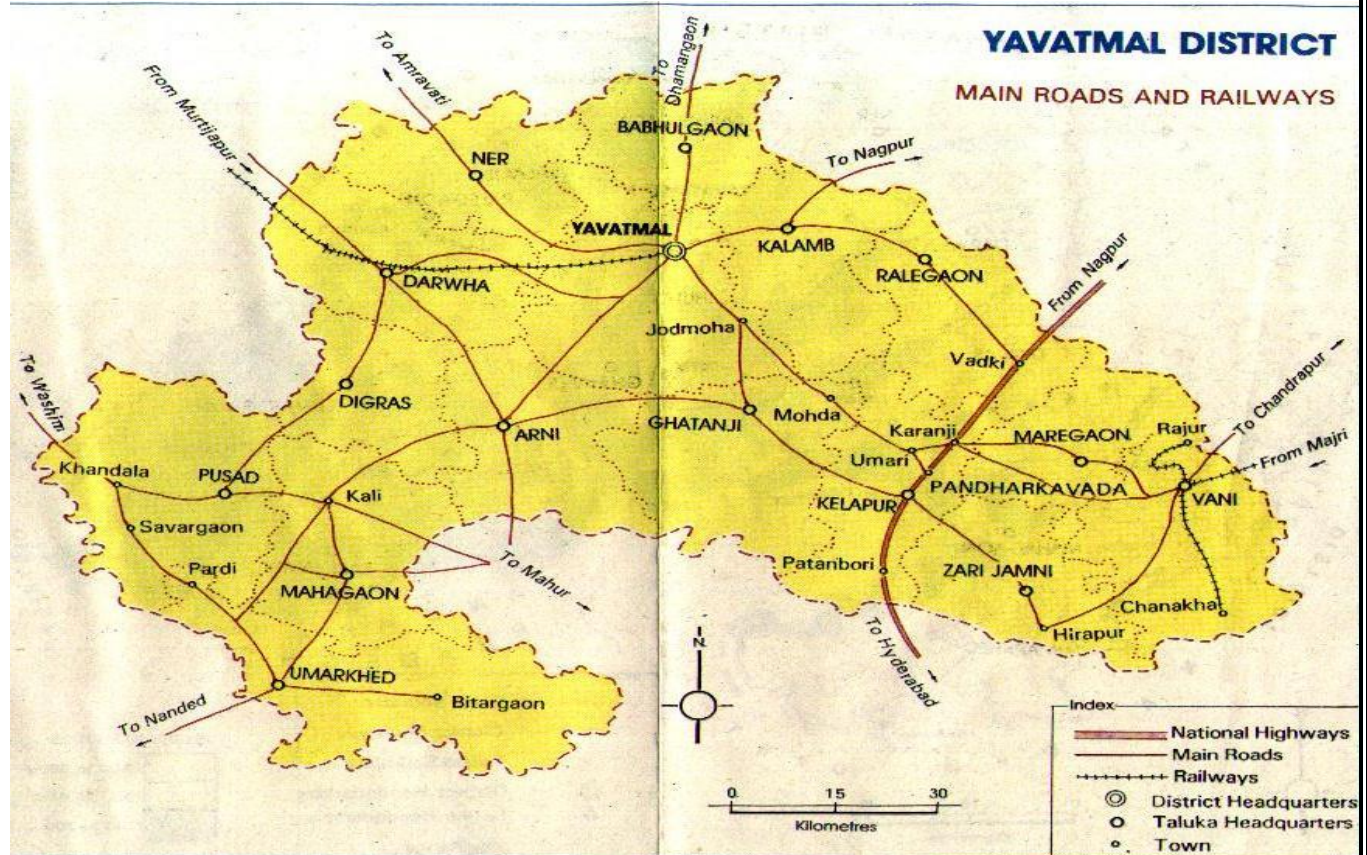
# YAVATMAL DISTRICT

यवतमाळ जिल्हा



## YAVATMAL DISTRICT

### MAIN ROADS AND RAILWAYS





## Structure of District Disaster Management Plan (DDMP)

### A. GENERAL

#### A 1 District Disaster Management Plan

##### A 1.1 District Profile

### Geographical Information

#### Introduction :-

Yavatmal district is one of the eleven districts of Vidarbha Region of Maharashtra. It is bounded on east by Chandrapur district, on south by Andhra Pradesh State and Nanded district on west by Washim and Hingoli districts and on north by Amravati and Wardha districts. Wardha River forms the northeastern boundary of the district. The district lies between 19°26' and 20°42' north latitudes and 77°18' and 79°9' east longitudes. It falls in parts of the Survey of India Toposheets No. 55L, 55I, 56E, 56I, 56M, covering 13582 sq.km, area. The district headquarters is located at Yavatmal Town. For administrative convenience, the district is divided in 16 talukas viz. Yavatmal, Wani, Maregaon, Pandharkawda, Ghatanji, Ralegaon, Babulgaon, Kalamb, Darwha, Ner, Digras, Pusad, Mahagaon, Umarkhed, Zhari Zhamni and Arni. It has a total population of 27,75,457 as per 2011 census. The district is well drained by Wardha and Penganga rivers and their tributaries.

#### Location and Administrative Devision

Yavatmal district lies in the South-Western part of the Wardha Painganga-Wainganga plain. The district lies between 19.26' and 20.42' north latitudes and 77.18' and 79.9' east longitudes. It is surrounded by Amravati and Wardha district to the north. Chandrapur district to the east. Telangana State and Nanded district to the south and Washim and Hingoli district in the west.

**Table**

Location (in degrees)	Latitude-19.26 to 20.42 Longitude-77.18 to 79.98
District Area (in sq. kms.)	13582.00
No. of sub divisions:	07
No. of Tehsils:	16
No. of Gram Panchayats	1198
No. of Villages	2159
No. of Police Stations	31
No. of Post Offices	369
Year of district formation	1905
Name of adjacent districts	Amrawati, Wardha, Nanded

## **Area of District**

The district has an area of 13582 sq. km (4.41 percent of the state) and a population of 2077144 (2.63 percent of the State). The density of population is 153 persons per km<sup>2</sup> with is less than 257 persons per km<sup>2</sup> for the state as whole. Amongst the 30 district in the state, Yavatmal ranks 6th in terms of area and 19th in terms of population.

The district headquarters are located at Yavatmal a town with a population of 116551 as per the 2011 census. It is well connected by roads to the different tahsil headquarters and is also connected to Achalpur by a narrow gauge railway line

The district consists of masses of hilly country broken by broad valley and partially surrounded by plains. The whole district is occupied by a number of east west ranges. The central portion is a plateau with very steep sides and attains an elevation of between 300 and 600 meters above the mean sea level. Here and there it rises into ridges or into flat-topped or pointed hills. All this country belongs to the Balaghat, the southern hills of Berar. In the north the district extends into the Payanghat, the valley of Berar. This valley varies between 65 and 80 kilometers in width. The small part of it that belongs to Yavatmal districts forms a belt of plain from 8 to 22 km in width along the northern district boundary. The district may be broadly divided into the following six geographical regions.

The Bembla basin in the northern parts of New and Babulgaon tahsils

The Wardha plain which spreads along the Wardha river in Kalamb, Ralegaon, Maregaon and Wani tahasil

Yavatmal plateau which covers major part of Yavatmal, Kalamb, Kelapur and Ghatanji tahsils and small part of Babhulgaon Ralegaon and Maregaon tahsils

Darwha plateau which covers the entire tahsil of Darwha, major part of Digras Tahsil, and parts of Ner, Yavatmal and Ghatanji tahsils.

The Pusad hills in Pusad, Mahagaon and Umarkhed tahsils

The Penganga valley along the southern district boundary and consisting of small part of Pusad, Umarkhed, Mahagaon, Darwha, Ghatanji, Kelapur, Maregaon and Wani tahsils

The chief rivers of the district are the Wardha and Penganga both of which flow along the north eastern and southern district boundaries respectively. The Wardha River rises to the east of Multai in Madhya Pradesh. It flows in general south-easterly direction along the north-eastern boundary of the district. The Wardha is the only river of the district, which is partly navigable. The bed of the river is broad and deep, but the banks are sometimes overflowed in times of exceptional floods. During the monsoons the river flows with a strong current but in summer the river is fordable at a number of places. The Bembla and the Nirguda are the main tributaries of the Wardha within the district and both are perennial. The Bembla rises in Amravati district and only the last 30 km or so of drain Yavatmal district. The Nirguda River rises within the district itself and has a length of about 165 km.

The Penganga River rises in the Ajantha range a little to the South west of Buldhana town. It is a major tributary of the Wardha River. The river is deeply entrenched and has a meandering course. The Penganga forms the southern district boundary throughout its long sinuous course. The river changes twice from one longitudinal valley to a parallel longitudinal valley northwards by marking big 'S' shaped curves. The Pus, Arha, Aran, Waghavi and Kunj are the major tributaries of the Painganga River within the district.

### **Boundaries**

Its greatest length, from east to west, is about 193 kilometers and its greatest breadth, from north to south, nearly 161 kilometers. It occupies the south eastern quarter of berar on the west are Washim and Hingoli District. On the north is the Amravati to the east where the Wardha river forms the boundary, lie two Districts Wardha and Chandrapur, along the south lie the Nanded District and Telangana State. The Painganga River, which flows in great curves and loop, marks the whole of the southern boundary and unites at the southeastern extremity with the Wardha River. The District is divided in old five tahsils and now sixteen tahsils.

### **Climate and Rainfall**

The Climate of the district is characterised by a hot summer and general dryness throughout the year except during the south-west monsoon season, i.e., June to September. The temperature rises rapidly after February till May, which is the hottest month of the year. The mean daily maximum temperature during May is 41.8°C and the mean daily minimum temperature during December is 15.1°C The normal annual rainfall varies from about 850 to 1150 mm and it increases from NW to SE direction in the district and reaches maximum around Pandharkawada. The average annual rainfall for the last ten years 2002-2011 ranges from 527.87 mm (Arni) to 985.35 mm (Ralegaon) and the same is presented in Table-3. It is observed that the rainfall has decreased during the last 10 years period.

**Geomorphology and Soil Types** The northern fringe of the district is hilly and forms part of Satpura range. South of these hill ranges, covering almost entire north-central parts, constitutes the Alluvial plain. Southern part of the district is characterized by hilly rugged terrain as a part of Deccan Plateau. Purna is the main river flowing through the district. Other important rivers are Man, Murna and Kate. Three types of soils are observed in the district i.e., (a) The shallow coarse soil which is reddish brown and brownish in colour, occurring in general at higher elevations along the ridges and also at the foothills zone of the major hills (b) The medium black soil is developed along the tributary drainage's and also along the intermediate gradient area. (c) The deep black

soil, which is developed along the lower reaches of Wardha and Penganga riverbeds. They differ from medium black soil in depth and fertility. The soils in the district are slightly alkaline, clayey loamy in texture and contain calcium carbonate.

### **History of Yavatmal District**

Formerly known as "Yeoti" or "Yeotmal", Yavatmal was the main town of the Berar Sultanate and according to old writings "the safest place in the world". The then region of Yavatmal (now Yavatma district), was part of the dominion of Aladdin Hassan Bahman Shah who founded the Bahman Sultanate in 1347. In 1572, Murtaza Shah, ruler of the Ahmadnagar Sultanate (current day Ahmadnagar District), annexed the Yavatmal district. In 1596, Chand Bibi, warrior queen of Ahmadnagar, ceded the district of Yavatmal to the Mughal Empire, then rulers of a large part of India. Following the death of the sixth Mughal Emperor Aurangzeb in 1707, Yavatmal was passed on to the Maratha Empire. When Raghoji I Bhonsle became ruler of the Nagpur kingdom in 1783, he included the Yavatma district in his territory. After the British East India Company created Berar Province in 1853, Yavatma became part of East Berar District in 1863 and later part of the South East Berar district—both districts of the Central Provinces and Berar. Yavatmal remained part of Maharashtra until the 1956 reorganization of states when it was transferred to the Bombay State. With the creation of the Maharashtra state on May 1960, Yavatmal district became a part of the same.

Yavatmal Municipal Council was constituted in 1869 but was dissolved shortly thereafter. It was established again in 1894 and thus forms the oldest municipal council in the district. Mr. Eliot was first mayor and Lieutenant, W. Hege was deputy mayor. Govind Punaji Bari was the first Indian president of the Yavatmal Municipal council (02-Jan-1914 to 31 May 1932). The first elections conducted for the position of president of municipal council were held on 22 December 1934. Prior to that the same was appointed.

The mini-train called *Shakuntala* is a historic remark built by the British government to transport cotton which is now closed.

### **Demographics**

According to the 2011 census Yavatmal district had a population of 2,772,348, its population ranking was 141st in India (out of a total of 640), and 21st in the state (out of 35). The district had a population density of 204 inhabitants per square kilometre (530/sq mi). Its population growth rate over the decade 2001–2011 was 12.9%. Yavatmal had a sex ratio of 947 females for every 1000 males, and a literacy rate of 80.7%. 21.58% of the population lived in urban areas. Scheduled Castes and Scheduled Tribes make up 11.85% and 18.54% of the population respectively.

**Table**

Total household	<b>6,44,794.00</b>
Total population	<b>2,77,2,348.00</b>
Male	<b>1,41,9,965.00</b>
Female	<b>1,35,2,338.00</b>
Population density	<b>204.00 sq.km</b>
Occupation	<b>Agriculture</b>
Main occupation of people	<b>Agriculture</b>
Secondary occupation of People	Dairy

**Source: District Statistical handbook 2011**

## **Language**

The principal language of the Yavatmal district is Marathi however Varhadi dialect of Marathi majorly spoken by people of Yavatmal. However, since the district has numerous Scheduled and Nomadic Tribes, other languages such as Gormati or Banjari, Gondi, Urdu, Telugu and Kolami are also spoken in parts of the district. In 1973, the *Marathi Sahitya Sammelan* (Marathi Literature Conference) was hosted in the city for the first time which was presided over by Gajanan Digambar Madgulkar. The second time, it was hosted on 11 January 2019 chaired by Vaishali Yende, widow of a suicide victim farmer, to highlight the issue of farmer suicides in the area.

## **Culture**

This city has a tropical climate. The Köppen-Geiger climate classification is Aw. In Yavatmal, the average annual temperature is 26.8 °C. The rainfall here averages 946 mm.

## **Economy**

During British rule, Yavatmal city was classified as a hill station. Both cotton-ginning and pressing are carried on in Yavatmal, while the town is also the chief trading center in the district and connected by road with Dhamangaon station, 29 miles (47 km) away. Major business establishments in Yavatmal include the Raymond UCO mill that produces denim fabrics for jeans. There are establishments related to the cotton, and textile industries. There is a 106-acre (0.43 km<sup>2</sup>) textile Special Economic Zone (SEZ) under construction while HLL Unilever has also decided to restart the plant they currently have in the city. Other local businesses in the town are dominated by the presence of agricultural supply facilities used by the nearby farming community.



Banking services are available in the Yavatmal, Arni, Ner, Pusad, Digras, Yavatmal, Arni, Ner, Pusad, Digras, Ghatanji and Kelapur (Pandharkawada) and Wani areas.

The major industrial centres are at: MIDC Lohara, Darwha, Digras, Pusad, Umerkhed, Wani, Umari, Kelapur, Ralegaon and Babhulgaon, Ner, and Wani-Maregaon with the main market places in: Yavatmal City, Arni, Wani, Darwha, Digras, Ghatanji, Mohada, Pusad, Umerkhed and Kelapur.

## **Transport**

### **Roads**

- New Shaktipith Expressway will pass through Yavatmal city and district Nagpur-Yavatmal-Goa Express
- The National Highway NH 44 (Varanasi–Kanyakumari) passes through the district at Vadki, Karanji, Pandharkawada, Patanbori, and Kelapur.
- New National Highway is being proposed from Khandwa (MP)– Dharni–Amravati–Yavatmal–Karanji on NH 44.
- The state highway (Amravati–Chandrapur) passes through Ner, Yavatmal, Jodmoha, Mohada, Umari, Karanji and Wani.
- The (Nagpur–Tuljapur) National highway 361 passes through Kalamb, Yavatmal, Arni, and Umerkhed.
- Mumbai–Nagpur Expressway will directly connect to Yavatmal City with feeder roads.

### **Railways**

- Yavatmal is the southern terminus of the 762 mm (30.0 in) narrow gauge railway known locally as the Shakuntala Railway. This line is composed of two legs intersecting with the 5 ft 6 in (1,676 mm) Broad gauge Howrah–Nagpur–Mumbai line at Murtijapur – the 76 km (47 mi) northern leg to Achalpur and the 113 km (70 mi) southeastern leg to Yavatmal. Darwha Station lies on this line.
- Another line, Majri–Mudkhed line, passes through the district. Wani is a railway station on this line.<sup>[4]</sup> The state cabinet has approved Wardha–Nanded rail link project. This railway line will connect Wardha–Yavatmal in Vidarbha with Nanded in Marathwada.
- India's First broad-gauge Metro will run From Nagpur to Yavatmal on Nagpur–Wardha, Wardha–Yavatmal–Nanded line.
- SURVEY REPORTS SUBMITTED TO BOARD for approval for new broad gauge line between Yavatmal–Adilabad Via Ghatanji, Pandharkawada, Chankha.

## Airport

### International

- Dr. Babasaheb Ambedkar International Airport, Nagpur is 150 km away From Yavatmal City.

### Regional

- Yavatmal airport is located 9 km (5.6 mi) east of the city of Yavatmal and has been taken up by Reliance Airport Developers Ltd for development.

### Education

- Shri Vasantao Naik Government Medical College
- Technical: Government College of Engineering, Government Polytechnic, Government Residential Women's Polytechnic, Jawaharlal Darda Engineering and Technical Institute (private), Jagdamba College of Engineering,
- Other: Amolakchand Mahavidyalaya (Science, Arts and Commerce), Babaji Datey Kala & Vanijya Mahavidyalaya (Arts and Commerce College), St. Aloysius English School.

## Geography and Topography

Geography of Yavatmal district is determined to a great extent by its location. The district of Yavatmal is situated in the eastern region of the state of **Maharashtra**. It is bounded by the Hingoli district and Washim district in the west and **Amravati district** and Wardha district in the north. To the east lies the Chandrapur district and to the south lie the district of Nanded and the state of **Andhra Pradesh**. The district consists of masses of hilly country broken by broad valleys and partially surrounded by plains. The southern half of Yavatmal taluka, which is just



Wardha River

in the middle of the district, is a plateau with very steep sides. Here and there it rises into ridges or into flat-topped or pointed hills. Steep, rough ranges of hills occur to east and west right across the district. In the north, the district extends into the Payanghat valley of Berar. The Wardha valley, which marks the boundary of the district for over a hundred miles, continues this belt of plain across the north of Kelapur taluka and the northern and eastern sides of Wani taluka. The chief rivers are the **Wardha River** and the **Penganga River** both of which flow along the boundary of the district. Each has various tributaries, which traverse its centre. The Penganga River gives a strip of plain in many parts of its course along the southern border of the district. The tributaries of the Penganga again have formed valleys, often some miles in breadth, through the hilly country.

The climate of the district is in general hot and dry with moderately cold winters. The year may be divided into four seasons. The hot season begins in March and extends up to the first week of June. May is generally the hottest month of the year with the mean daily maximum temperature at about 42 degrees Celsius. This is followed by the south west monsoon season which lasts up till the end of September. With the onset of the south west monsoons there is an appreciable fall in temperatures and the weather becomes pleasant. October and November constitute the post monsoon season and is followed by the cold season which lasts up till February. From about the end of November both day and night temperature fall rapidly and December is usually the coldest month of the year with the mean daily minimum temperature at about 13 C. Most of the total annual rainfall is reserved during the south west monsoon season. The rainfall is not uniform in all parts of the district. Wani in the eastern part of the district receives 1,125 mm of rain and **Darwha** in the western, part of the district receives 889 mm of rain Yavatmal in the central portion of the district receives 1099.5 mm of rain. In general, the amount of rainfall increases as one proceeds from west to east. The average rainfall received by the district is around 964.7 mm. There is generally a breeze in the hot weather, so that the nights are cool. The cold waves over northern India sometimes affect the district and the minimum temperature may drop to about 5 degrees Celsius.

In Yavatmal district the Archaean rocks, which consist of crystalline rocks of various kinds, were entirely covered by Puranic rocks, which consists mainly of sediments. These were covered in turn by the Gondwana system, consisting of sub aerial and freshwater deposits. Next, the **Deccan traps** were spread over all. Finally the action of the atmosphere removed the Decan trap in parts, exposing, Gondwana and Lameta beds. During the last stage alluvial soil, the common black cotton soil was spread over parts of the district.

Purana rock is found at various places in the south. It consists of shales, slates, limestones, and sandstones. The shales are deep red, fine grained, with a somewhat nodular structure, much jointed, but irregularly breaking up into small, minute, angular fragments. Thin beds of limestone occur in them. Capital section of these rocks is seen in the Penganga and its tributaries. At Yenuk, south of the Wani taluka there is a hill formed of Purana sandstone. It contains several bands of conglomerates in which pebbles of hematite are found. Iron-ore used to be made from this hematite. Rocks belonging to the Gondwana system are also found in Wani taluka. They occupy its south eastern half. Like the Purana rocks they are often shales, slates, limestone, and sandstones. Unlike them, they often take the form of coal. There is a large coalfield in Wani taluka which extends under Wardha to Warora in Chandrapur district and under the Penganga into the Nizam's Dominions. At Wanjra above five miles north of Wani town a small hill is composed of pinkish limestone of this bed. West of Wani the limestone continues varying in colour from buff to dark grey, and contains chert, passing into jasper in tolerably regular layers. To the west and north of Kayar there is deep angle in the trap and beds which are possibly Lameta. Deccan trap is spread over the greater part of the district. In the southern half it forms irregular hills, and some of these in Pusad taluka are nearly 2000 feet high.

## Rainfall and Weather

### Rainfall

The average rainfall of Yavatmal District is 926.80 mm. In Rabi cultivation is said to have decreased partly because of the uncertainty of the rainfall in recent years. On the other hand it is said that a heavy rainfall would injure or even ruin cultivation in some parts of the District, and that some villages in Pusad taluka formerly went out of cultivation from this cause. The rainfall of the last 12 years has certainly been enough when it has come at favourable times. The 25 years average gives 6 inches in June, 12 in July, 8 in August, 7 in September, 2 in October and less than 1 in each of the other months. There is no observatory in the District. Yavatmal is higher and cooler than Amravati or Akola, but is not as cool as Buldhana. There is generally a breeze in the hot weather, so that the nights are cool. The District has rather a bad name for fever.

#### Last 10 Years Rainfall Index (in mm)

Sr.No	Name of Taluka	Years										
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
1	Yavatmal	105.14	99.40	136.60	129.40	84.50	75.30	73.30	73.30	126.00	295.70	207.70
2	Babhulgaon	94.15	96.40	155.80	91.00	186.60	117.30	120.00	120.00	82.70	312.70	242.80
3	Kalamb	87.11	127.90	180.00	119.90	80.90	83.50	92.40	82.40	133.60	284.70	243.80
4	Darwha	96.27	61.60	148.90	153.50	100.40	95.00	69.70	69.70	164.50	263.50	224.30
5	Digras	111.16	57.20	188.80	138.10	152.40	75.60	55.70	55.70	147.10	317.40	221.60
6	Arni	155.29	127.90	149.90	151.70	156.50	66.20	63.80	63.80	75.90	220.40	314.70
7	Ner	99.73	82.90	110.30	138.80	137.80	75.50	67.90	67.90	171.90	265.20	251.50
8	Pusad	120.36	139.00	105.40	146.40	196.50	100.00	40.80	40.80	193.10	255.50	172.70
9	Umarkhed	80.44	123.70	202.30	145.50	135.00	38.20	47.50	47.50	226.20	271.10	165.60
10	Mahagaon	97.50	107.50	122.30	136.00	295.70	25.80	42.40	42.40	187.50	217.40	270.30
11	Wani	111.13	84.50	145.90	225.40	331.70	85.10	35.10	35.10	124.70	366.70	247.30
12	Maregaon	87.39	106.60	142.30	110.40	173.20	59.40	108.70	108.70	128.40	348.60	220.30
13	Zari Jamani	65.98	61.60	229.80	102.00	163.40	61.60	42.60	42.60	106.30	374.60	194.60
14	Kelapur	119.02	100.10	191.60	199.90	136.00	107.60	100.00	100.00	120.20	338.60	273.50
15	Ghatanji	97.65	101.60	170.20	140.10	99.40	82.60	92.90	92.90	159.70	368.00	242.40
16	Ralegaon	76.12	151.20	101.80	121.20	102.30	82.30	119.00	119.00	83.50	266.20	196.10

### Climate

The climate of the district is in, general hot and dry with moderately cold winters. The year may be divided into four seasons. The hot season begins in March and extends up to the first week of June. This is followed by the south west monsoon season which last up till the end of September, October and November constitute the post monsoon season and is followed by the cold season which last up till February.

Most of the total annual rainfall is reserved during the south west monsoon season. The rainfall is not uniform in all parts of the district. Wani in the eastern part of the district receives 1,125 mm of rain and Darwha in the western, part of the district receives 889 mm of rain Yavatmal in the central portion

of the district receives 1099.5 mm of rain. In general, the amount of rainfall increase as one proceeds from west to east.

The summer season from March to May is one of continuous rise in both day and night temperature. May is generally the hottest month of the year with the mean daily maximum temperature at about 42 C with the on set of the south west monsoons there is an appreciable fall in temperatures and the weather becomes pleasant. With the withdrawal of the monsoon day temperature increase slightly while night temperature progressively decrease. From about the end of November both day and night temperature fall rapidly and December is usually the coldest month of the year with the mean daily minimum temperature at about 13 C. The cold waves over northern India sometimes affect the district and the minimum temperature may drop to about 5 C.

During the South-west monsoon season the air is humid and the skies are heavily clouded to overcast. During the rest of the year the air is generally dry and the skies are clear or lightly clouded. Winds are generally light to moderate with some increase in force in the latter part of the summer season and the monsoon months.

**Table**

Total annual rainfall of last year	
Average rainfall (in mm)	926.80
Average Maximum Temperature:	42 c(108 F)
Average Minimum Temperature:	13 c(55 F)
Months of excess rainfall, leading to flood situation	July to August
Months of water scarcity, leading to drought situation	April to May

### **Daily Rainfall**

Tehsilwise as well as Circlewise daily rainfall in the district is maintained since long back. Various reports can be seen here. Rainfall occurred in the district since last few years are also maintained.

### **Health (Medical)**

No. of hospitals, PHCs, CHCs/ mini dispensaries (marked with the location), total beds, medical equipments medicines available, plot the location of Bock/ GPs w.r.t. PHCs, CHCs, trained manpower, first aid volunteers (check, if any record is available).

Yavatmal district has the following number of health centers:

1. No. of Primary Health Centers: 66
2. No. of Community Health Centers: 14
3. No. of District Hospitals: 02
4. No. of Sub centers: 455



Table A 1

<b>List of health centers in Yavatmal</b>			
<b>Sr.No</b>	<b>Name of development Block</b>	<b>Community health centers</b>	<b>Primary Health centers</b>
1	Yavatmal	0	4
2	Kalamb	1	3
3	Babulgaon	1	3
4	Darwha	1	4
5	Arni	1	6
6	Digras	1	2
7	Ner	1	3
8	Pusad	0	6
9	Umarkhed	1	6
10	Mahagaon	1	4
11	Kelapur	1	6
12	Ghatanji	1	4
13	Ralegaon	1	4
14	Wani	1	4
15	Maregoan	1	4
16	Zari Jamani	1	3
Total		14	66

## **B. First Aid Kits**

The first aid kits (at least one in every village) are with

- 1) Depot Holders
- 2) MLV (Malaria Linked Volunteers)
- 3) ASHA

These kits have all the needed material for first aid and Medicines

## **C. Ambulances and Mobile Units:**

### **1. List of Ambulances:**

Sr. no.	Health Unit	No. of ambulances
1	District Hospital	1
2.	CHCs	14

## **Agriculture and Land use**

Cotton is the crop key in Yavatmal district. Yavatmal comes under rain fed area. Agriculture in this district is to the large extent depends on monsoon. Therefore cotton, Soyabin, Pigeon Pea, Sourgham, Green Gram Black Gram crops are grown in Kharip (Rainy) season. The soils of the district are 50% light (7.5 – 25 cm i.e. Entisol), 30% medium (26-50 cm i.e. Inceptisol) and 20% black cotton soils (91 – 100 cm i.e. Vertisol).

## **Industrial setups**

Yavatmal Industrial Area is an industrial area situated in Yavatmal district in the state of Maharashtra, India. This industrial area is spread over 205.71 Hectare.

The major Mineral, Forestry available in Yavatmal district are Coal, Limestone ,Dolomite, Shale, Furniture wood, bamboo, gum and tendu leaves.

Major Exportable Items: Cotton Bales, Uco Denims Jean, Deoiled Cakes, Ferromagnesian & Ferrosilicon, Cotton Yarn.

## **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 Maharashtra (GoM) 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 Maharashtra State Disaster Management Authority (SDMA) 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.

## **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.

## **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.

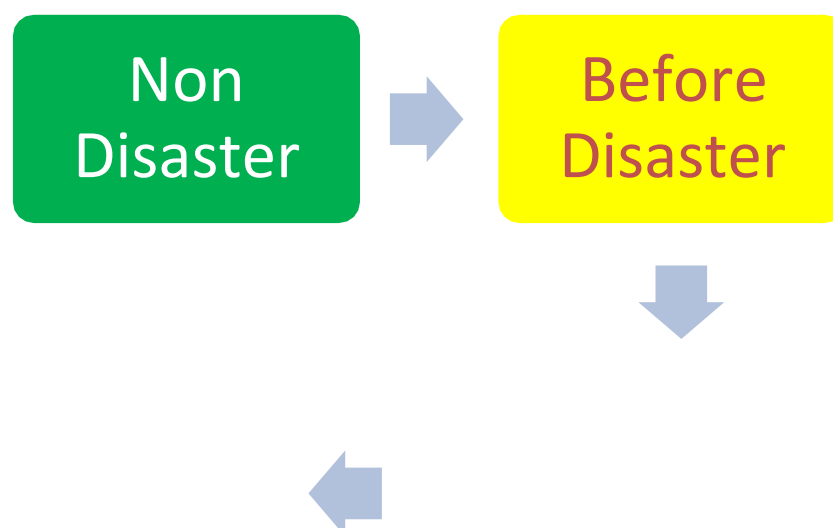
- Encourage training and create awareness, rehearsals, dissemination of knowledge, and information on DM among all the citizens living in the district.
- Ensuring relief/assistance to the affected with care, without any discrimination of caste, creed, community or sex
- Undertaking reconstruction as 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

### **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.





After  
Disaster

During  
Disaster

**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.

### **Institutional Arrangements**

**A DDMA for every district in the State of Maharashtra has to be constituted, consisting of the following members:**

1. Collector- Chairman of DDMA
2. Superintendent Of Police (Member)
3. Chief Medical Officer (Member)
4. Executive engineer (PWD) (Member)
5. Executive Engineer (Irrigation) (Member)
6. Executive Engineer (PH) (Member)
7. Chief Engineer (MSEB)/ Executive engineer  
Member
8. Chairperson of the Zila Parishad (Member)
- 9) RDC –Ceo of DDMA

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

District level Disaster Management Advisory Committee will be appointed by the District Disaster Management Authority *to take advice on various subject specific fields* within the overall context of disaster management.

The committee will comprise of disaster management experts, which may be from government departments, research institutes or NGO's. The proposed District Disaster Management Advisory Committee for Yavatmal district will comprise of following:

1. Collector
2. Superintendent of Police
3. CEO, Zilla Panchayat
4. District forest officer
5. Additional Collector
6. Commissioner/ CMO (Chief municipal officer)Municipal Corporation
7. Chief Medical Officer
8. Executive Engg. (PHE)
9. Executive Engg. (PWD)
10. Executive Engg. (I)
11. District Food officer
12. Commandant, Home Guards
13. Road and Transport officer
14. Fire Officer
15. Telecom officer ITS
16. District Revenue Officer
17. Executive engineer (Rural engineering)
18. CEO, Housing board
19. From two prominent NGO"s working in the district in the field of Disaster Management

***Block Disaster Management Committee will comprise of the following:***

1. Tahsildar - Chairperson

2. Block Development Officer Member
3. Thanedar/ Police Station Member
4. Chairperson, Panchayat Samiti-Block Member
5. Medical Officer In charge, Dispensaries Member
6. Assistant Engineer/ Sub engineer, I&PH Member
7. Assistant Engineer/ Sub engineer, PWD Member
8. Assistant Engineer, MSEB Member
9. Inspector, Food & Supplies Member
10. Platoon Commander, Home Guards Member
11. Range Officer, Forests Member
12. In charge, Fire Station Member
13. Junior Engineer (JTO), Telecom Member
14. Rural engineering (sub engineer) Member
15. From two prominent “NGO”s working in the block in the field of Disaster Management.

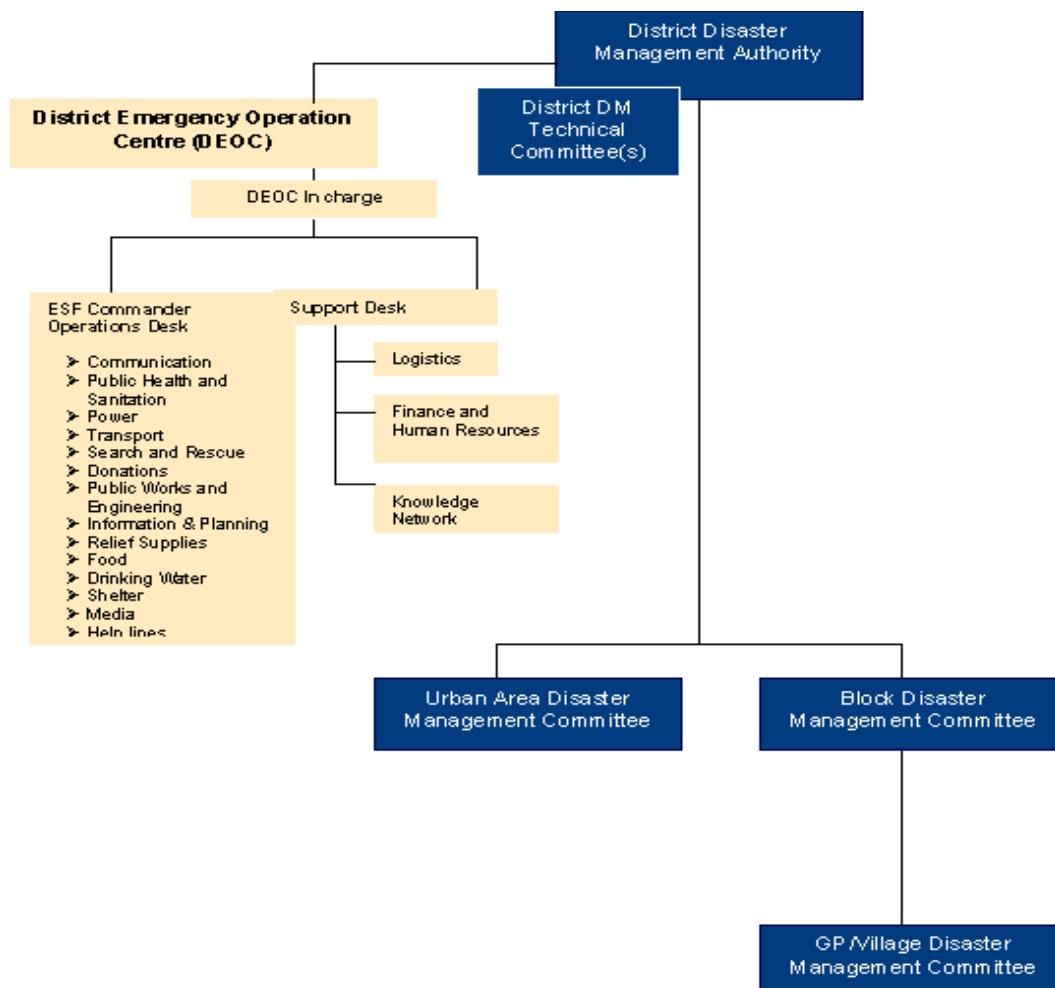
***Gram Panchayat/Village Disaster Management Committee***

Subject to the directions of the District Authority, the *Gram Panchayat* Disaster Management committees will be responsible for the development and implementation of GP level disaster management plans.

1. Sarpanch
2. Gram Sahayak
3. Talathi
4. Agriculture officer
5. Line man (Electricity and telecommunication)
6. Maintenance officer/ Incharge (PHE, PWD, Irrigation)
7. ASHA (Health Department)
- 6 Sainik of home guards
- 7 Kotwal

The following Structure of DDMA is recommended for the district which will be integrated with

ICSto deal with disasters holistically.



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

District level Disaster Management Advisory Committee will be appointed by the District Disaster Management Authority to take advice on various subject specific fields within the overall context of disaster management. The committee will comprise of disaster management experts, which may be from government departments, research institutes or NGO's. The proposed District Disaster Management Advisory Committee for Yavatmal district will comprise of following:

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

The District Emergency Operation Centre (DEOC) will be hub of all the activities related with disaster response in the District. During non-disaster times, the DEOC will work under the supervision of the official not below the rank of Additional District Magistrate and as designated by the DDMA and during the emergencies, DEOC will come under the direct control of Deputy Commissioner or a person designated by him as Chief of Operations.

### **A 2.4 Urban Area Disaster Management Committee**

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

### **A 2.5 Block Level Disaster Management Committee**

Subject to the directions of the District Authority, the block disaster management committee will be responsible for the development and implementation of block level disaster management plans.

### **A 2.6 Gram Panchayat / Village Disaster Management Committee**

Subject to the directions of the District Authority, the Gram Panchayat Disaster Management committees will be responsible for the development and implementation of GP level disaster management plans.

## **HAZARD, VULNERABILITY ASSESSMENT AND RISK PROFILING (HVRC)**

Yavatmal, the District of Maharashtra is not very vulnerable to the natural and manmade disasters. The district is vulnerable to 7 types of hazards out of 33 identified by the High Powered Committee (HPC) of Government of India



**Table B.1.2 Major applicable hazards**

Type of applicable hazards	Hazard prone districts/Areas
Flood,	Babhulgaon, Ralegaon, Maregaon, Wani, Pusad, Umarkhed, Mahagaon
Fire	Intire district
Industrial disasters	MIDC Area of district
rail/ road accidents	Intire district
Drought	Intire district

Seasonality of hazards

Hazard	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Flood							*	*	*			
Accidents	*	*	*	*	*	*	*	*	*	*	*	*
Fire					*	*						
Industrial Disaster	*	*	*	*	*	*	*	*	*	*	*	*

**B 2**      ***Vulnerability Analysis***

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

The district of Yavatmal is apparently “safe” in terms of disaster. One of the major reasons is the sparse population in the area as compared to other parts of the country.

There are very less high rise buildings which are to be taken special care of during the situations such as earthquakes. The only disaster that is stressed upon is “Flood” and a proper Flood relief cell is working in the district.

However no special measures in terms of disasters like droughts are currently in place except reserve stock of food at fair price shops and there are water tankers for provision of water.

*So, the district needs an “Integrated Disaster Management Plan’ which incorporates all the probable disasters as well as ensures a smooth co-ordination in the affected area so as to minimize the damage to human life as well as other loss.*

In the subsequent section, a new plan is recommended for **Yavatmal** which integrates ICS system considering all the disasters as well as abides by the guidelines of Disaster Management Act 2005.

## **DISTRICT LEVEL DISASTER MANAGEMENT PLANNING**

### **District Action Plans**

As per Article 5 of the Law, the following activities would be carried out for any emergency situation or disaster:

1. Prevention of disasters;
2. Assessment and Mitigation of the causes of disasters;
3. Rescue of people during a disaster;
4. Reconstruction and people’s return to normal life;
5. Conduction community awareness programmes and training personnel to be prepared to cope with disasters;

For efficient execution of the National Disaster Management Plan, the five activities have been allocated to four stages of the Disaster Cycle. The Plan has been organised as per these four stages of the Disaster Cycle.

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

This part will mainly focus on various ways and means of reducing the impacts of disasters on the communities through damage prevention. Major focus will be given to disaster mitigation owing to its importance in reducing the losses. The mitigation plans will be specific for different kinds of hazards identified in HRVC section. Mitigation plans will be sector specific, and will deal with both aspects, structural & non-structural.



Different parts of the Yavatmal district are vulnerable to different sets of hazards. Mitigation plans will be developed and adapted locally. Mitigation strategies need to ensure the higher level of community involvement and participation. For this, Yavatmal District Disaster Management Authority follows a “Bottom to Top” approach in preparation of the plan. The inputs for preparing the District level mitigation plan will come from the Gram Panchayat level, Block level and in the case of urban areas from municipal corporation or Nagar Panchayats level.

The institutional arrangement to ensure the planning, coordination, implementation and monitoring of the Yavatmal district mitigation strategy will be as follows:

The Yavatmal DDMA with inputs from the district technical committee(s) will plan and coordinate all the mitigation activities at the district level. All the concerned departments will develop and implement their respective mitigation plans. The departments will identify a nodal officer within their respective departments to coordinate the mitigation activities and who will also be responsible for communicating the status of the department’s efforts to the DDMA.

- All the Gram Panchayats of the districts will prepare their Gram Panchayat Disaster Management Plan, which includes the mitigation plan. The responsibility of preparation of these plans will be of the Gram Panchayat Disaster Management Committee. The plans will be submitted by the Gram Panchayat Disaster management Committees to the respective Block Disaster Management Committees, which in turn will prepare its own Block Disaster Management Plan using the information from all the Gram Panchayats falling under its jurisdiction. The Block level plans from all the blocks will be finally submitted to the Yavatmal District Disaster Management Authority, which will then using the information from the block level plans will prepare the district mitigation plan. Similarly, for the Urban Areas of the district, the disaster management plans including the mitigation plan will be prepared by the respective Municipalities or Nagar panchayats and will be submitted to Yavatmal DDMA.
- Vulnerability analysis and risk assessment are essential for developing mitigation

strategies and these analysis needs to come from the ground level to understand the locale specific situation. The gram panchayat, block level and urban bodies' disaster management plans will help in getting this information.

The mitigation measures proposed have been categorized into six major headings:

1. Risk assessment
2. Construction work
3. Repair and maintenance
4. Research and technology transfer
5. Training and capacity building
6. Land Use Planning and Regulations
7. Resources for Mitigation

In rural areas, characterized by inadequate infrastructure and poverty groups, all mitigation efforts will have to be backed up by a strong and committed programme of social development for the communities. Constant re-examination, therefore of development policies and programmes, leading to equity and social justice, will be a pre-requisite to ensure the success of mitigation efforts that are being proposed.

The roles of training, education, and information dissemination will be key areas of intervention in order to ensure the implementation and sustainability of the mitigation strategies.

#### *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 umaria district so that epidemics can be avoided. Under this scheme proper vaccination should be carried out by the district health administration through CHC and PHC. Apart from Special camp should be arranged at block level or Gram Panchayat level about awareness of diseases and how to be safe. Dotorsshould 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*

It is proposed the establishment of a State Disaster Management Authority Institution as part of overall mitigation strategy. The Institute will organize training for state level and district level officials, officials from line departments, as well as the private sector organizations.

Mode	Agency responsible
Training Programme for Rescue & Relief	SP, Dist. Fire Officer, NGOs,
Training for common people on Health Care, Sanitation & First Aid	Health Department
Disaster Orientation Training of Police/ Fire Personnel/ Medical Teams	SDMA/DDMA

### SETTING UP OF DISASTER VOLUNTER FORCE - IDENTIFICATION & TRAINING

	<b><u>Warning Group</u></b> - Warn the community of the impending danger.
<b>Block level Task force</b>	<b><u>Rescue &amp; Evacuation Group</u></b> - To be put into task immediately after abatement of calamity.
<b>G.P. Level Task force</b>	<b><u>Water &amp; Sanitation Group</u></b> - Ensured safe drinking water in the shelter camps, MCS
<b>Village Level Taskforce</b>	<b><u>Shelter management Group</u></b> - Shall remain overall charge of managing the evacuees in shelter camps.
	<b><u>First Aid &amp; Medical Group</u></b> - Shall take care of the minor elements in the rescue camp.

**Patrolling and Liaison Group**- Shall watch & Word belongings of the inmates in the shelter camps & keep liaison with Govt.

Field	Capacity Building	Department.
Information Education Centre(IEC) activities	Improving Information Education and communication activities through walling posters, street play,volunteers training , village task force training. Mass rallies during normal period.	Leading NGOs
Road	Repair/ Restoration of vulnerable points on Roads before unset of monsoon.	PWD / Rural Development/ Panchayat Samiti.
Embankment	Repair of vulnerable points in river/ canal Embankment during free flood period.	Irrigation / Minor Irrigation.
Bridge	Repair/ Restoration of vulnerable points on bridge before unset of monsoon.	PWD / concern village committee.
Safe shelters	Ensuring proper maintainance of shelter places constructed by default agencies.	Block / concern village committee.
Communication	Ensure maintainance and proper functioning of electronic communication system	BSNL Deptt.
Drinking water and sanitation	Immediate Response for repair/ replacement of tube wells / Pipe water supply system.	Public Health Engineering / Rural Water Supply and Sanitation
Power	Immediate response for repair of electric line and supply	Electric Deptt.
IEC activities	By way of IEC activities through walling posters, street play, village task force/volunteers training, during normal period.	By leading NGOs, Chief Medical and Health Officer, Agriculture and Rural Development Department

Vaccination	Adequate stock piling of vaccines should be ensured for vaccination before disaster.	NGOs, Chief Medical and Health Officer, Agriculture and Rural Development Department
Training	Training programme of common people should be programmed for health care, sanitation and first aid from village level to district level	NGOs, Chief Medical and Health Officer, Agriculture and Rural Development Department
Awareness	Creating awareness among general public during normal time to insured human life.	Leading NGOs.
Agriculture	To reduce adverse impact on agriculture farmers should be advised alternating cropping pattern/flood resistance crops.	Agriculture Superintendent.
Horticulture	Drought resistance short duration paddy seeds be made available to farmers.	Agriculture Superintendent.
Infrastructure	Improving information education and communication activities through walling, posters, street play, volunteers training	District Information officer
Life	Creating awareness among general public during normal time to insured human life.	Leading NGOs.
<p><b>The capacity building and the departments involved</b></p>		

### C 1.1.3

#### **Community Initiatives**

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. Special focused will be given to local contractors and masons, who are the prime responsible for construction work. Training programmes will target the informal construction sector by building their capacities on safe construction practices and retrofitting of existing structures. An institutional arrangement is required to ensure that in the long term, contractors and mason ensure safe construction practices.

Primary agencies for community level training and public awareness are:

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

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

#### **Land Use Planning and Regulations**

The department of Town and Country planning will be primary agency to encourage new development to occur in locations avoiding or minimizing exposure to hazards or enhance design requirements to improve resiliency in future disasters. This office should also ensure proper enforcement of existing regulations and acts.

### C 1.1.4 Risk Management Funding

This section addresses 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 set up of fire stations, watershed management, planting trees along the river etc.

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

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

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

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

Long term: Fire equipments should be purchased as required and as per new technology. For eg: multistoried buildings (masks aren't available), equipments for fire extinguishing in slum areas where fire brigade cannot enter. Only 3 fire brigades are available in the district that too in Ratlam which might pose a problem in case of incidence of fire in distant places.

Eco friendly watershed interventions to deal with drought situations, check dams for mitigating soil erosion should be established.

Planting trees on banks of rivers to prevent soil erosion and act as shelter belts.

## C 1.2 Preparedness Plan

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

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

## **Preparedness before response**General Preparedness Measures

### ***1. Establishment of the Control Rooms***

The district administration should ensure the operation of control rooms. The control rooms are presently run by major line departments at revenue, police, MSEDCL, Hospital, etc. at taluka and district level should be functional.

### ***2. Plan Updation***

Disaster Management Plan needs updation at every interval. It includes the skilled manpower, their addresses and contact numbers, necessary equipments, medicinal stock, daily necessities, list of flood prone villages etc. All these things have to be updated after a certain interval of time.

### ***3. Communication System***

Training is given for search and rescue teams, first aid teams disaster management teams at village, taluka and district level. These teams will provide timely help during any type of disaster. Provision of wireless sets at all Sub-division and Taluka Offices for effective communication of cyclone/heavy rainfall/flood warning should be provided. Fire Brigades at all the Municipal Offices. Setting up of a special Highway Safety Patrol along the Nagpur-Bhopal highway will be acted upon. Effective and stricter implementation of flood zone regulations disallowing construction within 200 m of river banks. Widespread community awareness programmes in flood prone villages so that villages are sensitized about the flood hazard and there are no problems when there is need for evacuation.

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

Each of the DMTs comprise of groups of women and men volunteers and are assigned with a special task. The Search and Rescue Teams, First Aid Teams formed at the three levels should be provided training from time to time so that their timely help can be used during disaster.

### ***5. Organization of Mock Drills***

Mock drill is an integral part of the Community based disaster management plan, as it is a preparedness drill to keep the community alert. Mock drills are organized in all the villages of the district to activate the DMTs and modification of the DM plan. Mock drill is organized once in six months as per the seasonality calendar of natural disaster events that is likely to occur.

#### **6. Community Awareness on Various Disasters**

1. Construction of Earthquake Resistant Structures
2. Retrofitting the weak structures
3. House insurance
4. Construction of embankments for flood control
5. Rehabilitation of people in safe lands
6. Development of plans for shifting people from vulnerable area to safer area

#### **Pre-Disaster Warning, Alerts**

The existing control rooms for flood relief can be used for disasters like cloud bursts or hail storms with little or no modifications. Here the information desk of the ICS system will play an important role. It should be ensured that the warning system is easy to operate, reaches a large number of people simultaneously 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. Often animals exhibit different kind of behavioral patterns prior to the onset of disasters like flood and earthquake. These patterns should be studied and integrated in the awareness program for communities.

**Table**

<b>Hazards</b>	<b>Agencies</b>
Flood	Indian Meteorological Department, Central Water Commission, Irrigation Department
Drought	Indian Meteorological Department, Revenue Department
Industrial	Dept. of Industry
Fires	Fire Brigade, Police, Forest Department
Hot & Cold Waves	Indian Meteorological Department
Road Accidents	Police
Human Epidemics	Health Department
Animal Epidemics	Animal Husbandry

#### **Evacuation stage**

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:

1. Evacuation team should separate into smaller groups targeting individually on different level of casualties.
2. The unconscious and severely hurt will given the top most priority and sent for in the ambulances
3. The people needing first aid come next who should be treated promptly.
4. Activate all the emergency communication mechanisms
5. Logistics should be contacted immediately for making the provisions for transportation.
6. Temporary relief centers should be set up as soon as possible to house all the affected people or they should be immediately sent for the existing relief centers.

### C 1.3 Response Plan

Effective response planning requires realistic identification of likely response functions, assignment of specific tasks to individual response agencies, identification of equipment, supplies and personnel required by the response agencies for performing the assigned tasks. A response plan essentially outlines the strategy and resources needed for search and rescue, evacuation, etc. A response plan will be supplemented by relief management planning activities, including relief needs, transportation routes, coordination with local police, District, State, national and international relief teams, transport vehicles and alternative communication.

#### 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.

#### **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



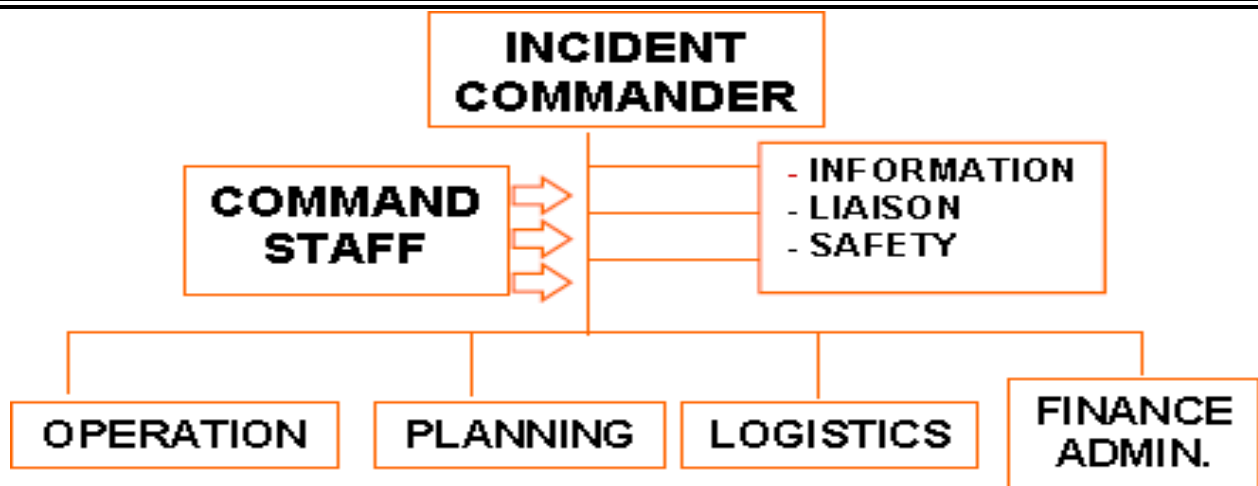
administration will be carefully selected and professionally trained for the different ICS positions in order to constitute the District Level Incident Command Teams. (DICTs). The teams will focus on the operational aspects of response management, duly supported by other functions in ICS, e.g. Planning, 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 commanders 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
- 4.

### *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**

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

Following are the key disaster management team at district level:

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

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

#### ***Role and Responsibilities of ICS General Staff***

***(Proposed) The General Staff consists of the following positions :***

1. Operations Section Chief
2. Planning Section Chief
3. Logistics Section Chief
4. Finance/Administration Section Chief

#### ***Operations Section***

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

The Operations Section consists of the following components:

1. Ground or surface-based tactical resources
2. Staging Areas

#### ***1. Ground or Surface-based Tactical Resources***

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

Resources can be used as:

1. Single Resources
2. Task Forces
3. Strike Teams

## *2. Staging Areas*

The second component of the Operations Section is the Staging Area.

An ICS Staging Area is a temporary location for placing resources available for incident assignments. All resources within the Staging Area belong to the incident.

Resources assigned to a Staging Area are available on a three minute basis to take on active assignment.

Staging Area are temporary facilities. They can be set up at any appropriate location in the incident area and moved or deactivated as needed.

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

## *Planning Section*

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

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

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

1. Chemist
2. Hydrologist
3. Geologist
4. Meteorologist
5. Training Specialist
- 6.

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

1. Resources Unit
2. Situation Unit
3. Documentation Unit
4. Demobilization Unit

*Common responsibilities of Unit Leaders are listed below:*

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

- Maintain unit records, including Unit Log

### ***1. Resources Unit***

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

1. Overseeing the check-in of all resources
2. Maintaining a status-keeping system indicating current location and status of all the resources.
3. Maintenance of a master list of all the resources, e.g. key supervisory personnel, primary and support resources, etc.

### ***2. Situation Unit***

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

### ***3. Documentation Unit***

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

### ***4. Demobilization Unit***

The Demobilization Unit is responsible for developing the Incident Demobilization Plan. On large incidents, demobilization can be quite complex, requiring a separate planning activity. Planning for demobilization should begin at the early stages of an incident, particularly in the development of rosters of personnel and resources, thus ensuring the efficient and safe demobilization of all the resources.

### ***5. Technical Specialists***

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

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

- ☐ Planning Section Chief
- ☐ A designated Unit Leader

Some examples of the more commonly used specialists are :

1. Meteorologist
2. Environmental Impact Specialist
3. Flood Control Specialist
4. Water Use Specialist
5. Fuels and Flammable Specialist
6. Hazardous Substance Specialist
7. Fire Behavior Specialist
8. Structural Engineer
9. Training Specialist



### **Logistics Section**

The Logistics Section is responsible for the following:

1. Facilities
2. Transportation
3. Communications
4. Supplies
5. Equipment maintenance and fueling
6. Food Services
7. Medical Services
8. Ordering Resources

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

Six Units may be established within the Logistics Section:

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

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

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

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

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

- First Aid Team
- Search and Rescue team
- Communication Teams

- Power Team
- Relief Teams
- Rehabilitation teams
- Transport Team

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

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

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

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

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

1. Initial Assessment
2. Technical Assessment

Rapid Assessment Teams will carry out the Initial Assessment

**Table 1: Initial Assesment Report**

Table 2: Initial Assessment Report

INITIAL ASSESSMENT REPORT												
1	NATURE OF DISASTER:											
2	DATE OF OCCURRENCE:							TIME:				
3	DAMAGE AND LOSS ASTIMATES											
	Name of the Site (Village, Block, Tehsil)	Total Population Affected	People missing	People injured	Severity		Immediate needs	Houses Damaged			Action taken	
					H	L		L	M	H		
4	INFRASTRUCTURE DAMAGE											
	Name of the Site (Village, Block, Tehsil)	Household	Agriculture	Animals	Water source	Road and bridge	Power	Communication	Govt. Building	Others		
5	NEED ESTIMATES											
	Name of the Site (Village, Block Tehsil)	Medical Needs	Population requiring shelter		Clothes	Food	Water	Sanitation	Any Other			
6	ANY OTHER VITAL INFORMATION											
7	SPECIFY IMMEDIATE NEEDS: (With quantity)											
	Food											
	First aid											
	Machinery											
8	Possible Secondary Affects:											
9	NAME THE CONTACT PERSON:											
10	AGENCY/ADDRESS:											
	TELEPHONE NUMBER											
	DATE:						SIGNATURE:					
	FOR OFFICE PURPOSE:						REPORT NO.:					
	ACTION TAKEN:											

### C 1.3.5: District Search & rescue Team

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

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

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

Table 3: District Search & rescue Team

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

- |  |
|--|
| <ul style="list-style-type: none"> <li>• Driver (For Every vehicle)</li> <li>• Any person with the prior experience of the disaster (From Home Guard/Police Dept.)</li> <li>• A doctor or nurse or at least a person having first aid training</li> <li>• A Class IV Officer (Health Dept.)</li> </ul> |
|--|

<Source: Home Guards Office, Yavatmal>

### C 1.3.6: Medical response

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

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

**Table 4: Medical Response Team**

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

<Source: Health Dept., Yavatmal>

### **C 1.3.7: Logistic arrangements**

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

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

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

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

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

1. Supply Unit
2. Facilities Unit
3. Ground Support Unit

4. Communications Unit
5. Food Unit
6. Medical Unit

#### **C 1.3.8: Communication**

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

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

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

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

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

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

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

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

### C 1.3.11: Law & order

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

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

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

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

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

### C 1.3.13: Animal care

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



Husbandry and Dairy Department, Social Justice & Empowerment and the district has devised such measures at all levels.

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

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

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

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

The mandate of the Civil Defense (CD) and the Home Guards should be redefined to assign an effective role in the field of disaster management. They will be deployed for community preparedness and public awareness. A culture of voluntary reporting to duty stations in the event of any disaster should be promoted. A proper Civil Defense set up in every District would be a boon for disaster response as the neighborhood community is always the first responder in any disaster. The proposal to make Civil Defense District centric and be involved in disaster response has already been approved by the GoI. Its phase wise implementation has also begun. State Governments should ensure its operationalization in their respective districts.

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

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

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

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

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

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

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

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

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

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

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

### ***Functions of Health Desk***

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

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

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

### ***Functions of Operation Desk***

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

### **C 1.3.19: Media Management**

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

A strategy needs to be formulated for managing mass media such as newspapers and television in terms of dissemination of information at the wake of disasters. Clear guidelines would help the administration in avoiding communication of wrong information and creating panic. The nodal person will act as the Public relations officer and the person will coordinate with the local media to publicize the right information.

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

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

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

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

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

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

Rehabilitation and reconstruction comes under recovery phase immediately after relief and rescue operation of the disaster. This post disaster phase continues until the life of the affected people comes to normal. This phase mainly covers damage assessment, disposal of debris, disbursement of assistance for houses, formulation of assistance packages, monitoring and review, cases of non-starters, rejected cases, non-occupancy of houses, relocation, town planning and development plans, awareness and capacity building, housing insurance, grievance redressal and social rehabilitation etc.

#### *Post Disaster Reconstruction and Rehabilitation*

Post disaster reconstruction and rehabilitation should pay attention to the following activities for speedy recovery in disaster hit areas. The contribution of both governments as well as affected people is significant to deal with all the issues properly.

1. Damage assessment
2. Disposal of debris
3. Disbursement of assistance for houses
4. Formulation of assistance packages
5. Monitoring and review
6. Cases of non-starters, rejected cases, non-occupancy of houses
7. Relocation
8. Town planning and development plans
9. Reconstruction as Housing Replacement Policy
10. Awareness and capacity building
11. Housing insurance
12. Grievance redressal

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

**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.

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

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

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

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

### *C 1.4.3 Restoration of livelihoods*

Restoration of livelihoods in post disaster phase will be taken care of by the NGO's , Forest department (specifically in tribal areas, agriculture department by providing them with various incentives in form of free seeds and fertilizers. The relief fund can also be used constructively so that the lives of people are back to normal as soon as possible by floating various schemes, offering less interest on loans, etc

### *C 1.4.4 Psycho-social interventions*

Psycho social needs of the affected victims, including women and children will be taken care by special teams in the health department. The provision of trauma handling and social rehabilitation is very necessary from the point of view of restoration to normal life and should be specifically given priority in the after disaster recovery plan.

## *C 1.5 Cross cutting elements*

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

Communities are always the first responders and hence the initiatives pertaining to Community participation, promote local ownership, address local needs, and promote volunteerism, will be captured. This district level plan will be prepared, by incorporating the information, needs and local vulnerability, keeping in view the community participation at the sub district level.

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

Special needs of highly vulnerable groups including differently able persons, aged, children and women, will be taken care of, while addressing the preparedness and relief requirements of the disaster victims. A specific strategy for addressing the risk reduction needs of these vulnerable groups will be developed by every line department in the district. 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. Based on the available data and analytical research, list of climate induced anthropogenic events will be prepared, and the concerned issues will be addressed through adaptation strategies.

### **Standard Operating Procedures (and Checklists)**

#### **Standard Operating Procedures**

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

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

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

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

## Department of Revenue and Relief

### Non Disaster Time

- To appoint a nodal officer in the DEOC.
- Establish infrastructure for DEOC and maintain in state of readiness with all equipment in working order and all inventories updated.
- Train personnel on operations of DEOC.
- Ensure basic facilities for personnel who will work at district level for disaster response. To coordinate the preparedness functions of all line departments.
- Establish disaster management funding mechanisms to ensure adequate resources for preparedness work, and quick availability of resources for relief and rehabilitation when required.
- Ensure that all the Gram Panchayats, urban bodies and blocks prepare their disaster management plan.
- Coordinate with other state departments of state and centre for their disaster management plan at the district level and synchronise the same with the district disaster management plan.
- Help District Administrators with additional resources for disaster preparedness, if necessary. On annual basis report to the SEC of the preparedness activities.
- To ensure that funds are being allocated under the District Disaster Mitigation Fund.
- To ensure that structural and non-structural mitigation measures are taken by all its department offices.

### Warning Time

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

### During Disaster

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



**After Disaster**

- Organise initial and subsequent technical assessments of disaster affected areas and determine the extent of loss and damage and volume and nature of relief required.
- Keep the DDMA informed of the situation.
- Ensure supply of food, drinking water, medical supplies and other emergency items to the affected population. 🚒 Visit and coordinate the implement of various rehabilitation programmes.
- Coordinate the activities of NGOs in relief and rehabilitation programmes.
- Allocate funds for the repair, reconstruction of damaged infrastructure after considering their overall loss and damage

**Department of Home****Non Disaster Time**

- Vulnerability map of the block / Tehsil
- Resource Inventory, Capacity analysis.
- List of cut off areas with safe route map for communication.
- Formulation/ Updation of Disaster Plan for the District.

**Warning Time**

- List of storage facilities, dealers of food.
- Control room setup/assignment of control room duty.
- Pre-positioning of staff for site operation centres.
- Pre-arrangements to be made as per the demand of various departments.

**During Disaster**

Arrangement of alternative communication/generator sets etc.  
Arrangement of vehicles/boats of for evacuation.  
Dissemination of warning/coordination with District Control room.  
Monitor the working of various departments and make frequent visits to disaster struck areas to cross-check.

**After Disaster**

- Estimating the loss and damage and keep a record.
- Share experiences with all the departments.
- Continuous aid & proper arrangements till situation is under control.
- Monitor that the Repair & Restoration work is in progress as planned.
- Examine the performance reports of various departments.
- Examine the reports in order to make amendments and prepare a better strategy by taking inputs from all departments.

## Department of Health

### Non Disaster Time

- Check on the tasks done at Zila, Tehsil & Block level.
- Demarcate areas prone to epidemics and other similar disasters.
- Coordination with private health organizations
- Demarcate areas where medical camps can be set.
- Take regular inputs from Swastha Kendras about any unwanted/hostile conditions in terms of endemic/epidemic diseases.
- Awareness among people about diseases & how can they be prevented from spreading.
- Generators to be made available in all major hospitals.
- Prepare a list of inventories required in case of disaster(vehicles/equipments/medicines)

### Warning Time

- Construction & repair of IEC inventory.
- ORS & other important medicines to be procured as requirement.
- Training of employees and people regarding the basic treatment in case of flood/loo/minor bruises etc.
- Procure necessary medicines for cases that are otherwise rare like snake bite, chlorine for cleaning water etc.
- Prepare mobile units for sensitive & prone to be hit areas.
- Identification of sites in probable disaster areas for site operation areas

### During Disaster

- Send task force with necessary medicines to affected areas.
- Procure required medical equipments & medicines in case they fall short of it.
- Strong emphasis to be given to sensitive areas.
- Ensure that appropriate no of Staff/Doctors are present at the affected areas.
- Ensure cleanliness at the medical camps.
- Frequent checks on the Staff/Doctors on duty.Postmortem of dead bodies.

**After Disaster**

- Monitoring against spreading of diseases
- Continuous medical aid & proper arrangements till situation is under control
- Dead/Injured counseling
- Injured/handicapped to be treated and arrangement for healthy living facilities
- Provide healthy rehabilitation to disaster affected people.

**Department of Transport****Non Disaster Time**

- Designate one Liaison Officer of the department as the Focal Point and inform all concerned.
- Develop and implement disaster management plan for the department.
- Carry out survey of condition of all highway systems at state and district level.
- Identify and inventories transport vehicles available with the department and ensure that they are all in good working condition.
- Identify and inventories transport vehicles available with the private operators in the district.
- Allocate additional force to possible Disaster prone roads/routes identified
- Ensure that the force so allocated are aware of the possible disaster prone spots on these routes along with the possible type of disaster which may happen, as in the case of Petrol and Diesel transport vehicles leading to and from the IOC depot.
- Make departmental mitigation plan and ensure its implementation.
- Enforce the speed limits in the government vehicles regulated by the department and organize departmental awareness programs for the same

**Warning Time**

- Depute an officer at the DEOC.
- Ensure availability of fuel, recovery vehicles and equipment.
- Take steps for arrangement of vehicles for possible evacuation of people

**During Disaster**

- Establish contact with the DEOC.
- Take steps for transportation of relief personnel and material to affected areas.
- Take steps for movement of affected population to safer areas.
- Collate and disseminate information regarding operational and safe routes and alternate routes, fuel availability etc. to personnel operating in the field.
- Launch recovery missions for stranded vehicles.

**After Disaster**

- Assess damage to transportation infrastructure.
- Take steps to ensure speedy repair and restoration of transport links.

## Department of Public Works

### Non Disaster Time

- Designate one Liaison Officer in the department as the Disaster Preparedness Focal Point. The Chief Executive Engineer will be the liaison.
- Take precautionary steps for the protection of government property against possible loss and damage during disaster. Formulate guidelines for safe construction of public works.
- Prepare list, with specifications and position, of heavy construction equipment within the district.
- Organize periodic training of engineers and other construction personnel on disaster resistant construction technologies. Inspect all roads, road bridges by a bridge engineer, including underwater inspection of foundations and piers. A full check should be made on all concrete and steel works.
- Inspect all buildings and structures of the state government (including hospital buildings) by a senior engineer and identify structures which are endangered by the impending disaster.
- Emergency tool kits should be assembled for each division, and should include:
- The designation of routes strategic to evacuation and relief should be identified and marked, in close coordination with police and district control room.
- Prepare mitigation plan for the department and enforce the same.
- Advise the district disaster management authority on structural mitigation measures for the district. Repair, Maintenance and retrofitting of public infrastructure.
- Identify / prioritize mitigation activities of lifeline buildings and critical infrastructure and coordinate with the DDMA for its implementation.
- Place danger sign boards in the areas highly prone to specific type of disasters, such as road accidents etc.

### Warning Time

- Establish radio communications with DEOC.
- Depute one representative at the DEOC as per the directions from DDMA.
- Instruct all officials at construction sites to keep manpower and materials prepared for protection and repair of public works.
- Direct construction authorities and companies to preposition necessary workers and materials in or near areas likely to be affected by disaster.
- Vehicles should be inspected, fuel tanks filled and batteries and electrical wiring covered as necessary.
- Extra transport vehicles should be dispatched from district headquarters and stationed at safe strategic spots along routes likely to be affected.

- Heavy equipments, such as front-end loaders, should be moved to areas likely to be damaged and secured in a safe place.
- Establish a priority listing of roads which will be opened first. Among the most important are the roads to hospitals and main trunk routes.
- Give priority attention to urgent repair works that need to be undertaken in disaster affected areas.
- Work under construction should be secured with ropes, sandbags, and covered with tarpaulins if necessary.
- Emergency inspection by mechanical engineer of all plant and equipment in the district workshops.

### **During Disaster**

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

### Non Disaster Time

- Communication establishment with District and Block/ Tehsil Control Rooms and departmental offices within the district. An officer to be appointed as nodal officer.
- Activation of flood monitoring mechanism
- Methods/communication arrangement of alerting officers on various sites established. Check the preparation level of the department.
- Identify the areas that face the maximum flow of the major rivers and also make the locals aware about it. Identify the flood prone areas and demarcate them and also send a flood surveillance team to such areas. Mark the maximum safe level of water at all the embankments of rivers, reservoirs and dams.

### Warning Time

- Mechanism evolved for forewarning settlements in the down stream/evacuation/coordination with other dam authority. Identification of materials required for response operations
- Repairs/ under construction activity are well secured. Water level gauges marked. Inlet and outlet to tanks are cleared.
- Watch and ward of weak embankments & stock piling of repair materials at vulnerable points. Guarding of weak embankments
- All staff informed about the disasters, likely damages and effects.
- Procure necessary inventory for flood situations and keep it properly maintained.
- Inventories for the case of breakage of dam/embankments like sand sacks, rocks, etc need to be brought and checked well in advance.

### During Disaster

- Surveillance of flood hit/susceptible areas.
- Make announcements about the coming flood.
- Usage of advanced technology like GPS to calculate damage and the areas where maximum damage would occur.
- Safety of equipments of the Irrigation department to be maintained.
- Survey of major dams, embankments, bridges, channels etc is done. Emergency help services to areas where bank got broken.

### After Disaster

- Estimating the loss and damage and keep a record.

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

## Department of Agriculture

### Non Disaster Time

- Designate a focal point for disaster management within the department. Identify areas likely to be affected.
- Arrange for keeping stock of seeds, fertilizers and pesticides.
- A pests and disease monitoring system should be developed to ensure that a full picture of risks is maintained.
- Historical data to be gathered on the drought prone areas.

### Warning Time

- Provide timely warning to DEOC/DDMA about droughts.
  - Check available stocks of equipments and materials which are likely to be most needed after the disaster.
  - Stock agricultural equipments which may be required after a disaster
  - Determine what damage, pests or diseases may be expected, and what drugs and other insecticide items will be required, in addition to requirements of setting up extension teams for crop protection, and accordingly ensure that extra supplies and materials, be obtained quickly.
- Provide information to all concerned, about disasters, likely damages to crops and plantations, and information about ways to protect the same.
- All valuable equipments and instruments should be packed in protective coverings and stored in room the most damage- proof

### During Disaster

- Depute one liaison officer to the DEOC.
- Monitor damage to crops and identify steps for early recovery.
- Estimate the requirement of Seeds Fertilizers ,Pesticides, and Labour.
- Organize transport, storage and distribution of the above with adequate record keeping procedures.
- Ensure that adequate conditions through cleaning operations are maintained to avoid water-logging in flooded areas.

### After Disaster

- Quantify the loss and damage within the quickest possible time and finalize planning of agriculture rehabilitation. Ensure availability of adequate supply of seeds, seedlings, fertilizers, pesticides and agricultural implements.
- Assist farmers to re-establish their contacts with agriculture produce market and ensure that appropriate prices be offered to them.



## Department of Rural water and sanitation

### Non Disaster Time

- Provide clean drinking water in all areas rural/urban.
- Regular cleaning of nalas and prevent them from choking.
- Facilitate proper drainage in all areas to prevent diseases.

### Warning Time

- Proper arrangement of water tankers in good condition.
- Arrange for generators in advance.
- Make necessary arrangements of chlorine tablets for disaster prone/expected areas.
- Repair the platforms of tube wells if required and any other necessary repairs if required to avoid damage.

### During Disaster

- Cleaning water sources and continuous monitoring.
- Supply of clean water at hospitals and medical camps.
- Provide water through water tankers wherever required.
- Provide emergency help to clean and start tube wells & other water sources.
- Repair of damaged water sources to be carried out.
- Aware people about how to keep the hand pumps free of microbial infections.

### After Disaster

- Reinforcement & reconstruction of damaged sources and to keep records.
- Share experiences with the department.
- Training of employees.
- Formulate a checklist and re-prepare an emergency plan.

## Department of Veterinary

### Non Disaster Time

- Communication establishment with district and Block / Tehsil control rooms and departmental offices within the division.
- Listing of club houses, schools, community centers that can be used as shelter for animals.

### Warning Time

- Collect information from different areas and to act accordingly (Assignment of duties).
- Preparation of shelters in clubs, Schools, Halls etc, for animals and shifting them if necessary.
- Tagging the animals to avoid mix up and chaos.
- Getting proper stock of fodder for cattle.

### During Disaster

- Veterinary Hospital & Veterinary Dispensary at every important place (thickly cattle populated areas) headed by the Veterinary Assistant/ Surgeon.
- Regular collection of situation report of the risk and vulnerable areas from the officers assign for the purpose.
- Replacement of affected cattle in the shelters/camps, collection of fecal waste and cleaning etc.
- Feeding the animals.

### After Disaster

- 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.
- Getting the animals back to their owners and returning the stray ones to Nagar Maha Palika.
- Cleaning of temporary shelters.

## Department of Fire Services

### Non Disaster Time

- Strict enforcement of laws made for the security of Fire squad and proper proceedings to be done in case the law is violated.
- Regular check of equipments and procuring new ones as and when necessary.
- Demarcating Industries and areas susceptible to fire, events that are susceptible to fire etc.
- Aware people about their safety how to mitigate fire & its effects.
- Training of employees keeping their safety in mind.
- The blueprint of any building/house should not be accepted without proper Fire Safety measures.

### Warning Time

- Train people how to mitigate fire in early stages and foremost how to avoid it.
- Training of people on how to react in an emergency situation.
- Train staff and Raj Mistri's about latest Fire Fighting techniques

### During Disaster

- Find a safe way to save people trapped in fire in a house/ building/ aero plane/ train/ industry/ boiler etc.
- Get control over fire and minimize damage in case of an explosion.
- Control the situation in case of gas leak or leakage of some dangerous chemical.

### After Disaster

- Help other departments in search & rescue and estimation of damage.
- Share experiences with the department.
- Training of employees about new disasters (related to fire) that can occur.
- Formulate a checklist and re-prepare an emergency plan.

## Department of Telecommunication

### Non Disaster Time

- Communication establishment with District and Block /Tehsil Control Rooms and departmental offices within the division.
- An officer to be appointed as nodal officer.
- Continuous training of staff on the usage of new equipments that are procured.

### Warning Time

- Prepare an inventory of resources that would be required and procure the material based on estimation.
- Train staff on quick response to restore the Tele-connectivity of the district.

### During Disaster

- Standby arrangements for temporary electric supply or generators.
- Inspection and repair of poles etc.
- Identification of materials required for response operations.

### After Disaster

- Repair of damaged poles & lines etc as soon as possible to restore Tele-connectivity in the district.
- Share experiences with the department.
- Training of employees for better performance.

## Department of Food and civil Supplies

### Non Disaster Time

- Make go downs in disaster prone areas in advance.
- Collect necessary resources keeping the type and intensity of disasters that have previously occurred or are expected to occur.
- Make proper arrangements so that the stock in the go downs does not rot/spoil.

### Warning Time

- Make necessary arrangements according to the expected requirements and procure the material which the department is short of.
- Form teams and train them on how to ration resources.

### During Disaster

- Proper keeping of resources.
- Arrangements made for the distribution like vehicles through help from DDMA or other departments.
- Make an inventory according to the prevailing needs and the estimated time and hence procure the needful.

### After Disaster

- Use the equipments/resources from time to time so that they remain in working condition.
- Strict monitoring to keep a check on unauthorized using of resources and legal proceedings to be carried out if required.

## Home Guards

### Non Disaster Time

- Get details of the staff with their address and phone numbers
- Arrange for details of fuel arrangement for ships-mechanized launches at the time of emergency.
- Do's and Don'ts to be observed during emergencies and details of priorities should be given to the staff.
- Set up for evacuation of people from affected area of the river side area.
- Details of buildings, vehicles and equipments and list of contractors with vehicles and equipments should be procured.
- Prepare map showing rivers and the important routes
- Maintain communication equipments, telephone line, telex lines, megaphone and amplifiers with statistical data.
- Make a list of details of important telephone numbers of water supplies, control room, hospitals, drainage system, railway stations, bus depots, strategically important places, Army Air force Navy camps and other sensitive places, major industrial units, and other communication channels which can be used during emergency.
- Ensure the arrangement for transportation & evacuation of people from the affected areas.
- Prepare the action plan regarding repairs and alternative ways in case of disruption of transportation.
- Prepare plan showing the alternative routes and arrangement for transportation of goods etc; during emergencies.
- Inspect the garages and control point etc; which are damage prone.
- Make due arrangement for materials to restore the facilities in case the movement of the materials and goods on the ports are damaged.
- Prepare an action plan to avail on temporary bases, the technical personnel from the nearby district which is not affected. 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 and Development Department**

### **Non Disaster Time**

- Designate one Liaison Officer in the department and the district as the Disaster Management Focal Point.
- Develop a district disaster management plan for the department.
- Prepare maps showing population concentration and distribution of resources.
- Encourage disaster resistant technological practices in buildings and infrastructure.
- Encourage the people in earthquake prone areas to adopt earthquake resistant technologies.
- Report activities in periodic meetings of the district disaster management advisory committee and to DDMA. In coordination with PWD conduct regular training to the engineers of the department.
- Appoint one officer as focal point for mitigation activities
- On the basis of its developmental responsibility, liaise with other line departments and agencies for a coordinated mitigation approach.
- In coordination with the DDMA, conduct building assessments, identification of structural and non structural mitigation activities. Organize awareness programmes for BDO's, Panchayat secretaries and Gram Pradhans on structural and no-structural mitigation activities.

### **Warning Time**

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

### **During Disaster**

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



**After Disaster**

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

**Panchayat Raj****Non Disaster Time**

- Develop a disaster management plan for the department at district level & update it annually.
- Analyze the training needs of the department's personnel, which include its officials and elected representatives of Gram Panchayat, Panchayat samiti's and Zila Panchayat and organize trainings with the help of HIDM or other agencies.
- Conduct gram Panchayat level mock drills as part of preparedness.

**Warning Time**

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

**During Disaster**

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

**After Disaster**

- Ensure proper distribution of reconstruction schemes and monitoring of the same during Block development committee and Zila Parishad meetings

## **Forest Department**

### **Non Disaster Time**

- Prepare a department disaster management plan for the district.
- Depute one liaison officer for disaster management.
- Forest Fire prone areas should be identified and extra vigilance be ensured in such cases.
- Depute one liaison officer within the department, who will be in contact with the SEOC during disasters.
- Every year pre-fire season meetings should be organized to take the stock of the preparedness at Range level
- Prepare & maintain forest lines
- Organize community awareness programs
- Train the Gram Panchayat disaster management committees in forest fire prevention, protection and control, especially in those gram Panchayat which are located at the fringes of forest areas.
- Prepare mitigation plan for the department buildings and infrastructure.

### **Warning Time**

- A rapid response team will be established at division/sub-division/range level, which will have all tools and equipments readily available.
- Information regarding issue alerts to nearby population

### **During Disaster**

- Respond within the department as per the department disaster management plan.
- The liaison officer will coordinate with DEOC for information exchange & also for requirements of resources to & from DEOC

### **After Disaster**

- Damage assessment and sharing of reports with DEOC

## Electricity Department

### Non Disaster Time

- Prepare and manage inventory for emergency operations.
- Training of electricity department workers and make sure that proper norms are being followed at the time of installation of various electric units/instruments.
- Make various applicable and implementable schemes regarding the setup and examination of electrical units/instruments. Make people aware so as to minimize the damage to life/limb caused due to electricity.

### Warning Time

- Make provisions for providing electricity to rehabilitation centers in disaster hit areas & to cut off electric supply from risky areas in case of emergency.
- Follow proper regulations monitor continuously so that in case of wire breakage the current does not spread.
- Make proper arrangements and follow stringent norms such that in case of a natural calamity, (like earthquake, flood, cyclone etc) the high tension line does not get damaged.

### During Disaster – Response

- Cut off electricity immediately after receiving information about any disaster so as to minimize the damage caused. Survey the spot and estimate (also help in estimation) the damage caused.
- Be ready to provide electricity in areas where it is needed and can be provided safely.
- Make a plan about how to re supply electricity to important areas, site operation centers, Industries, etc.
- Examine and repair major poles, transformers & wires necessary for getting electricity supply back to areas needed. Minimize the damage caused to life by demarcating dangerous areas and cutting electricity in time.
- Restore the electricity facility in affected areas.

### After Disaster – Recovery and Rehabilitation

- Repair of damaged poles, transformers and conductors etc as soon as possible to restore electricity in the district.
- Surveillance for protection of people.
- Share experiences with the department.
- Formulate a checklist and re-prepare an emergency plan.

## Department of Education

### Non Disaster Time – Preparedness

- Identify one Liaison Officer in the department at district level as Disaster Management Focal Point. Develop district level disaster management plan for the department.
- In consultation with DDMA, state education directorate and state education board include disaster related subjects in the curricula in schools, and colleges.
- Arrange for training of teachers and students on Dm and school safety activities.
- Ensure that all schools and colleges develop their disaster management plans.
- Ensure that construction of all educational institutions in earthquake zones is earthquake resistant.
- Conduct regular mock drills in the educational institutes

### Non Disaster Time – Mitigation

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

### During Disaster – Response

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

### After Disaster – Recovery and Rehabilitation

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

## Department of Industrial Health and Safety

### Non Disaster Time –

- Designate one Liaison Officer in the Department as the Disaster Management Focal Point at district level.
- Ensure all possible steps for the security of manpower, implements, stock, installations/factories etc.
- Prepare listing and locations of industries and establishments for possible sourcing of relief material during disasters in the district.
- Ensure training on preparedness programmes to be adopted at different levels for all manpower employed in factories and establishments in disaster vulnerable areas.
- Issue disaster management guidelines to all the industries and ensure on-site and off-site plans for all industries. Prepare and disseminate guidelines for the labor security and safety.
- Prepare and implement rules and regulations for industrial safety and hazardous waste management.
- Support the State Pollution Control Board to enforce the law for preventing environmental disaster in chemical industry or industries emitting toxic gases and effluents.
- Issue detailed instructions to the employees about their duties and responsibilities in precautionary, disaster and post-disaster stages of normal disaster.
- Prepare and disseminate public awareness material related to chemical accidents.
- Prepare & implement department's mitigation plan for the district

### During Disaster

- Evacuation of the workers from the industrial area vicinity
- Request industries to provide emergency relief material such as food products, temporary shelter, medicines and medical equipment and search & rescue equipment.
- During any industrial disaster, respond as per the disaster management plan of the respective industry or as per the guidelines for the specific hazard involved in the event.

### After Disaster

- Take steps to plan for rehabilitation of industries adversely affected by disasters.

## Department of Urban Development

### Non Disaster Time

- Designate one Liaison Officer in the department at district level as the Disaster management Focal Point.
- Develop a disaster management plan for the department, including the identification of location of camps for different type of disasters, existing locations that can be used as shelters, inventories of agencies that can be used for tent establishment.
- To conduct regular training the staff on minimum standards for shelter, relief camps and tent structures.
- Prepare department's disaster management plan.
- Develop alternative arrangements for population living in structures that might be affected after the disaster.

### Mitigation

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

### Alert and Warning Stage

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

### Response

- Quick assessment of damaged areas and areas that can be used for relief camps for the displaced population
- Locate adequate relief camps based on survey of damage
- Clear areas for setting up relief camps
- Locate relief camps close to open traffic and transport links
- Set up relief camps and tents using innovative methods that save time
- Provide adequate and appropriate shelter to the entire population
- Coordinate with other ESFs in equipping shelter and relief sites with basic needs of communication and sanitation.
- Maintaining and providing clean water
- Procurement of clean drinking water.
- Coordinate with DEOC & ICP's for proper disposal of dead bodies in the urban areas.

### Recovery and rehabilitation

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

## NGO's

### Non Disaster Time

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

### Alert and Warning Stage

- Issue warning notice to all concerned including the preparedness programs
- Designate a liaison officer for maintaining link with the DEOC of the District.
- Keep the survey and relief team of head quarters on stand-by in readiness with required transport and equipment.
- Mobilise volunteers and issue instructions for sending them to potential disaster affected areas.
- Take part in evacuation programme of population with close cooperation of volunteers
- Coordinate with pre identified NGOs for possible joint operations.

### During Disaster :

- Ensure survey of loss and damage in affected areas and dispatch of relief teams from concerned Red Crescent Society Units.
- Assist the Province Government to determine loss, damage and needs related information.
- Give emergency assistance to disaster affected people especially in the following cases:
- Help in rescue and evacuation work, temporary shelter, first aid, food and clothing,
- Arrange for distribution of relief material received from Red Crescent Unit of areas not affected by disaster and from headquarters.
- Send request for requirement of relief and rehabilitation to the International Federation of Red Cross and Crescent Societies (IFRC) after informing about loss and damage due to disaster.

### After Disaster

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

## **Checklist of Various Departments**

### **Preparedness Checklist for the District Collector**

1. Prepare of the DDMP with the assistance of DDMO after setting up the DDMA for the district.
2. Set up District Control Room.
3. Under the DDMP, district level agencies would be responsible for directing field interventionsthrough various agencies right from the stage of warning to relief and rehabilitation.
4. At the disaster site, specific tasks to manage the disaster will be performed.
5. Collector will be assisted by SOC (site operation control).
6. Tahsildar will co-ordinate the activities at various camp sites and affected areas.
7. The site Operations Centre will report to the District Control Room.
8. The Collector will co-ordinate all the field responses which include, setting up Transit Camps, ReliefCamps and Cattle Camps.

### **Preparedness Checklist for the Police Department**

1. The department is familiar with the disaster response plan and disaster response procedures are clearlydefined.
2. Adequate warning mechanisms established for evacuation.
3. An Officer has been designated as Nodal Officer for Disaster Management.
4. Sources of materials required for response operations have been identified.
5. Orientation and training for disaster response plan and procedures undertaken.
6. Special skills required during emergency operations imparted to the officials and the staff.
7. Reviewed and updated the precautionary measures and procedures, the precautions to be taken toprotect equipment, the post-disaster procedures to be followed

### **Preparedness Checklist for the Health Department**

1. The department is familiar with the disaster response plan and disaster response procedures are clearlydefined.
2. Orientation and training for disaster response plan and procedures undertaken.
3. Special skills required during emergency operations imparted to the officials and the staff.
4. Reviewed and updated the precautionary measures and procedures, the precautions to be taken toprotect equipment, the post-disaster procedures to be followed.
5. A hospital plan for the facilities, equipment and staff of that particular hospital based on “The Guideto Health Management in Disasters” has been developed.
6. Hospital staff is aware of which hospital rooms / buildings are damage proof.
7. All the staff of the hospital has been informed about the possible disasters in the district, likelydamages and effects, and information about ways to protect life, equipment and property.
8. An area of hospital identified for receiving large number for casualties.
9. Emergency admission procedures with adequate record keeping developed.
10. Field staff oriented about DDMP, standards of services, and procedures for tagging.
11. An Officer has been designated as Nodal Officer for Disaster Management.
12. Sources of materials required for response operations have been identified.



### **Preparedness Checklist for M.S.E.B**

1. The department is familiar with the disaster response plan and disaster response procedures are clearly defined.
2. Orientation and training for disaster response plan and procedures undertaken.
3. Special skills required during emergency operations imparted to the officials and the staff.
4. Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.
5. An Officer has been designated as Nodal Officer for Disaster Management.
6. Sources of materials required for response operations have been identified.

### **Preparedness Checklist for Water Supply Department**

1. The department is familiar with the disaster response plan and disaster response procedures are clearly defined.
2. Orientation and training for disaster response plan and procedures undertaken.
3. Special skills required during emergency operations imparted to the officials and the staff.
4. Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.
5. Adequate warning mechanisms for informing people to store an emergency supply of water have been developed.
6. Procedures established for the emergency distribution of water if existing supply is disrupted.
7. An Officer has been designated as Nodal Officer for Disaster Management.
8. Sources of materials required for response operations have been identified.

### **Preparedness Checklist for Irrigation Department**

1. The department is familiar with the disaster response plan and disaster response procedures are clearly defined.
2. Orientation and training for disaster response plan and procedures undertaken.
3. Special skills required during emergency operations imparted to the officials and the staff.
4. Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.
5. Flood monitoring mechanisms can be activated in all flood prone areas
6. All staff is well aware of the precautions to be taken to protect their lives and personal property.
7. Each technical assistant has instructions and knows operating procedures for disaster conditions.
8. Methods of monitoring and impounding the levels in the tanks evolved.
9. Methods of alerting officers on other dam sites and the district control room, established.
10. Mechanisms evolved for forewarning settlements in the downstream, evacuation, coordination with other dam authorities.
11. An Officer has been designated as Nodal Officer for Disaster Management.
12. Sources of materials required for response operations have been identified.

### **Preparedness Checklist for Telephone Department**

1. The department is familiar with the disaster response plan and disaster response procedures are clearly defined.
2. Orientation and training for disaster response plan and procedures undertaken.
3. Special skills required during emergency operations imparted to the officials and the staff.
4. Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.
5. An Officer has been designated as Nodal Officer for Disaster Management.
6. Sources of materials required for response operations have been identified.

### **Preparedness Checklist for PWD**

1. The department is familiar with the disaster response plan and disaster response procedures are clearly defined.
2. Orientation and training for disaster response plan and procedures undertaken.
3. Special skills required during emergency operations imparted to the officials and the staff.
4. Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.
5. All officers are familiar with pre-disaster precautions and post-disaster procedures for road clearing and for defining safe evacuation routes where necessary.
6. An Officer has been designated as Nodal Officer for Disaster Management.
7. Sources of materials required for response operations have been identified.

### **Preparedness Checklist for Agriculture Department**

1. The department is familiar with the disaster response plan and disaster response procedures are clearly defined.
2. Orientation and training for disaster response plan and procedures undertaken.
3. Special skills required during emergency operations imparted to the officials and the staff.
4. Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.
5. Information provided to all concerned officers about the disasters, likely damages to crops and plantations, and information about ways to protect the same.
6. The NGOs and the other relief organizations are informed about the resources of the department.
7. An Officer has been designated as Nodal Officer for Disaster Management.
8. Sources of materials required for response operations have been identified.

### **Preparedness Checklist for Animal Husbandry Department**

1. The department is familiar with the disaster response plan and disaster response procedures are clearly defined.
2. Orientation and training for disaster response plan and procedures undertaken.
3. Special skills required during emergency operations imparted to the officials and the staff.
4. Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.
5. Hospital staff is aware of which hospital rooms / buildings are damage-proof.
6. All the staff of the veterinary hospitals and centres have been informed about the possible disasters, likely damages and effects, and information about the ways to protect life, equipment and property.

7. An area of the hospital identified for receiving large number of livestock.
8. Emergency admission procedures with adequate record keeping developed.
9. An Officer has been designated as Nodal Officer for Disaster Management.
10. Sources of materials required for response operations have been identified.

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

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

## **C 3 Financial Provisions for Disaster Management**

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

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

### *Establishment of funds by the State Government*

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

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

### *Emergency procurement and accounting*

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

- a) it may authorize the concerned department or authority to make the emergency procurement and in such case, the standard procedure requiring inviting of tenders shall be deemed to be waived;
- b) a certificate about utilization of provisions or materials by the controlling officer authorized by the National Authority, State Authority or District Authority, as the case may be, shall be deemed to be a valid document or voucher for the purpose of accounting of emergency, procurement of such provisions or materials.

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

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

1. Private and Public Sectors
2. Governmental Organizations and Community Based Organisations
3. Religious Institutions
4. Academic Institutions
5. International Humanitarian organizations

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

**Public Sector:** *The Indian Railways* has a strong Disaster Management System in place which can be looked upon as a model for the accident prevention in the district.

Also, it is recommended that coordination with the Railway Department for the District Disaster management plan will give it a more holistic view and a lead to better implementation of the plan.

**Private Sectors:** Media along with the Public Relation officer who is an important part of the information desk in ICS is recommended to play an important role during time of disasters to provide important information as well as stop rumors.

Hospitals in private sectors can act as essential stakeholders due to their infrastructure and speciality.

#### *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. The list of other working NGO's are given in the annexure.

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

The responsibilities of all the key stakeholders include:

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 centers
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 – [Standard Operating Procedures / Protocols]**

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

This will be ensured at the disaster management plan formation stage itself by comparing the resourceinventories and the vulnerability of the area.

The DDMA"s of adjoining districts or of all the districts in one subdivision should later integrate theirdisaster plans so as to have a joint approach when dealing with disasters

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

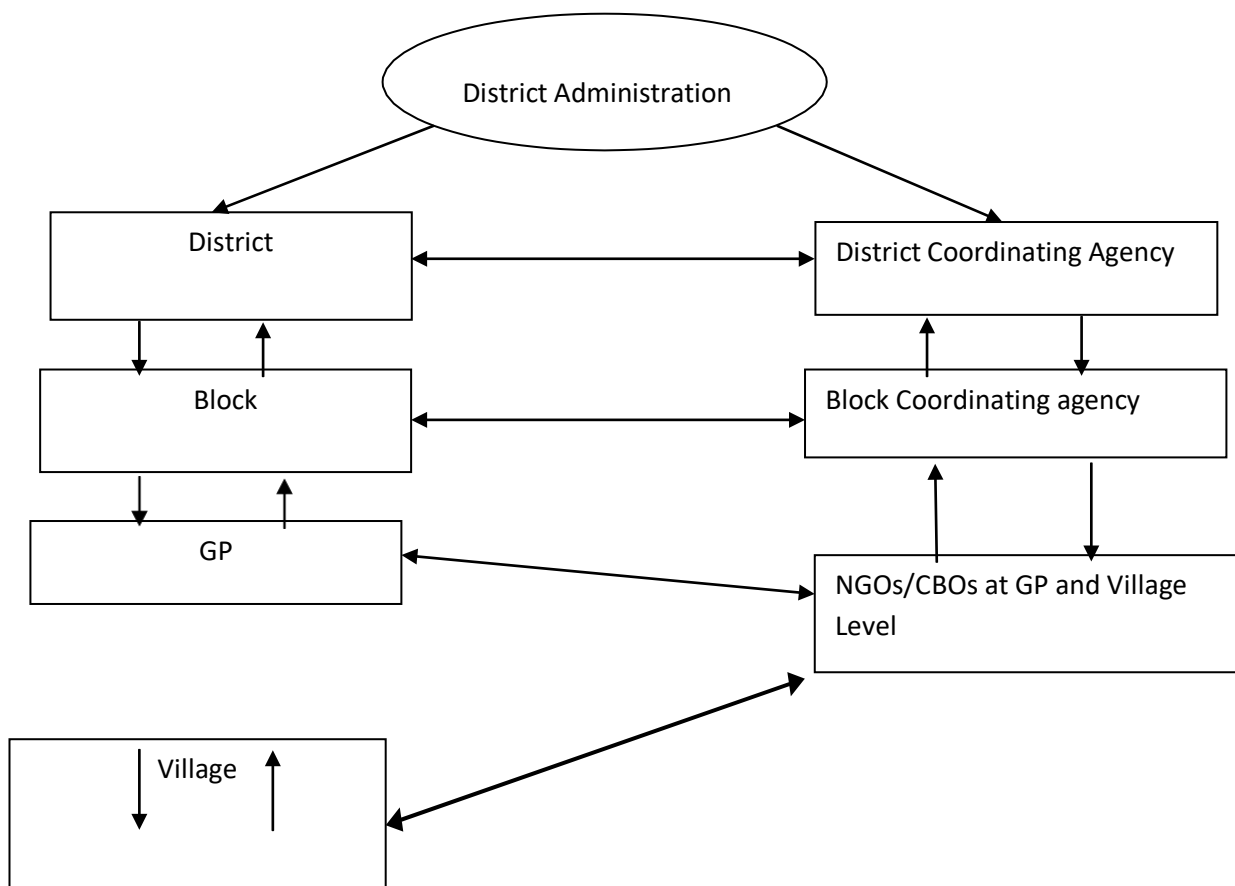
The recommended "integrated disaster management plan" follows „Top to Bottom“ approach i.e thecommunities are the first one to response.

Then there are disaster management committees on gram panchayat level and block level upto thedistrict level.

On each stage, the nodal contact people are appointed who will ensure the adequacy of resources indealing with disasters.

The roles and responsibilities of various officers are clearly mentioned upon activation of the ICS inthe Response planning section.

Intra District Flow Diagram is given below:



## C 7 Dissemination of DM Plan

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

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

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

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

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

- newspapers, TV
- local cable networks
- radio
- publicity material

Schools, colleges and other public institutions should be specifically targeted.

### *C 7.1 Plan Evaluation*

The purpose of evaluation of DDMP is to determine

1. the adequacy of resources
2. co-ordination between various agencies
3. community participation
4. partnership with NGOs

The plan will be updated when shortcomings are observed in

1. Organizational structures
2. Technological changes render information obsolete
3. Response mechanism following reports on drills or exercises
4. Assignments of state agencies

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 DDMP is a “living 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

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. 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.

### List of NGO's

Sr. No	Name	Address	Contact No.
1.	Rotary Club	Pusad	9422867950
2	Medical Association	Pusad	07233248068
3	Deorao Patil chondhikar Trust	Pusad	07233249291
4	Sahyog Foundation	Ner	9405685050
5	Chintamani Ganesh Mandal	Ner	8698980100
6	Sai Prasarak Mandal	Ner	9970336231
7	Indian Redcross Society	wani	-
8	Balaji shikshan sanstha	wani	9221024549
9	Vyapari Assoviation	wani	9422161616
10	Rajsthani Mahila Mandal	wani	-
11	TDRF	Yavatmal	9822894644
12	Savitri Jyotiba Fule	Yavatmal	7741929760



## C 8.2 Resources

### **1. India Disaster Resource Network (IDRN) :**

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

The Ministry of Home Affairs, Government of India has developed a web-based database of resource named India Disaster Resource Network (IDRN). This database contains information about equipments (such as boats, bulldozers, chain saw, etc), manpower (divers, swimmers, etc) and critical supplies (oxygen cylinder, fire fighting foams, etc) required during response.

It can be accessed by anyone and its direct link is

<http://idrn.gov.in/publicaccess/countryquerypublic.asp>. One can also access it by clicking on the Quick link to inventory of disaster response resources on the IDRN site (idrn.gov.in)

## Contact List

### Contro Room

Sr.No	Department	Tel.No
1	District Control Room	07232-240720/240844
2	Divisional Contro Room	0721-2661364/2662782
3	Mantralaya Control Room	022-22027990
4	NDRF Pune	0211-4232509
5	Fire Department Yavatmal	07232-244265
6	Police Contro Room Yavatmal	07232-256700
7	Electricity Department	7875763099
8	Arunawati Project	Shri.Chavhan-8830880160
9	Adan Project	Shri.Rathod-9970697298
10	Pus Project Tq.Pusad	Shri-Bhagat-9423424207
11	Lower Wardha Project Dist.Wardha	Shri.Butle – 9561476134
12	Adharpus Project.Tq.Mahagaon	Shri-Bhagat-9423424207
13	Bembla Project Tq.Babhulgaon	Shri.Tiwati-9689064667
14	Goki Project Tq.Darwha	Shri-Borule-9820237543
15	Saykheda Project Tq.Kelapur	Shri.Khandare-7507709786
16	Waghadi Prohct Tq.Ghatanji	Shri-Borule-9820237543
17	Borgaon Project Tq.Yavatmal	Shri.Dagwar-9604033767
18	Navargaon Project Tq.Maregaon	Shri.Chintawar-9665191276
19	Uppar Painganga Project .Dist.Nanded	02462-260820

## Contact Number of District Collector, Deputy Collector, SDO, Tahsildar

Sr.No	Name of Officer	Designation	Contact.No
1	Shri.Amol Yedge	District Collector	9503731693
2	Shri.Pramodsibgh Dube	Addi.Collector	9822593023
3	Smt.SangitaRathod	Res.Deputy Collector	9421000017
4	Dr.Santosh Doifole	Tahsildar (Gn)	9260619560
5	Shri.Sudhakar Pawar	District Supply Officer	8237415085
6	Shri.Bibe	District Reh.Officer	9970412595
7	Shri.Gohad	Ast.Commi.Nagarpalika	9028055505
8	Shri.Satish Mun	District Disaster Managment Officer	8308754473
9	Shri.Anirudh Bakshi	SDO Yavatmal	7507407686
10	Shri.Sudhir Patil	SDO Darwha	9975462219
11	Smt.Yashni Nagarajan	SDO Kelapur	9958493799
12	Shri.Kartikeyan	SDO Pusad	8610480624
13	Shri.Nitinkumar Hingole	SDO Wani	9404805317
14	Shri.Sunil Chavhan	SDO Ralegaon	7798538829
15	Shri.Venkat Rathod	SDO Umrkhed	7719924861
1	Dr.Yogesh Deshamukh	Tahsildar Yavatmal	9890566240
2	Shri.Sunil Chavhan	Tahsildar Kalamb	7798538829
3	Smt.Mira Pagore	Tahsildar Babhulgaon	8698221884
4	Shri.P.S.Bhosale	Tahsildar Arni	9767113684
5	Shri.Kumare	Tahsildar Darwha	9822216169
6	Shri.Sudhakar Rathod	Tahsildar Digras	9404844960
7	Shri.Shivaji Magar	Tahsildar Ner	9637376456
8	Shri.Kalbande	Tahsildar Pusad	9689955450
9	Shri.Anand Deulgaokar	Tahsildar Umarkhed	9028516205
10	Shri.Rane	Tahsildar Mahagaon	9373991675
11	Shri.Ingale	Tahsildar Kelapur	9860822474
12	Shri.Shelwatkar	Tahsildar Ghatanji	
13	Shri. Bhoite	Tahsildar Ralegaon	9359544014

14	Shri.Nikhil Dhuldahar	Tahsildar Wani	9356809418
15	Shri.Akshay Rasane	Tahsildar Maregaon	9823449044
16	Shri.Ramgunde	Tahsildar Zari	7773902101

### Police Department

अ.क्र.	नांव	Phone Number		
		Designation	Office	Mobile
1	Shri.Pawan Bansod	District Supri.of Police	256702	7420933943
2	Shri.Piyush Jagtap	Addi.Supri.of Police	256703	9404953147
3	Shri.Kujalwar	SDPO Yavatmal	256712	9823754555
4	Shri. Masaram	Police Inspector DSB	256707	9527218334
5	Shri.Shende	Police Hedquarter, Yavatmal	256706	8554853978
6	Shri .Pant	Thanedar , City police Station Yavatmal	242500	9422117804
7	Shri.Tunkalwar	Thanedar, Police Station Rural Ytl.	242960	8975753516
8	Shri. Milkhelkar	SDPO Darwha	07232-256714	7767088843
9	Shri.Pankaj Atulkar	SDPO Pusad	07233-246110	8446786090
10	Shri.Pradip Patil	SDPO PKD	07235-256728	9922900307
11	Shri.Ganesh Kendri	SDPO Wani	07239-228989	9823518257
12	Shri.Pradip Pasawi	SDPO Umarkhed	07231-237123	8275016303

### Electricity Department

1	Shri. Raut	Supri. Engineer, MSEB Yavatmal	7875763555
2	Shri.Khangar	Excutive Engineer, MSEB Yavatmal	7875763024
3	Shri.Katare	Excutive Engineer, MSEB PKD	7875763088
4	Shri.Sanjay Aade	Excutive Engineer, MSEB Pusad	7875763023
5	MSEB Control Room		7875763099

### M.S.R.T.C

1	Divisional Workshop Yavatmal	07232	245139
2	Divisional Transport officer, Yavatmal	07232	245142
3	Divisional Labour officer, Yavatmal	07232	242636
4	Divisional Storage office Yavatmal	07232	9763341801
5	Bus stand Inquiry office	07232	244787
6	S.T Bus Stand Control Room	07232	245132

### PWD Department

1	Shri.Dhotre	Supri.Engineer, PWD Yavatmal	242206/246043	9764672728
2	Shri.Mukade	Excutive Enginner, PWD Yavatmal	243228	8149204125

### Irragation Department

1	Shri.Sunil Chodhari	,Supri.EngineerYavatmal Patbandhare Mandal	242135	9923772373
2	Shri.Rajbhoj	,Supri.EngineerSinchan Mandal Ytl	-	7709017865

### Medical Department

1	Dr.Jatkar	Dean of Medical College	242456/ 240843	9822363140
2	Dr.Rathod	Civil SurgeonYavataml	243162	9422353091
3	Dr.Manoj Tagadpalliwar	Res.Civil Surgeon	242245	9422866921
4	Dr. P.S.Chavhan	District Health Officer	242298	9422169286