



DISTRICT DISASTER MANAGEMENT PLAN NANDED

UP DATED VERSION 2022-23

DISASTER MANAGEMENT PROGRAMME

GOVERNMENT OF INDIA

GOVERNMENT OF MAHARASHTRA



**District Disaster Management Authority
Collector Office, Nanded-431601**

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Abbreviations Used in the Document

AIR	All India Radio
BIS	Bureau of Indian Standards
BSNL	Bharat Sanchar Nigam Limited
CEO	Chief Executive Officer
CISF	Central Industrial Security Force
CRPF	Central Reserve Police Force
DCR	District Control Room
DD	Doordarshan
DDMA	District Disaster Management Authority
DDMC	District Disaster Management Committee
DDMP	District Disaster Management Plan
DHO	District Health Officer
DICT	District level Incident Command Team
DMT	Disaster Management Team
DOT	Department of Telecommunication
DP	Diversification of Power
DRMP	District Risk Management Programme
EOC	Emergency Operation Centre
FCI	Food Corporation of India
GOI	Government of India
GoM	Government of Maharashtra
IAP	Incident Action Plan
ICP	Incident Command Post
ICS	Incident Command System
ICT	Incident Command Team
IDRN	India disaster Response network
IMD	Indian Meteorological Department
ITI	Industrial Training Institute
MERI	Maharashtra Engineering Research Institute
MIDC	Maharashtra Industrial Development Corporation
MPCB	Maharashtra Pollution Control Board
MSEDC	Maharashtra State Electricity Development Corporation
MSRTC	Maharashtra State Road Transport Corporation
MTDC	Maharashtra Tourism Development Corporation
MWSSB	Maharashtra Water Supply and Sewerage Board
NABARD	National Agricultural Bank for Rural Development
NCC	National Cadet Corps
NDRF	National Disaster Response Force

NGO	Non Governmental Organization
NIDM	National Institute of Disaster Management
NSS	National Social Service
PHC	Public Health Centre
PPPP	Public Private Partnership Programme
PWD	Public Work Department
RCC	Reinforced Cement Concrete
RDC	Resident Deputy Collector
RTO	Regional Transport Officer
SDO	Sub Divisional Officer
SOC	Site Operations Centre
SOP	Standard Operating Procedure
SP	Superintendent of Police
SRP	State Reserve Police
ST	State Transport
TDMP	Taluka Disaster Management Plan
UNDP	United Nation Development Programme
YASHADA	Yashwantrao Chavan Academy of Development Administration
ZP	Zilla Parish

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INTRODUCTION

1.1 Background

Natural Disasters are known to mankind before it evolved and will happen afterwards also. It reminds us of a meteorite that had hit the earth which eventually wiped off the entire dinosaurs, million years ago. Today, also we witness them in the form of Earthquake, Floods, Landslides, Cyclones, Wildfires, Avalanches, Cloudburst, Heat and cold waves and the tsunamis (giant tidal waves). Many countries have suffered loss of human lives and damage to property; their economic losses have been in million dollars. Thus, disasters not only kill people, but also have tremendous effect on economy. It enhances the poverty of an already poor country and makes it impoverished. In disasters, it is the poor and under privileged, who are the worst affected, they tend to lose their shelter, livelihood and become more impoverished.

1.2 Need for Disaster management

Data on disaster occurrence, its effect upon people and its cost to countries, are primary inputs to analyze the temporal and geographical trends in disaster impact. Disaster losses, provide the basis for identifying where, and to what extent, the potentially negative outcomes embedded in the concept of risk is realized. They help to understand where, and to whom, disaster risk becomes impact. They also provide the basis for risk assessment processes, a departing point for the application of disaster reduction measures. – UN ISDR Development cannot be sustainable unless disaster mitigation is built into development process. Investments in mitigation are more cost effective than expenditure on relief and rehabilitation. Prevention and mitigation contribute to lasting improvement in safety and are essential to integrated disaster management. Disaster response alone is not sufficient as it yields only temporary results at very high cost. So emphasis must be on Disaster prevention, mitigation and preparedness, which help in achieving objectivity of vulnerability reduction.

1.3 What is a Disaster?

“A **Disaster** is a sudden, calamitous event that causes serious disruption of the functioning of a community or a society involving widespread human material economic or environmental losses and impacts which exceeds the ability of the affected community or society to cope using its own resources.”

---- **UN International Strategy for Disaster Reduction,
(UNISDR)**

A Disaster is a "Situation or event, which overwhelms local capacity, necessitating a request to national or international level for external assistance; an unforeseen and often sudden event that causes great damage, destruction and human suffering".

-----**Centre for Research of Epidemiology of Disaster (CRED),
Belgium**

1.3.1 Hazard: is a natural physical event which has a potential to convert into a disaster, causing widespread injury or deaths and damage to public or private property or the environment.

1.3.2 Vulnerability: means inability to resist a hazard or respond when a disaster has occurred. It depends on several factors such as people's age and state of health, local environmental and sanitary conditions, as well as on the quality and state of local buildings and their location with respect to any hazards. --- UNISDR

1.3.3 Disaster Preparedness

Pre-disaster activities that are undertaken within the context of disaster risk management and are based on sound risk analysis. This includes the development/enhancement of an overall preparedness strategy, policy, institutional structure, warning and forecasting capabilities, and plans that define measures geared to helping at-risk communities safeguard their lives and assets by being alert to hazards and taking appropriate action in the face of an imminent threat or an actual disaster.

--- Office of Commissioner for Humanitarian Affairs (OCHA)

1.3.4 Disaster risk reduction (DRR), attempts to look back at the root causes of risks and vulnerabilities in a [society](#), state, town or even a single household. Factors can be broad or specific, depending on the scope of risk and vulnerability assessments.

1.3.5 Natural hazard: Natural process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

The **Natural disasters** were split into 3 specific groups:

1. **Hydro-meteorological disasters:** Floods and wave surges, storms, droughts and related disasters (extreme temperatures and forest/scrub fires), and landslides & avalanches;
2. **Geophysical disasters:** Earthquakes & tsunamis and volcanic eruptions;
3. **Biological disasters:** Epidemics and insect infestations.

1.3.6 Man made disasters

Disasters due to human activities could be unintentional, but lack of safety measures and abiding by certain safety rules and regulations, . Most of these (barring coordinated terrorist activities) are due to certain accidents.

Terrorism, Bomb blast, Wars, Riots, technology related, Accidents (Road, Ship, Air), Chemical and Nuclear, Industrial accidents etc.

1.4 Worst Disasters in the world

1. **Bam earthquake, Iran**, Dec 2003, magnitude 6.6 and 26,271 dead, 30,000 injured
2. **South Asian tsunami**, Dec 2004, magnitude 9.3 and 230,000 dead in 14 nations, 125000 injured, 45,752 missing and 1.69 million homeless
3. **Sichuan earthquake, China**, May 2008, magnitude – 7 and 8 69,195 dead, 18,392 homeless and 374,643 injured and 115 billion dollars loss
4. **Haiti earthquake**, Jan 2010, magnitude 7 and 150,000 dead, 300,000 injured and 100 million dollars loss
5. **Pakistan floods**, Jul 2010 --- 2,000 dead, 20 million affected and loss of 43 billion dollars
6. **Japan tsunami**, Mar 2011, magnitude 9 and 15,188 dead, 5,337 injured, 8,742 missing and loss of 300 billion dollars
7. **Uttarakhand India flash flood** 5000 dead, 6543 injured,

1.5 The Indian scenario

India has been vulnerable to many disasters in the past both natural and man made. Nearly, 60% of the landmass is prone to earthquake, 8% for cyclones (east and west coast) and 68% for drought. Some of them are mentioned below along with number of people dead and the economic losses incurred.

A. Natural disasters in India

1. **Latur earthquake**, Sept. 1993, magnitude 6.4 and 20,000 dead and 30,000 injured
2. **Orissa super cyclone**, Oct 1999, 15,000 dead 275,000 homes destroyed and 8,119 injured and 4.9 billion dollars loss
3. **Gujarat earthquake**, Jan 2001, magnitude 7.7 and 20,000 dead and 167,000 injured and 400,000 homes destroyed and 5.5 billion dollars loss
4. **South Asian Tsunami**, Dec 2004, magnitude 9.3 and 12,405 dead, 5,640 missing and 647,599 homeless.
5. **Cyclone Aila**, 25 May 2009, 325 dead and 8,000 missing, one million homeless and loss of 552.6 million dollars and 7,000 infected with diarrhea due to floods
6. **Uttarakhand Cloud Burst and Flash Flood** 16 June 2013 casualty reported 5000, missing 3000, loss of personal and public sector 4.8 Billion dollars

B. Man made disasters in India

1. **Bhopal gas tragedy**, Dec1984 and 3,787 dead and 558,125 affected with disabling injuries.
2. **Gujarat riots**, Mar 2002
3. **Serial bomb blast**, Mumbai, Mar1993
4. **Bomb blast in suburban trains**, Mumbai, Jul 2006
5. **Terrorist attack**, Mumbai, Nov 2008
6. **Air plane accident**, Mangalore, May 2010

7. Malin Dist

Thus, we can notice that most of the disasters have occurred within the last two decades, and the frequency, intensity and magnitude of the disasters are ever increasing.

1.6 National disaster management (NDMA) Act, 2005

The National emergency management authority was constituted in Aug 1999, which submitted a report in 2001, to have separate department for Disaster management in India Government enacted the National disaster management act on 23rd Dec 2005, which lead to the creation of National disaster management authority (NDMA).

Nodal ministries responsible for various categories of disasters

Earthquakes and	MHA/Ministry of Earth
1. Tsunami	Sciences/IMD
	MHA/Ministry of Water
2. Floods	Resources/CWC
	MHA/Ministry of Earth
3. Cyclones	Sciences/IMD
4. Drought	Ministry of Agriculture
	Ministry of Health and Family
5. Biological Disasters	Welfare
6. Chemical Disasters	Ministry of Environment & Forests
7. Nuclear Disasters	Department of Atomic Energy
8. Air Accidents	Ministry of Civil Aviation
9. Railway Accidents	Ministry of Railways
10. Terrorism, bomblast, Riots	Ministry of Home Affairs

Nanded at a Glance : History

Nanded is one of the historical places in Marathwada region of Maharashtra State. It is situated on the north bank of Godavari River. It is famous for Sikh Gurudwaras. Nanded is a town of great antiquity. It is said that during the Puranic days, Pandavas travelled through Nanded district. Nandas ruled over Nanded through generations.

The mention of Nanded is found in the Lilacharitra, a treatise written by Mahimbhatta. It gives the description of the idol of Narasimha in the town. Nanded was formerly known as "Nanditat" which is confirmed by the copper plate found at Vasim. Nanded District and the adjoining areas were ruled over by the Andhrabhrtyas or Satvahanas during the First Century A.D. During the fourth century A.D. Kandhar was the capital of the King Sogadev and at Nanded was ruled by the king Nanddeva of the Chalukya dynasty. That the Rashtrakutas were ruling at Kandhar is established by the inscription at Krishnadev alias Khandardev found at Khandar. Another inscription at Ardhapur shows that some dynasty of the Rashtrakutas was also ruling over Degloor. Hottal, a place in Nanded District was the capital of the Chalukyas; Kakatiyas followed by the Yadavas of Devagiri were the last Hindu dynasties to have ruled of this part. During the very first invasion by Muhammedans this territory subjugated to them and after a few years it became a part of the fief of Malik kafur, the general of Alauddin Khilji.

With the advent of the Bahamanis, the southern country or the Deccan was divided into four parts or the subhas and Nanded was included in the Subha of Telangana. The famous Vazir or the Prime Minister of the Bahamanis Mahmud Gavan divided the Kingdom into subhas with Nanded forming part of Mahur Balaghat. Resided at Nanded and Kandhar for many days and the Vazirabad part of Nanded town was established, while he was residing at Nanded and Kandhar.

When Aurangzeb was appointed the Subhedar of the Deccan. Bidar was one of the Subha. The Subha of Bidar was divided into six sarkars and 76 mahals and Nanded was one of the Sarkars of that subha.

In 1708, the year following the death of Aurangzeb, his son accompanied by Guru Govind Singh the tenth spiritual leader of the Sikhs came over to Nanded, as his permanent abode. It was he who preached amongst the sikhs that there need not be any spiritual leader for them and they should take Granthsaheb as their leader. A monument has been constructed at place where he breathed his last. A Gurudwara has also been constructed there and is known as Shri Hazur Abchalnagar Sachkhand Gurudwara.

It became the part of the Hyderabad Kingdom in 1725 when the Nizam permanently opted for the Deccan and continued to be so till 1947. With India getting freedom and the consequent police action against the Hyderabad State, the district forming part of the Marathwada region of the Hyderabad state became part of the bilingual Bombay State and consequent upon the creation of Maharashtra, the district continues to form part of the state of Maharashtra.

Nanded has a great cultural heritage. It is the place of birth of the Saint poets like Vishnupant Sesa, Raguhunath Sesa and Vaman Pandit besides being a Centre for learning Sanskrit.

1.8 Importance of Multi-hazard Management Plan

Disaster Management has comprehensive cycle that includes preparedness, response, recovery and reduction phases. Based on this cycle, the response part is addressed with Incident Command System, **(ICS)** a best management tool, and linked with resource inventory connected to website India Disaster Resource Network, www.idrn.gov.in (**IDRN**). In fact, ICS and IDRN make it more effective.

Above all, this plan will be a true guide to a disaster manager at district level, since it provides all necessary information required for timely and effective response to any unexpected disaster. Being a border sharing district with Andhra Pradesh, Telangana and Karnataka, Nanded is largely prone to cyclones, earthquake and flash floods. Considering this situation, the District Disaster Management Plan (**DDMP**) has been developed and covered all relevant information related to human resources, equipments and critical supplies. It is apparent that this district is prone to natural disasters such as floods, cyclones, landslides etc. Also, it cannot ignore the man-made disasters. So the district plan is designed as per the present need and the major strategies to respond to any unexpected situation have also been considered.

In the multi-hazard district plan, all the disasters will be handled properly following the given response mechanism, like ICS, use of resource inventory, Standard Operating Procedures (**SOP**), keeping coordination with the line agencies and proper community based awareness activities. SOP of line departments is designed to make them alert. It highlights their role and responsibilities during, after and normal time of the disaster.

1.8.1 The main features of multi-hazard plan are: -

1. It gives importance to all the disasters equally and helps to mitigate the situation beforehand.
2. All the departments are assigned with their proper role and responsibilities, which are clearly indicated in the SOPs.
3. The District administration has to be alert round the year as disasters may occur any time, anywhere in the district, irrespective of time and location.

1.8.2 Disaster Management Cycle

In multi-hazard response plan, the disaster management cycle has a significant role to play. The four stages of disaster cycle have their own importance in terms of their implementation during, after and before the occurrence of any disaster.

1.8.2.1 Pre disaster activities

1. Policy development and National, State, district, local level disaster organization formation
2. Vulnerability and capacity assessment
3. Prevention and mitigation
4. Preparedness, planning and training

1.8.2.2 Emergency activities

1. Warning (beginning before the actual event)
2. Evacuation, search and rescue
3. Emergency assistance (relief) – food, water, shelter, medical aid
- 4.

1.8.2.3 Post disaster activities

1. Repair and restoration of life lines (power, telecommunications, water transportation)
2. Reconstruction and rehabilitation

1.8.2.4 Mitigation methods

i) **Structural measures:** Any physical construction to reduce or avoid possible impact of hazards, which include engineering measures and construction of hazard-resistant and protective structures and infrastructure. --- **NDMA (2005)**

ii) **Non structural measures:** Non engineered measures to reduce or avoid possible impacts of hazards such as education, training and emergency planning, capacity development, general public awareness, early warning system, hazard vulnerability risk analysis, communication mechanism etc. --- **NDMA (2005)**

1.9 Objectives of DDMP

1. To prevent loss of human life and property damage
 2. To study, analyze and evaluate the disasters
 3. To identify the vulnerable locations and do the vulnerability and risk analysis
 4. To improve preparedness, prevention and mitigation at district level
 5. To ascertain the status of existing resources and facilities available
 6. To recommend appropriate strategies and responses to deal with future disasters
-

2. DISTRICT PROFILE

2.1 Location and Extent

- Nanded is one of the historical places in Marathwada region of Maharashtra State. It is situated on the north bank of Godavari river. It is famous for Sikh Gurudwaras. Nanded is a town of great antiquity. It is said that during the Puranic days, Pandavas travelled through Nanded district. Nandas ruled over Nanded through generations. Also known as *Nadigram*.
- Located in South East Part of Maharashtra, lies between 18 15 ' to 19 55' North latitude and 77 to 78 25' East longitudes.
- Second largest City in Marathwada region.
- Adjoining state boundaries of Telangana State, Andhra Pradesh & Karnataka.
- Total No. of Tahsils - 16 & Divisions -08
- Population as per 2011 census-
Male-14.76 Lakhs, Female- 13.91 Lakhs ,Total-28,76,259 .
- Literacy – Male – 81% , Female- 55% Avg. – 68%.

Nanded Connectivity

- Road- Situated on N.H.222 Kalyan –Nirmal. Well connected with Mumbai, Hyderabad, Pune, Aurangabad.
- Rail:- Situated on Kachiguda – Manmad Rail route. Connected with Delhi, Mumbai , Hyderabad, Bangluru.
- Air :- Shri Guru Gobind Singhji Nanded Air Port. Air Services are available for domestic flights.

2.2 Area and Administrative Division

Nanded district covers an area of 10502 Sq.km. For administrative convenience, it has been divided into 8 sub divisions and 16 Talukas.

2.3 Socio Economic Features

The district has an area of 10,502 km² while according to 2011 census its population is 3,361,292 of which 27.19% were urban. Nanded District lies in the eastern portion of Marathwada region, which corresponds to Aurangabad Division of Maharashtra. The district is bounded by Nizamabad, Medak and Adilabad districts of Telangana the east, by Bidar District of Karnataka falls on the south, by Parbhani and Latur districts of Marathwada on the west, and Yavatmal District of Maharashtra's Vidarbha region on the north. The influence of Andhra, Karnataka and Vidarbha can be seen on the language, behaviour and general conduct of the people of Nanded.

Geographical Area : 10,502 km²

Normal Rainfall :956 mm

Taluka or Mandal : 16

Per Capita Income : Rs 23,801

Population (1991 Census, in 1000s) : 2,330 (Males=1,198 Females=1,132)

Density : 319 per km²

Literacy : 75.45%

Male Literacy : 84.27%

Female Literacy : 66.15%

Amenities and infrastructural facilities

Total inhabited villages: 1,546

Amenities No. of villages

Drinking water facilities: 1,538

Important Towns (Largest three) Safe Drinking water: 1,537

Population Electricity (Power Supply): 1,531

Primary school: 1,536

Middle schools: 768

Secondary/Sr Secondary schools: 504

College: 26

Medical facility: 209

Primary Health Centre: 71

Primary Health Sub-Centre: 111

Bus services: 1,141

Paved approach road: 1,049

Mud approach road: 4

Industrial Estates : Nanded, Dharmabad, Loha, Degloor, Kinwat, Krushnoor (SEZ).

Total population	3,361,292
Total male	14.81 Lakhs
Total female	13.94 Lakhs
Total literacy rate	86.57 %
Female literacy	79.73 %
Total families	1,92,666
Urban population	28 %

2.4 Major Historical and Religious Centres

Sachkhand Gurudwara (Hazur sahib), Renuka Devi Mandir Mahur, Dargah at Kandhar, Shri Khandoba Devasthan Malegaon (Tahsil Loha)

2.5 River Systems and Dams

Division : Nanded Irrigation Divn.Nanded

Sr.No.	Name of Project	FRL/RBL in meter
1	2	3
1	Jayakwadi Project	463.906
2	Majalgaon Project	431.800
3	Dhalegaon River Bridge	386.570
4	Gangakhed River	363.000
5	Zari River Bridge	373.200
6	Yeldari project	461.890
7	Siddheshwar Project	413.260
8	Purna river bridge	358.000
9	S.C.V.P. Nanded	355.000
10	Nanded Old Bridge	340.500
11	Nanded Chaitanyanagar	-
12	Nizamsagar Project	428.350
13	S.R.S.P.Pochampad	332.530
14	Lower Manar project	393.890
15	Upper Manar Project	447.600
16	U.P.P. Isapur Project	441.000
17	Digras Barrage	366.000
18	Amdura Barrage	343.500
19	Lower Dhudhana Project	426.500

2.6 Industries

Industrial Estates: Nanded, Dharmabad, Loha, Degloor, Kinwat, Krushnoor (SEZ).

Name of the place	Location	Numbers of industries	No. of major hazardous and polluting industries	Total work force
Nanded MIDC	MIDC Balirampur	162	3	1419
Dharmabad	Dharmabad	01	1	380
Loha	Loha	03	0	200
Degloor	Degloor	08	0	350
Kinwat	Kinwat	07	0	250
Krushnoor	Krushnoor	21	1	800

2.7 Power Stations and Electricity Installations

Maharashtra State Electricity Distribution Co. Ltd.
220,132, 66 KV power Sub Stations

SI No.	Name of the installation	Taluka
01	220 KV Nanded -2 Waghala	Nanded
02	132 KV Jagamwadi Nanded	Nanded
03	132 KV Mukhed	Mukhed
04	132 KV Degloor	Degloor
05	132 KV Narsi (Dhuppa)	Naigaon
06	132 KV Umri	Umri
07	132 KV Tamasa	Hadgaon
08	132 KV Kandhar	Kandhar
09	132 KV Himayatnagar	Himayatnagar
10	132 KV Ardhapur	Ardhapur
11	132 KV Elaichpur	Nanded
12	132 KV Kinwat	Kinwat

Maharashtra State Electricity Distribution Co. Ltd.
33 KV power Sub Stations

SI No.	Name of the installation	Division
01	33 KV Degloor	Degloor
02	33 KV Loha	Nanded
03	33 KV Narsi	Degloor
04	33 KV Ardhapur	Nanded
05	33 KV Bhokar	Bhokar
06	33 KV Mukhed	Degloor
07	33 KV Hadgaon	Bhokar
08	33 KV Tamsa	Tamsa
09	33 KV Dharmabad	Dharmabad
10	33 KV Umari	Umari
11	33 KV Kalambar	Kalambar
12	33 KV Arjapur	Arjapur
13	33 KV Himayatnagar	Himayatnagar

14	33 KV Mandavi	Mandavi
15	33 KV Mahur	Mahur
16	33 KV Mudkhed	Mudkhed
17	33 KV MIDC Nanded	Nanded
18	33 KV Barad	Barad

2.8 Transport and Communication Network

South Central Railway passes through this district and covers 364 kms. The total length of National Highway in the district is 187.91 km whereas the State Highway and ZP road also access to the whole district. Almost all parts of the district are connected by ST bus service and private travels. Post office and telephone services are already available in each and every part of the district.

2.9 Education

Nanded district has a good educational infrastructure. Its literacy rate indicates that the basic education facility is accessed to each and every corner of the district. Besides it also has medical, engineering, polytechnic, and training institutes, which help the youths here to be its beneficiaries.

2.10 Tourism

Nanded District has been designated as a Tourism District and special initiatives have been proposed. The state government has undertaken the development of tourist centres as follows:-

- 1) Shastra Kund Water fall at Islapur
- 2) Renuka Devi Sansthan Mahur
- 3) Fort and Durgah of Kandhar
- 4) All Gurudwara's around Nanded District
- 5) Temple at Hottal (Tahsil Degloor)
- 6) Shri.Khandoba Devsthan, Malegoan

2.11 Historic Forts

1. Fort of Kandhar 62 KM

-

2. Fort of Nandagiri in old Nanded City

.

2.12 Luring Waterfall

Shahstrkund waterfall 89 Km from Nanded is a big attraction to the visitors on the river Vainganga.

2.13 Geography and Topography

A. Housing Pattern

The houses built in the district are of sloping roofs as the rain water should drain off. There are also R.C.C. buildings constructed in this area. In rural areas, mostly the houses are of mud or brick walls. There are also some pacca houses in the rural areas.

B. Landholding Pattern

Nanded district is a part of Marathwada division and enjoys a boarder line with Telangana and Karnataka State.

The details of land use statistics are given below.

Land Use Category	Area In Hectares	Percentage to total geographical area
Built up land	6,000	1.15%
Agricultural land	2,18,000	41.87%
Forest land	39,156	7.52%
Waste land	2,48,000	47.63%
Other fallow, water bodies, rivers	9,544	1.83%
Total	5,20,700	100%

C. Livelihood & Occupation Details

Most of the people here are engaged in farming and related occupations. Horticulture is the main source of earning. Most of the people are also engaged in private and governmental jobs.

D. Agriculture and Major Crops

The main kharif and rabbi crop is paddy. Most of the kharif cropping season is June to October. Now most of the land is under horticulture use.

E. Climate and Weather

The climate of the district is is hot and humid in the summers and mild in winters. The average maximum and minimum temperatures recorded are 42.2 and 20.3 degree Celsius respectively.

F. Rainfall

The rainfall is quite heavy during the months of June to September due to the southwest monsoon winds. The total annual rainfall is 956 mm. March, April, May and June are the months of water scarcity.

3. HAZARD AND VULNERABILITY ANALYSIS

This chapter largely deals with the disasters that Nanded district experienced. Based on this, the vulnerability assessment of people and their income sources, infrastructure, crops, livestock resources, drinking water supply, daily necessities, communication and transportation system, public distribution, medical facilities and other elements has been done so that such elements can be safely shifted to, or to be taken care of before any unexpected disaster or during the disasters.

This is the most important part of the plan. Vulnerability assessment deals with the socio-economic vulnerability, housing vulnerability and environmental vulnerability.

3.1 History of Disasters in Nanded District

The major calamities, which the district administration in Nanded district has to face, are floods in the major rivers, minor shocks of earthquake, communal Disturbances, draught and road accidents. Whose details have been given below:-

A. Flood

Flash floods bring about disasters. As expressed above there was a critical situation in some parts of the district during 2005-06 floods. Most of the rivers were overflowing and there was a loss of life and property. The river water entered the standing crops and the farmers suffered a huge loss. Most of the livestock also was flown away in this flood. Some people were shifted to safe shelters but there was no rehabilitation.

B. Road and Rail Accidents

There is a good network of pucca and kaccha road in the district with 582.55 km of state highway and 2416.20 km Zilla Parishad roads. About 107 km of the National Highway Nanded-Pune Mumbai-Hyderabad.

The information from the police and RTO reveals that road accidents take place on this highway. No road side settlements and villages are affected by these accidents.

C. Landslides

Due to heavy rain some parts of the district experienced landslides along with tree collapse leading to the human loss and disturbances in traffic.

Landslides largely occur in Mahur and Kinwat Tahsils.

3.2 Vulnerability Assessment

A. Flood and Cyclones

Based on the previous history, Nanded district has an unexpected rainfall, thunder shower, flash flood. This district receives uncommon amount of rainfall during the rainy season. As a result most of the rivers get excess water and experience floods. This heavy rainfall also results in washing out of crops, public infrastructures and houses.

Identified Flood Prone Villages

Major Rivers follows from Nanded District:

- 1. Godavari**
- 2. Painganga**
- 3. Lendi**
- 4. Manjara**
- 5. Manar**
- 6. Kayadhu**

History of Major Flood to River Godavari

Year	Water level of Godavri River in Mtrs.
1969	356.62
1973	354.26
1975	354.63
1983	355.60
2005	355.70
2006	357.10
2016	352.10

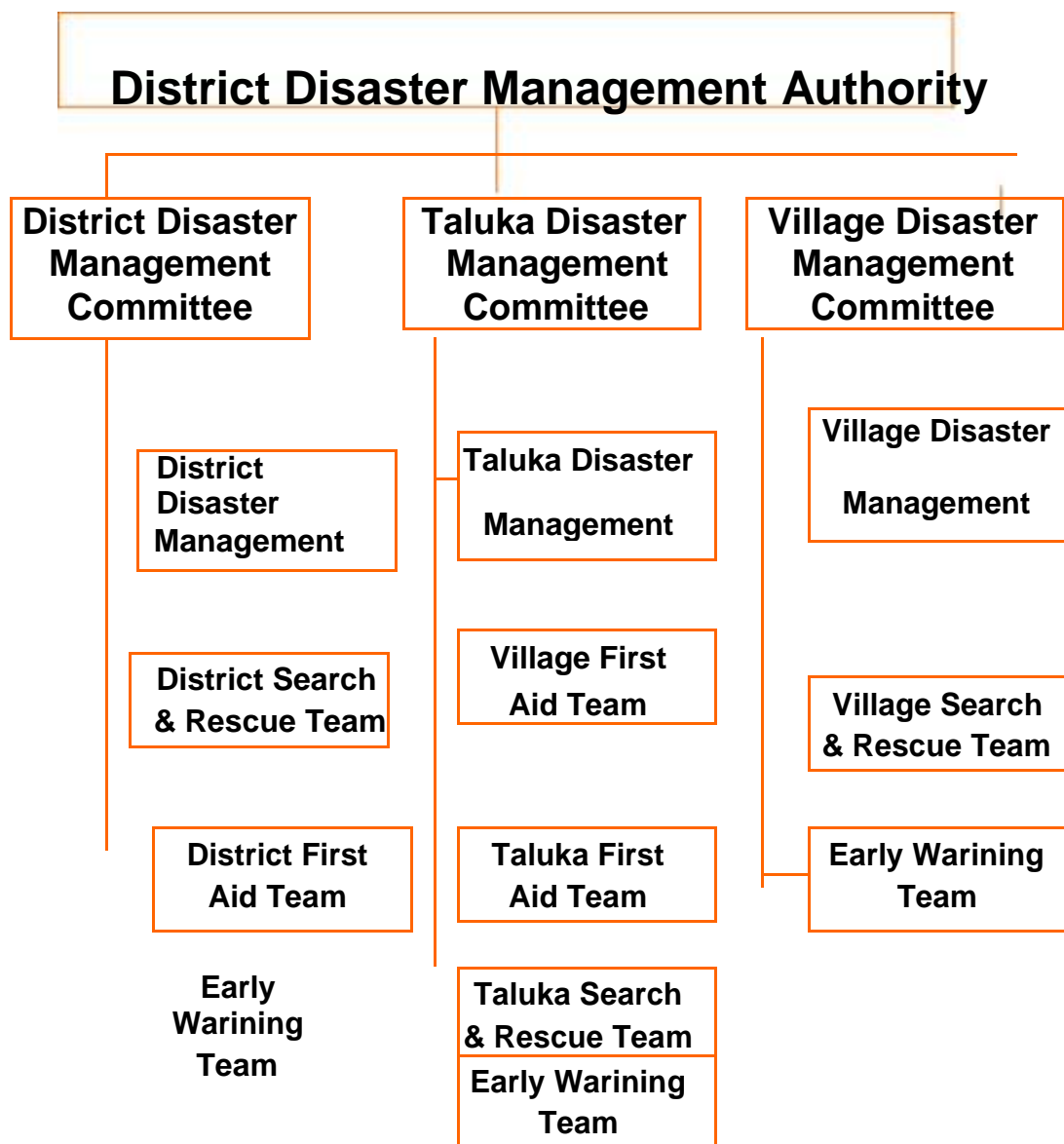
Flood affected areas (Blue/Red Line) and demarcation of shelter station		
Landmark	Area	Shelter Station
Nanded Urban Total = 9	Navghat	ZP High School Choufala
	Chaufala	ZP High School Choufala
	Brahmapuri	ZP High School Choufala
	Gadipura	Gadipura Badi Durgah
	Mondha Ghat	Old Mondha Mangal Karyalaya
	Khadakpura	KalaMandir
	Kautha	Mangal Karyalaya Kautha
	Asarjan	SRTMU
	Vasarni	ZP School Vasarni
Nanded Rural Total = 39	Vajegaon	Aarya Samaj Ashram, Traders Godawon
	Brahmanwada	Matasaheb Gurudwara
	Wangi	ZP School Wangi
	Injegaon	ZP School Injegaon
	Punegaon	ZP School Punegaon
	Rahegaon	ZP School Rahegaon
	Sidhanath	ZP School Sidhanath
	Gadegaon	ZP School Gadegaon
	Wadi Janji	ZP School Wadi Janji
	Gangabet	ZP School Gangabet
	Wahegaon	ZP School Wahegaon
	Vishnupuri	ZP School Vishnupuri
	Kottirth	ZP School Kottirth
	Naleshwar	ZP School Naleshwar
	Sayal	ZP School Sayal
	Nasratpur	ZP School Nasratpur
	Khadkut	Sailabnagar Shadikhana
	Hussapur	Ashram School New Colony, ZP School Hussapur
	Taroda Bu	Sandeepani School Taroda Bu
	Taroda Khu	Sandeepani School Taroda Bu
	Nerali	Nerali Krushtadham Nerali
	Bondhar T/F Nerli	ZPPS Bondhar
	Chimegaon	ZPPS Chimegaon
	Sangavi Bu	NWCMC School. Freedom Fighter Colony
	Vishnupuri	ZPHS Vishnupuri
	Mujampeth	Vasantrao Naik College, Vasarni
	Kakandi	Bhayegaon
	Rahegaon	Bhayegaon
	Kiki	Bhayegaon
	Vadi P.	ZPPS Vajegaon
	Pimplegaon M	ZPPS Vajegoan
	Fattepur	ZPPS Fattepur
	Limbgaon	ZPPS Limbgaon
	Rahati Bu	ZPHS Rahati Bu.
	Thugaon	ZPPS Thugaon
	Sugaon Kh.	ZPPS Sugaon Kh
	Sugaon Bu	ZPPS Sugaon Kh
	Kottirth	ZPPS Kottirth
	Waghi	ZPPS Waghi

Flood affected areas (Blue/Red Line) and demarcation of shelter station		
Landmark	Area	Shelter Station
Nanded Rural	Marlak Bu.	ZPPS Marlak Bu.
	Talani	ZPPS Talani
	Khadki (Marlak)	ZPPS Khadki
	Nila	ZPPS Nila
	Kasarkheda	Gram Panchayat Office Kasarkheda
	Ekdara	Gram Panchayat Ekdare
	Chikhali Bu	ZPPS Chikhali Bu. And Gram Panchayat Office
Mudkhed Tahsil Total = 10	Aamdura	ZPPS Aamdura
	Wasari	ZPPS Wasari
	Shankhtirth	ZPPS Shankhtirth
	Chil pimpari	ZPPS Chil pimpari
	Rohi Pimpalgaon	ZPPS Rohi Pimpalgaon
	Saregaon	ZPPS Saregaon
	Dhanaj	ZPPS Dhanaj
	Jawala Murar	ZPPS Jawala Murar
	Jawala Fatka	ZPPS Jawala Fatka
	Mudkhed	Mahatma Gandhi High School/ZPCPS Mudkhed
Aardhapur Tahsil Total = 12	Mendhala Bu.	Gram Panchayat Office Mendhala Bu
	Mendhala Kh.	ZPPS Mendhala Kh.
	Khadki	ZPS Khadki
	Shelgaon Bu	ZPS Shelgaon Bu
	Kautha	ZPPS Kautha
	Bhogaon	ZPPS Bhogaon
	Swargaon	ZPPS Sawargaon
	Gunpur	ZPPS/Gram Panchayat Gunpur
	Sangavi Khu	ZPPS/Gram Panchayat Sangavi
	Devud Bu.	ZPPS /Gram Panchayat Devud Bu.
	Devud Kh	ZPPS/Gram Panchayat Devud Kh
	Loni Kh. & Bu	ZPPS/Grampanchayat/Baudh Vihar
Bhokar Tahsil	Dhanora	Local Zilla Parishad School
	Renapur	Local Zilla Parishad School
	Diwashi Bu.	Local Zilla Parishad School
	Mahagaon	Local Zilla Parishad School
	Kolgaon Bu.	Local Zilla Parishad School
	Kolgaon Khu	Local Zilla Parishad School
	Lagdud	Local Zilla Parishad School
	Ravangaon	Local Zilla Parishad School
	Diwashi Kh.	Local Zilla Parishad School
	Matul	Local Zilla Parishad School
	Pimpledhav	Local Zilla Parishad School
	Bendri	Local Zilla Parishad School
	Pakitanda	Local Zilla Parishad School
	Nanda Khurd	Local Zilla Parishad School

4. INSTITUTIONAL MECHANISM

The disaster management will be more effective and sustainable if it is institutionalised. For this purpose Government of India has already passed Disaster Management Act on 23rd December, 2005, where it is clearly outlined that a Disaster Management Authority to be formed at the district level. It will be the apex body at the district level. Disaster management would involve many layers of participating organization. The three focal levels would be State, District and the site of the disaster. The State level agencies would be involved in policy/decisions making, resource and budget allocation and monitoring through the State Emergency Operations Centre.

Similarly, at district level a District Disaster Management Authority is already formed and activated to mitigate any unexpected situation in the district. There are seven members included in this authority.



The Institutional Framework for disaster management developed at the District, Taluka and Village level is as follows:-

At each level, apart from disaster management committee, each level has a disaster management plan along with the various task forces like search and rescue, first aid, early warning, shelter management, etc.

Nanded district has its own district disaster management authority chaired by the district collector. Besides, the district disaster management committee is also working under district collector where all line departments are its member. The District search and rescue team consists of 36 members belonging to various departments is also set up in the district.

At taluka level every taluka in the district has a taluka disaster management committee headed by tahsildar. As said above all line departments at taluka level are its members. Also a search and rescue team as well as first aid team have been set up at every taluka.

At village level, every panchayat has a village disaster management plan as well as village disaster management committee. The VDMC chaired by sarpanch includes talathi, gramsevak, teacher, health workers, etc. of 10 – 12 persons. Also a search and rescue team as well as first aid team have been set up and trained at every village.

4.1 District Disaster Management Authority (DDMA)

Sr. No.	Designation	Position
1	District Collector (District Disaster Manager)	Chairperson
2	Chairperson, Z.P.	Vice Chairperson
3	Chief Executive officer, Z.P.	Member
4	Superintendent of Police	Member
5	Civil Surgeon	Member
6	Executive Engineer (PWD)	Member
7	Executive Engineer (irrigation)	Member
8	Additional Collector / RDC	Member Secy.

The District Disaster Management Committee (DDMC) is an apex planning body and plays a major role in preparedness and mitigation. The district level response is co-ordinated under the guidance of the District Collector, who acts as a District Disaster Manager.

4.2 District Disaster Management Committee (DDMC)

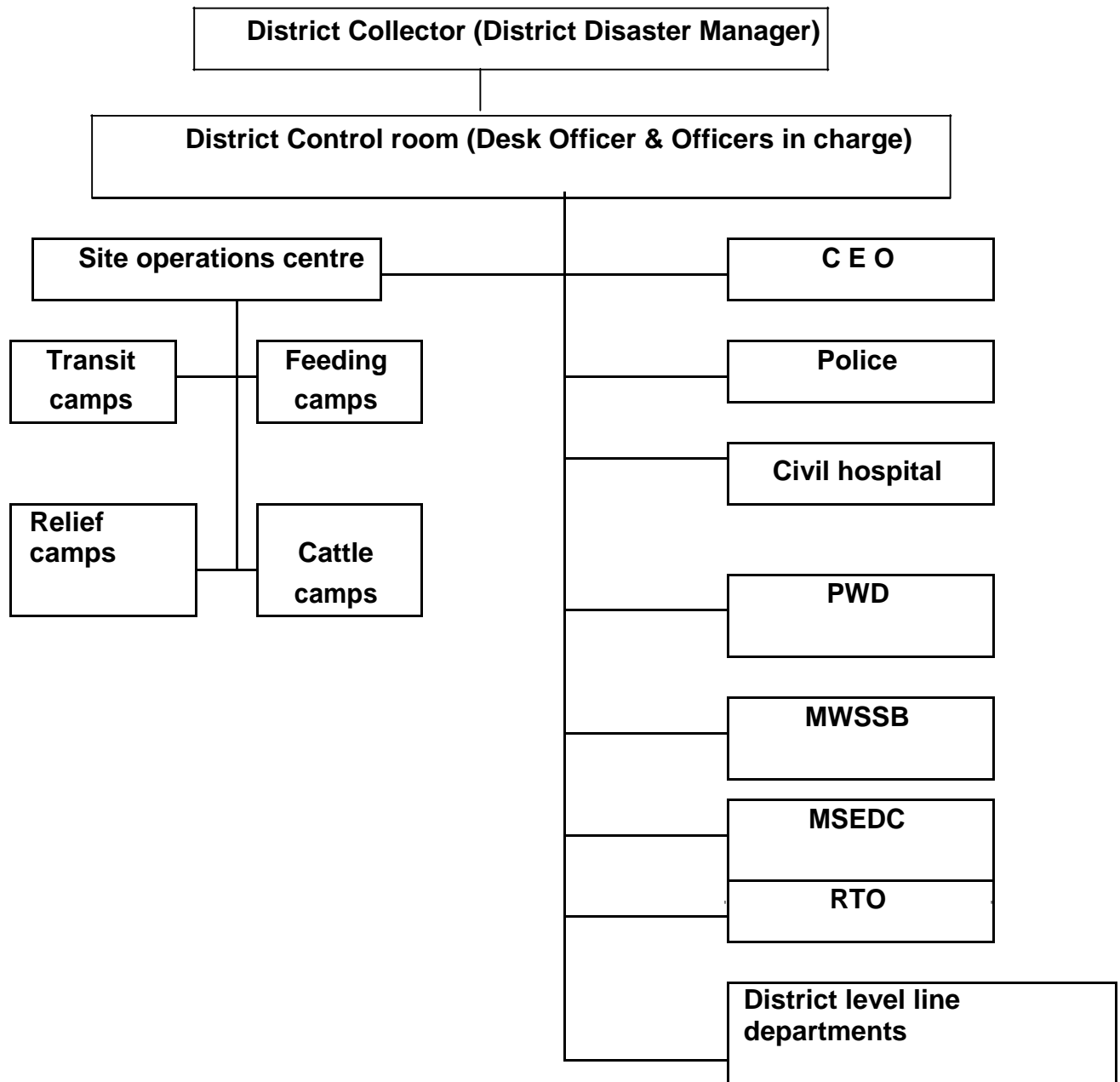
Besides this, the Disaster Risk Management Programme also traced much to form Committees at the three levels with plans and task forces. A Disaster Management Committee exists to assist the Collector in

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

The Committee meets once a year under the chairmanship of the Collector and consists of the following functionaries

The Collector	Chairman
The District Superintendent of Police	Member
The Chief Executive Officer, Zilla Parishad	Member
The Additional Collector	Member
The Resident Deputy Collector	Member-Secy
The Chief Fire Officer	Member
The District Health Officer	Member
The District Agriculture Officer	Member
The District Animal Husbandry Officer	Member
The Civil Surgeon	Member
The Executive Engineer, P.W.D.	Member
The Executive Engineer, Irrigation Department	Member
The Executive Engineer, Minor Irrigation Division	Member
The Executive Engineer, M.S.E.D.C.	Member
The Executive Engineer, MWSSB	Member
The Deputy Director of Education	Member
The Divisional Manager, Railways	Member
The Regional Transport Officer	Member
The Regional Manager, M.S.R.T.C.	Member
The District Publicity Officer	Member
The District Supply Officer	Member
The Local Station Director, A.I.R.	Member
The Local Station Director, Doordarshan	Member

Coordination Structure at District level



4.3 District Control Room

The District Control Room, under the control of the district collector, will be the nerve center. It has been set up

- ◆ To monitor
- ◆ Co-ordinate
- ◆ Implement the actions for disaster management

It works throughout the year and orders the various departments to work as per the directions during the disaster.

4.4 Communication Mechanism

On the basis of reports from the possible disaster site, or on the warning from the agencies competent to issue such a warning, or on the receipt of warning or alert from Emergency Operations Center, the Collector will exercise the powers and responsibilities of the District Disaster Manager.

The list of the agencies competent for issuing warning or alert is given below :

Disaster	Agencies
Earthquakes	IMD, MERI
Floods	Meteorology Department, Irrigation Department
Cyclones	IMD
Epidemics	Public Health Department
Road accidents	Police
Industrial and Chemical Accidents	Industry, Police
Fires	Fire Brigade, Police

The warning or occurrence of disaster will be communicated to

- ◆ Chief Secretary, Relief Commissioner, Emergency Operation Center
- ◆ Office of Divisional Commissioner
- ◆ All district level officials, Municipal Councils
- ◆ The Officials of central government located within the district
- ◆ Non-officials viz; Guardian Minister of the district, Mayor, ZP President, MPs, Local units of the Defense Services.

The occurrence of the disaster would essentially bring into force the following :

- ◆ The District Collector will activate the District Control Room as the District Disaster Manager.
- ◆ The DCR will be expanded to include desk arrangements with the responsibilities for specific tasks.
- ◆ All district level staff from various departments will be under the direction and control of the District Disaster Manager. These would also include the district level staff of Zilla Parishad

Municipal
Authorities MSERC
MWSSB
PWD
MSRTC
Irrigation
District Industrial
Center
Telecommunications

Leave of all the officers and the staff working with the above organizations, as requisitioned by the District Disaster Manager, would automatically stand cancelled and the organizations would direct their staff to report on duty immediately.

- ◆ The Relief Commissioner is the controlling authority in respect of Grants under “2245-Relief on account of Natural Calamities and also Loans and Advances”. He shall, therefore, ensure that adequate grants are placed at the disposal of the Collector under these budget head and that implementation of relief and rehabilitation measures is not hampered on account of paucity of funds or otherwise.
- ◆ The District Disaster Manager may in case of large-scale disasters get in touch with the local Defence units for assistance for rescue, evacuation and emergency relief measures.
- ◆ The District Disaster Manager will have the authority to requisite resources, materials and equipments from the private sector.
- ◆ The District Disaster Manager will have the power to direct the industry to activate their on-site or off-site disaster management plan.
- ◆ The District Disaster Manager will set-up Site Operation Center/s in the affected area with the desk arrangements.
- ◆ The District Disaster Manager will authorize establishment of transit and /or relief camps, feeding centers and cattle camps.
- ◆ An on-going wireless communication and contact from the DCR to the Site Operation Centers, Transit Camps, Feeding Centers, Relief Camps and Cattle Camps will be activated.
- ◆ The District Disaster Manager will send the Preliminary Information Report and Action Taken Report, as per the available information, to the Chief Secretary/Relief Commissioner/Emergency Operation Center and the Divisional Commissioner.
- ◆ The District Disaster Manager will authorize immediate evacuation whenever necessary.
- ◆ In the event of possibilities of the disasters in the adjoining districts, including those beyond the state borders, the District Disaster Manager will issue the alert warning to them.
- ◆ In multi-district disasters, if Additional Relief Commissioner is appointed at the multi-district level, the District Disaster Manager will report to the Additional Relief Commissioner.

In the absence of the Collector, Additional Collector or Assistant Collector or Resident Deputy Collector will officiate and exercise all the powers and responsibilities of the District Disaster Manager listed above.

4.5 Site Operation System During Disaster

Following the ICS, the site operations would be taken into action.

Depending on the nature of disaster and the type of damage, it may be necessary to set up a number of relief camps and/or cattle camps.

- ◆ In such a situation, the DDMA may decide to set-up a Site Operations Center (SOCs) to reduce the pressure on District Control Room for

field coordination.

- ◆ Depending upon the disaster locations and the number of campsites, the DDMA may decide to set-up more than one Site Operations Center.

- ◆ The Site Operations Center and the camps would be wound up after the relief and rehabilitation work is called off or after the relief camps and cattle camps are dismantled, whichever is later.

The Site Operations Center will be managed by Site Manager of the rank of Sub Divisional Office/ Deputy Collector.

4.6 Desk Arrangements in District Control Room

District Disaster Manager

- a) Establishing Priorities
- b) Direct and co-ordinate the service of,
 - Defence Services, SRP, CRPF, Home Guards, Coast Guards, CISF Fire Brigade, Civil Defence
 - Fire Brigade, Civil Defence
 - DOT, Railways, AAI, Port Trust,
 - FCI DD, AIR
 - MSEB, MWSSB, MSRTC, MPCB
 - Meteorological Department, MERI,
 - MPCB State Government Aircrafts and Helicopters Co-ordinate with the NGOs and aid agencies
 - Enlist services of GOI/GOM laboratories and expert institutions for Specialized services.

For immediate contact in case of major disaster;--

1. NDRF, 145 BN CRPF, Talegaon, Pune, Tel-02114-231509, fax- 281241; E-mail- 145crpf@gmail.com
2. Coast Guard Goa- Telephone- 0832-2521051, 2520440
3. Coast Guard, Ratnagiri, 02352-220490, Fax- 02352-224555
4. Army, Sahamaratha light infantry, Aundh, Pune, 9420605519/9673006453 Email – sahamaratha@gmail.com

PREPAREDNESS AND MITIGATION

In disaster management cycle, preparedness and mitigation are the two important stages before the occurrence of disaster. It has a great importance in reduction of loss of life and property if proper preparedness and mitigation strategies are followed.

5.1 Preparedness

This protective process embraces measures which enable governments, communities and individuals to respond rapidly to disaster situations to cope with them effectively. Preparedness includes the formulation of viable emergency plans, the development of warning systems, the maintenance of inventories and the training of personnel. It may also embrace search and rescue measures as well as evacuation plans for areas that may be at risk from a recurring disaster.

Preparedness therefore encompasses those measures taken before a disaster event which are aimed at minimizing the loss of life, disruption of critical services, and damage when the disaster occurs. All preparedness planning needs to be supported by appropriate legislation with clear allocation of responsibilities and budgetary provisions.

5.2 Mitigation

Mitigation embraces all measures taken to reduce both the effect of the hazard itself and the vulnerable conditions to it in order to reduce the scale of a future disaster. Therefore mitigation activities can be focused on the hazard itself or the elements exposed to the threat. Examples of mitigation measures which are hazard specific include modifying the occurrence of the hazard, e.g. water management in drought prone areas, avoiding the hazard by siting people away from the hazard and by strengthening structures to reduce damage when a hazard occurs. In addition to these physical measures, mitigation aims at reducing the physical, economic and social vulnerability to threats and the underlying causes for this vulnerability.

Proper preparedness and mitigation measures instantly helps to respond a disaster in time. So disaster wise preparedness and mitigation is highly required. These are normal time activities. A prepared community is the best community to minimize the loss and damage caused by the disasters. Mitigation focuses on various ways and means of reducing the impacts of disasters on the communities through damage prevention. It is hazard specific including both structural and non-structural issues. It is also very strategic rather than the description of various methods of resistant construction technologies.

5.3 Preparedness and Mitigation Measures

Preparedness and mitigation measures towards various disasters certainly helps to reduce the risk as well as loss and damage of the life and properties caused by different disasters. Let's discuss them in general as well as event wise:-

5.3.1 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. Fire Brigades at all the Municipal Offices. Setting up of a special Highway Safety Patrol along the Mumbai-Goa highway. 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 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

5.3.2 Disaster wise mitigation measures may be taken as follows

A. Floods and Cyclones

Flooding frequency is quite frequent in many talukas of the district. Strict enforcement of flood zone regulations need to be done to prevent constructions of any type within 200 m of the riverbanks.

Engineering solutions like building of flood embankments, small dams, deepening of the channels may be considered for specific localities.

Community awareness should be built up so that people respond effectively to the flooding. Persons living in the low lying parts of floodplains, areas below unsafe dams, low-lying shorelines, or river delta areas are vulnerable to flood hazards. Notable risk in flood plain settlements are buildings made of earth or with soluble mortar, buildings with shallow foundations or non-resistant to water force and inundation. Infrastructural elements at particular risk are utilities such as sewer systems, power and water supplies, machinery and electronics belonging to industry and communications, livestock, vehicles, agricultural fields etc. Inhabitants of flood prone areas usually have a number of traditional methods at their disposal for coping with floods. Some aspects of flood planning and response are:-

- Issuing warnings at the local levels

- Participating in flood fighting by organizing work parties to repair Embankments or clear debris from drainage areas, pile sandbags

- Stockpile needed materials

- Facilitating agricultural recovery

- Planning emergency supplies of flood and clean drinking water

- To conduct trainings on search and rescue for Search and Rescue

- Teams formed at District, Taluka and Village level from time to time.

There is need for trained full time fire brigade personnel in each municipality who will help in search and rescue. The health department needs to be equipped with more water quality monitoring centers for effective surveillance of water quality during flood events.

Planting of casaurina trees along the coast, which will serve as wind breakers. Provision of wireless communication equipment to all tahsil offices so that information about approaching cyclone can be relayed immediately.

Main Mitigation Strategies

1. Mapping of the flood prone areas is a primary step involved in reducing the risk of the region. Historical records give the indication of the flood inundation areas and the period of occurrence and the extent of the coverage. Warning can be issued looking into the earlier marked heights of the water levels in case of potential threat. In the coastal areas the tide levels and the land characteristics will

- determine the submergence areas. Flood hazard mapping will give the proper indication of water flow during floods.
2. The onset of cyclones is extensive and often very destructive. A hazard map will illustrate the areas vulnerable to the cyclone in any given year.
 3. The map is prepared with data inputs off past climatological records, history of wind speed, frequency of flooding etc.
 4. Land use control will reduce the danger of life and property when waters inundate the floodplains and the coastal areas. In areas where people already have built their settlements, measures should be taken to relocate to better sites so as to reduce vulnerability. No major development should be permitted in the areas which are subjected to high flooding. Important facilities should be built in safe areas.
 5. Construction of engineered structures in the flood plains and strengthening of structures to withstand flood forces and seepage. The buildings should be constructed on an elevated area. If necessary build on stilts or platform. They should be wind and water resistant. Protect river embankments. Communication lines should be installed underground. Provide strong halls for community shelter in vulnerable locations.
 6. Flood Control aims to reduce flood damage. Measures such as reforestation, protection of vegetation, clearing of debris, conservation of ponds and lakes, etc.
 7. Structural measures include storage reservoirs, flood embankments, drainage channels, anti-erosion works, detention basins, etc. and non-structural measures include flood forecasting, flood proofing, disaster preparedness, etc.

B. Road Accidents

1. Setting up of a Highway Safety Patrol along the Mumbai-Goa highway, which will be a specialized division of the highway police to tackle road accidents.
2. Provision of full time trained fire brigade personnel in at least all the municipalities.
3. Provision of adequate signboards, speed breakers and guard stones near the accident prone spots.
4. Some hospitals along the Mumbai-Goa highway should be upgraded with X-ray machines, blood bank and surgical facilities.
5. If necessary, bypasses should be constructed wherever the highway passes through densely populated localities.
6. The risk at the accident-prone spots must be minimized by adequate construction/resurfacing/widening etc.

C. Epidemics

Health department needs to be provided with more water quality monitoring centers for effective surveillance of water quality principally during the monsoon months and during flood events.

Bleaching powder should be adequately available with all the Gram

panchayats. Rural hospitals should be upgraded to include blood bank and surgical facilities.

Contingency plan for response should be prepared after identifying the epidemics that are likely to occur in the region. Maps of all the health facilities in the region with an inventory of drugs and vaccines, laboratory set ups, list of number of doctors and supporting staff etc. need to be kept ready and updated at regular intervals. First aid training will help to cope better during the emergency response period for epidemics. Personnel protection through vaccination is an effective mitigation strategy and will protect the persons at risk. Improving the sanitary conditions, drive to check and fumigate breeding places of any vector, disinfecting the water source, etc.

D. Fires

Provision of trained manpower to the fire brigades. Provision of fire engines and trained manpower to all the municipalities. All fire tenders should be equipped with wireless sets.

The procedural delay for fire engines to move outside the municipal limits should be removed. The coordinating authority for this may be vested with a senior officer in the municipal administration.

6. RESPONSE PLAN

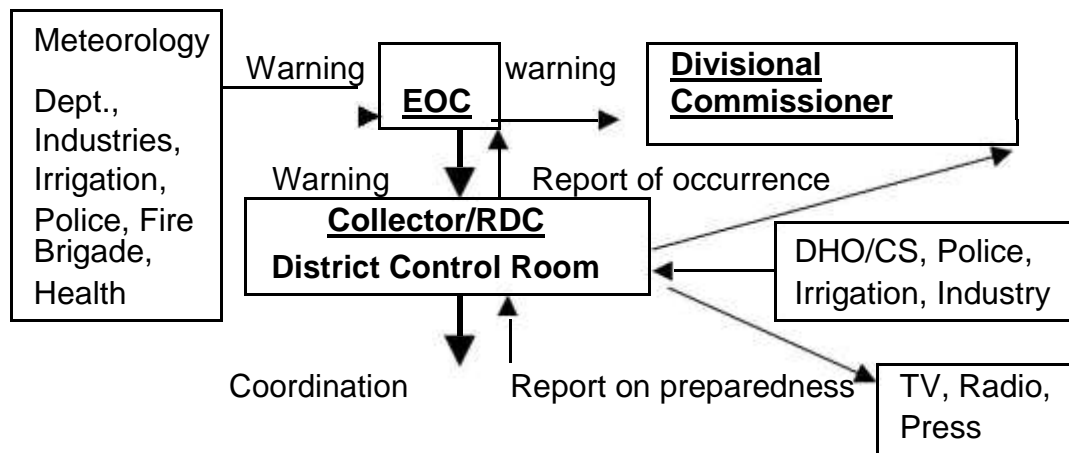
The onset of an emergency creates the need for time sensitive actions to save life and property, reduce hardships and suffering, and restore essential life support and community systems, to mitigate further damage or loss and provide the foundation for subsequent recovery. Effective response planning requires realistic identification of likely response functions, assignment of

specific tasks to individual response agencies, identification of equipment, supplies and personnel required by the response agencies for performing the assigned tasks. A response plan essentially outlines the strategy and resources needed for search and rescue, evacuation, etc.

Considering all this points, this response plan has been developed. For the first time Incident Command System (ICS) has also been introduced in response plan along with the resource inventory that is directly linked to the website. In fact, during disaster the ICS management tool will be more effective to handle the situation in proper way within limited time.

6.1 Response Structure during Warning Stage

At district level, before the occurrence of disaster and immediately after the disaster, the district administration will activate the district control room so that proper information will be provided to the concerned authorities.

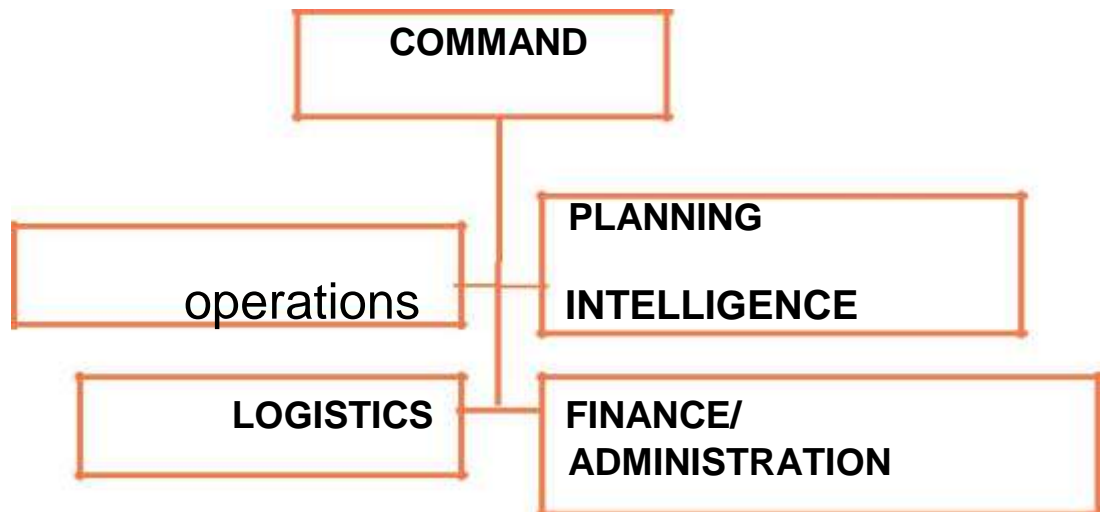


6.2 Incident Command System (ICS)

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:

- ◆ Command
- ◆ Operations
- ◆ Logistics
- ◆ Planning
- ◆ Finance / Administration

FIVE PRIMARY I.C.S MANAGEMENT FUNCTIONS



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

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

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.

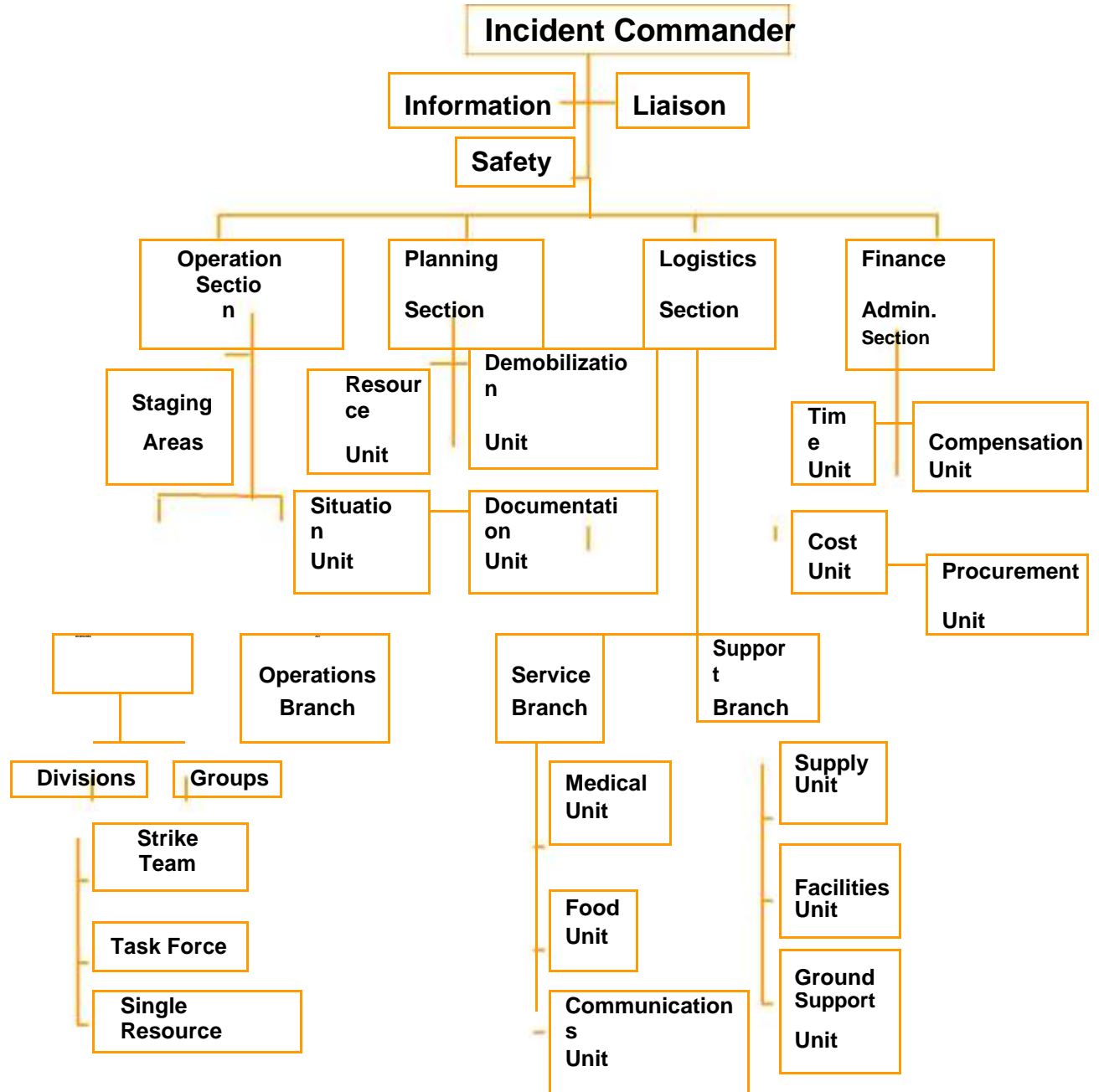
4. Logistics Section

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.

INCIDENT COMMAND ORGANIZATION CHART



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.

Training And Rank Requirements For District Headquarters Team

Category A

Collector/District Magistrate/Additional District Magistrate/Sub divisional Magistrate, ICS for Executives, Basic/Intermediate ICS, Incident Commander, Advance ICS, Area Command.

Category B

Sr. No.	ICS Position	Rank Requirement	Training Requirement
1	Headquarters Co-coordinator	ADM/Senior Dy. Collector	Basic/Int. ICS, Incident Manager, Advanced ICS, Area Command
2	Dy. Headquarters Co-coordinator	Dy rank Collector/ Equivalents	Basic/Int. ICS, Incident Manager, Advanced ICS, Area Command
3	Liaison Officer	Dy rank Collector/ Equivalents	Basic/Int. ICS, Liaison Officer, Advanced ICS.
4	Information Officer	Dy rank Collector/ Equivalents	Basic/Int. ICS, Information Officer,
5	Planning Section Chief	Dy rank Collector/ Equivalents	Basic/Int. ICS, Planning Section Chief, Advanced ICS, Area Command
6	Logistic Section Chief	Dy rank Collector / Equivalents	Basic/Int. ICS, Logistic Section Chief, Advanced ICS, Area Command
7	Air Operations Officer	Dy rank Collector/ Equivalents	Basic/Int. ICS, Advanced ICS, Area Command
8	Finance/Adm. Section Chief	Dy rank Collector/ Equivalents	Basic/Int. ICS, Advanced ICS, Area Command
9	Situation Unit Leader	Dy rank Collector/ Equivalents	Basic/Int. ICS, Situation Unit Leader

10	Resource Unit Leader	Deputy Collector/ rank s	Equivalent	Basic/Int. ICS, Resource Unit Leader
11	Receiving and Distributing Branch Director	Deputy Collector/ rank s	Equivalent	Basic/Int. ICS nt. , Self Study
12	Mobilization Branch Director	Deputy Collector/ rank s	Equivalent	Basic/Int. ICS nt. , Self Study
13	Other Positions. (Technical Specialist /	Line department representatives		Basic/Int. ICS, Job Aids Self Study

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.

INCIDENT COMMANDER

COMMAND STAFF

- INFORMATION
- LIAISON
- SAFETY

OPERATION

PLANNING

LOGISTICS

**FINANCE
ADMIN.**

6.3 Role and Responsibilities of ICS Staff

The following represents the major responsibilities and duties of the Incident Commander. The incident commander's responsibility is the overall management of the incident. The Incident Commander may have a deputy who may be from the same agency, or from an assisting agency.

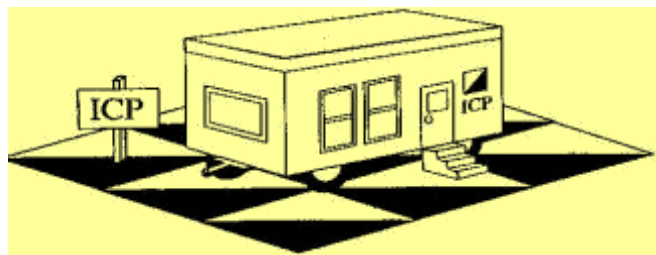
6.3.1 Incident Commander

Major responsibilities and duties of Incident Commander

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

- ◆ Approve requests for additional resources or for the release of resources.
- ◆ keep agency administrator informed of incident status.
- ◆ Approve the use of students, volunteers, and auxiliary personnel.
- ◆ Authorize release of information to the news media.
- ◆ Order the demobilization of the incident when appropriate.

1. **Establish an Incident Command Post (ICP)**



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.

2. **Establish the Immediate Priorities**

First Priority is always safety of:

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

Second Priority: Incident Stabilization. Stabilization is normally tied directly to incident complexity.

When considering stabilizing the Incident Commander must:

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

3. **Determine Incident Objectives, Strategy, and Tactical Direction**

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

have more steps and are more detailed than others. A suggested four-phased approach is offered below:

A. Know Agency Policy

The Incident Commander may not always be an employee of the agency or jurisdiction experiencing an incident. Therefore he must be fully aware of agency policy.

This includes any operating or environmental restrictions, and any limits of authority. Agencies will vary on how this policy is made known to the Incident Commander. Agency policy can affect the establishment of incident objectives.

B. Establish Incident Objectives

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

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

C. Develop Appropriate Strategy

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

D. Execute Tactical Direction

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

Tactical Direction consists of the following steps:

1. Establish Tactics

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

2. Assign Resources

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

3. Monitor Performance

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

4. Monitor Scene Safety

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

5. Establish and Monitor Incident Organization

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

6. Manage Planning Meetings as Required

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

7. Approve and Authorize the Implementation of an Incident

Action Plan

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

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

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

9. Authorize Release of Information to the News Media

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

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

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

6.3.2 Information Officer

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



Reasons for the IC to designate an Information Officer

- ◆ An obvious high visibility or sensitive incident media demands for information may obstruct IC effectiveness.
- ◆ Media capabilities to acquire their own information are increasing.
- ◆ Reduces the risk of multiple sources releasing information.
- ◆ Need to alert, warn or instruct the public

The Information Officer should consider the following when determining a location to work at the incident.

Be separate from the Command Post, but close enough to have access to information.

An area for media relations and press/media briefings must be established. Information displays and press handouts may be required.

Tours and photo opportunities may have to be arranged.

6.3.3 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.



**LIAISON
OFFICER**

Reasons for the IC to designate a Liaison Officer

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

When the IC can no longer provide the time for individual co-ordination with each agency representative.

When it appears that two or more jurisdictions may become involved in the incident and the incident will require on-site liaison.

6.3.4 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

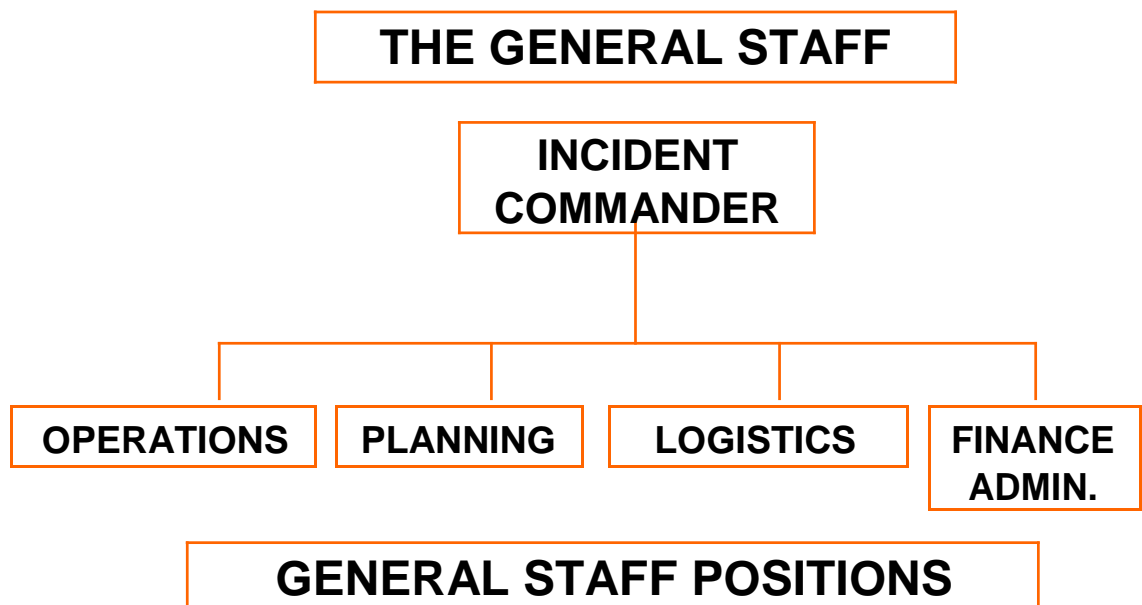
responsibilities such as air operations, hazardous materials, etc. The Safety Officer will correct unsafe situations by working through the chain of command. However, the Safety Officer may exercise emergency authority to directly stop unsafe acts if personnel are in imminent life-threatening danger.



6.4 Role and Responsibilities of ICS General Staff

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



6.4.1 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 :

- Ground or surface-based tactical resources
- Aviation (Air) resources – helicopters and fixed-wing aircraft
- 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:

- Single
- Resources
- Task Forces
- Strike Teams

Depending on the need, tactical resources can be placed into an operations organization made up of:

- Resources reporting to the Incident Commander or Operations
- Section
- Chief
- Divisions or Groups
- Branches

2. Aviation (Air) Resources

Many incidents require the use of tactical or logistical aircraft to support the incident. In ICS, all aviation resources assigned for exclusive use of the incident are assigned to the Operations Section. These include aircraft providing logistical support.

The Operations Section Chief may establish a separate Air Operations Branch when

- The complexity of air operations and/or the number of aircraft assigned to the incident requires additional management support

- The incident requires both tactical and logistical use of air support

When the air operations organization is formally established on an incident, it will be set up as an Air Operations Branch within the Operations Section.

3. Staging Areas

The third 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.

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

6.4.2 Planning Section

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

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

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

Chemist
Hydrologist
Geologist
Meteorologist
Training Specialist

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

- 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:

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

2. Situation Unit

The collection, processing, and organizing of all incident information takes place within the Situation Unit. The Situation Unit may prepare future projections of incident growth, maps, and intelligence information. Three positions report directly to the Situation Unit Leader

- Display Processor – maintains incident status information obtained from

- Field Observers, resource status reports, etc. information is posted on maps and status boards as appropriate.

- Field Observer – Collects and reports on situation information from the field.

- Weather Observer – Collects current weather information from the weather service or an assigned meteorologist.

3. Documentation Unit

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

4. Demobilization Unit

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

5. Technical Specialists

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

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

Planning Section Chief
A designated Unit Leader

Some examples of the more commonly used specialists are :

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

6.4.3 Logistics Section

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

Six Units may be established within the Logistics Section :

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

1. Supply Unit

The Supply Unit is responsible for ordering, receiving, processing and storing all incident-related resources.

All off-incident resources will be ordered through the Supply Unit, including:

- ◆ Tactical and support resources (including personnel)
- ◆ All expendable and non-expendable support supplies.

Two Managers report directly to the Supply Unit Leader:

Ordering Manager – places all orders for incident supplies and equipment. Receiving and Distribution Manager – receives and distributes all supplies and equipment (other than primary tactical resources) and is responsible for the service and repair of tools and equipment.

2. Facilities Unit

This unit is responsible for set-up, maintenance, and demobilization of all incident support facilities except Staging Areas. These facilities are :

- ◆ Incident Command Post
- ◆ Incident Base
- ◆ Camps
- ◆ Other facilities within the incident area to be used for feeding, sleeping, and sanitation services.

The Facilities Unit will also provide security services to the incident as needed.

Three managers report directly to the Facilities Unit Leader. When established at an incident, they have important responsibilities.

- a) **Security Manager** – provides safeguard necessary for protection of personnel and property from loss and damage.
- b) **Base Manager** – ensures that appropriate sanitation, security, and facility management services are in place at the Base.
- c) **Camp Manager** – or more camps may be established. Activities at the camps may include many of those regularly performed at the Base. Camp Managers are responsible for providing non-technical coordination for all the units operating within the camp

3. Ground Support Unit

The Ground Support Unit is responsible for the maintenance, service, and fueling of all mobile equipment and vehicles. The Unit also has responsibility for the ground transportation of personnel, supplies, and equipment and the development of the Incident Traffic Plan.

4 Communications Unit

The Communications Unit is responsible for developing plans for the use of incident communications equipment and facilities, installing and testing of communications equipment, supervision of the Incident Communications Center, and the distribution and maintenance of communications equipment.

5. Food Unit

The Food Unit is responsible for supplying the food needs for the entire incident, including all remote locations as well as providing food for personnel unable to leave tactical field assignments. Planning is essential to the efficient supply of food. The Food Unit must anticipate the number of personnel to be

fed and develop plans for supplying food to all incident areas.

6. Medical Unit

The Unit will develop an Incident Medical Plan, develop procedures for managing major medical emergencies, provide medical aid, and assist the Finance/ Administration Section with processing injury-related claims.

6.4.4 Finance / Administration Section

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

- ◆ Time Unit
- ◆ Procurement Unit
- ◆ Compensation /Claims Unit
- ◆ Cost Unit

1. Time Unit

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

3. Procurement Unit

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

3. Compensation / Claims unit

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

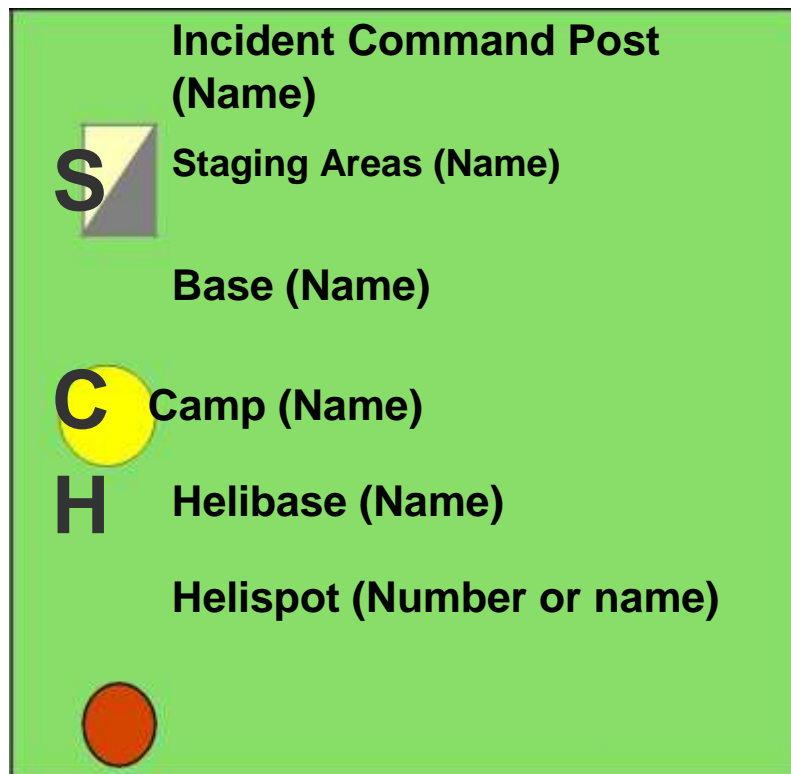
Two Specialists report to the Compensation / Claims Unit Leader :

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

4. Cost Unit

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

Map Designations for ICS Facilities



6.5 District Search and Rescue Team

S.No.	Name and Designation	Office Address	Contact No.
01	Shri Nishikant Deshpande, Commissioner, NWCMC Nanded	NWCMC Main Office Shivaji Chouk Nanded	9403689444 02462-234461
02	Dr. Mirza Farhatulla Baig	RDMO	9011000950 02462-234461

Incident Commanders.

Executive Group I

S.No.	Name and Designation	Office Address	Contact No.
01	Shri. Shaikh Rais Pasha Hamidoddin	Chief Fire Officer Nanded Fire Brigade	90110009920 2462-252555
02	Shri A R Raheman (Boat Driver)	Fireman & Rescuer	8888578861
03	Shri LD Ghorpade	Fireman & Rescuer	8421226700
04	Shri. DK Kadam	Fireman & Rescuer	8806833433
05	Shri. Sk Salve	Fireman & Rescuer	7387656924
06	Shri RN Jondhale	Fireman & Rescuer	9411933732
07	Shri Sainath Badewad	Fireman & Rescuer	7685624349

Executive Group II

S.No.	Name and Designation	Office Address	Contact No.
01	Shri. Tanaji Chikhale, ASP	Distt. Homeguard Cmndt	9823058700
02	Shri A N Shaikh	Coy. Subedar	
03	Shri Dilip S. Tidke	Homeguard	9850241920
04	Shri Balaji Gavandale	Homeguard	9970520963
05	Shri Nemaji Nandane	Homeguard	9860128493
06	Shri Prabhakar Komatwar	Homeguard	8149712063
07	Shri Shivaji Kokare	Homeguard	8975162918
08	Shri. Sayyad Imran Ali	Homeguard	9890129937
09	Shri. Laxman T Hiware	Homeguard	

S.No.	Name and Designation	Office Address	Contact No.
01	Shri Nana Dipak Linge	PSI Quick Reaction Team District Police HQ Nanded	02462-234031 Hot line 203 9881518180
02	Shri. BS Thakur PC 1527	Quick Reaction Team District Police HQ Nanded	9923087819
03	Shri SP Kambale PC 2861	As above	8888817484
04	Shri BV Satpute PC 900	-As above-	9823216771
05	Shri YS Kasar PC 2618	-As above-	8805001569
06	Shri DB Thadke PC 3151	-As above-	9011083685

07	Shri GA Kangulwar PC 412	-As above-	8484949426
08	Shri BM Bodke PC 3195	-As above-	9657723195

Technical Support Group-III

S.No.	Name and Designation	Office Address	Contact No.
1	Shri Rajesh Bhusari	District Information And Scientific Officer NIC Nanded	9403689666
2	Shri Nishikant Todkar	District Information Officer, District Info Office	9881747323
3	Dr. Ashish Talanikar	Medical Officer Indian Red Cross Society Nanded	9881090996
4	Shri DK Admane	Dy. Executive Engineer	
5	Dr. Balaji Shinde	DRCH Officer, DHO, ZP Nanded	9422171761
6	Dr. Rode Durgadas	Medical Officer, ZP Nanded	9420668435
7	Smt. Madhuri S. Jarange	Medical Assistant, Govt Medical Hospital Nanded	9823506473

Administrative Support Group-IV

S.No.	Name and Designation	Office Address	Contact No.
1	Shri Jairaj Karbhari	SDO Nanded	9421658299
2	Shri SD Kapale	Dy.CEO, ZP Nanded	9960726252
3	Shri KB Kambale	AK SDO Office Nanded	9860922766

District Level Medical Team

The following district level medical team will be activated at the time of emergency which consist of doctors, nurses, pathologist, etc.

6.7 Involvement of Defence and Paramilitary Forces

At district level whatever help would be required during disaster that will be immediately informed to the various departments by the district collector and possible support NGOs and other line agencies in the district would be tapped up. If the District Collector thinks that it cannot cope with the disaster then he can ask help from the defence and paramilitary force.

Important Contact Numbers

Departments	Contact	Contact Nos.
Navy		
Maritime Operation Center, Mumbai	Commander Dhoot	022-22704672 / 22703743 / 226305 50
INS Shivaji (Lonavla)	Commanding Officer	952114-284304 / 284735 / 284861 (exnt 284701
Air Force		
Southern Western Air Command Head Quarter, Gandhinagar.	Duty Officer	079- 23221200
Air Force Station Cotton Green	Group Captain	022-23714982 / 4902 / 4947 Mob. 9869058025
Army		
Military Exchange, Coast Guard		9522-2215 1701
17 th Rajput (Unit)		221633 20
Civil Defence & Home Guard		
Civil Defence Head Office, M		9522-2284 3667 / 4171
Civil Defence, Pune		2636004 9520 – 1, 226361072, 26360067
Civil Defence, Nashik		95253 – 2573149
Civil Defence, Kalyan		95251 – 2313494 / 2317578
Civil Defence, Thane		9522 – 25342288

Civil Defence, Uran		9522 – 27222343 / 272213 55
Civil Defence, Tarapur		952525 – 264677 / 78
Home Guard Head Office, Mum		9522 – 2284 2423 / 6941
Police		
D. G. P. Control		9522 2202 6636, 2282 2631
Geological Survey of India		
Director, GSI, Pune	D. T. Kamble	Tele /Fax : 020 - 26696489
Mukund Ltd. (Rescue Team)	Lt. Gen. V. M. Patil	25347373/ 25348181 / 9324645587
National Disaster Response Force (NDRF)	Comndt.	02114 – 231509

6.7.1 NDRF in Disaster Management

Ministry of Home Affairs, Government of India National Disaster Response Force, has raised the National Disaster Response Force (NDRF). The two broad mandate of NDRF is to undertake search and rescue operations during disaster and conduct training and capacity building programme during peace time. One of the battalions of NDRF is stationed at Talegaon,

Pune and Maharashtra is one of its operation areas. During disaster, the NDRF may be called for search and rescue operation while services of NDRF can also be utilized for conducting capacity building and training programmes for different response groups. The contact details are:

Comdt.
145, Bn. CRPF (NDRF)
Talegaon, PO Vishnupuri
Pune, Maharashtra Pin – 410
507 Unit Control Room 02114 –
231509 Fax 02114 – 281241
Mob. 09423578445
E –mail: 145crpf @ gmail.com, Mrjssandhu@Sancharnet.in

6.8 Temporary Shelter Management

In many emergencies, local authorities would set up public shelters in schools, municipal buildings and places of worship. While they often provide water, food, medicine and basic sanitary facilities.

Living in Designated Emergency Shelters

- ◆ Stay in the shelter until the local authorities say it's safe to leave
- ◆ Restrict smoking and ensure that smoking materials are disposed off safely.
- ◆ Cooperate with local authorities and others staying in the shelter.
- ◆ Listen to radio broadcasts
- ◆ Watch out for fires
- ◆ Assist local authorities and volunteers in the management of water, cooked food and other relief supplies including medical care, if required.
- ◆ Make arrangement for pets and cattle before going to a public shelter.
- ◆ Organize recreation for children.
- ◆ Assist local authorities with the assistance of community members to maintain law and order.
- ◆ Immunize the population against epidemics.

6.9 Relief Management

management
Relief should be done carefully so that all the victims will be benefited from the limited resources and manpower. In this regard the following activities must be assigned to related desks while serving the people in disaster hit areas. Though it is clearly mentioned in the ICS, still the specific functions of the various desks are given below:

Functions of Infrastructure Desk

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

Functions of Logistics Desk

- ◆ 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

Co-ordination with

Site Operations Center
District Control Room
District administration staff in the area
NGOs
Private donors

B. Manage

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

C. General

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

Functions of Services Desk

Relief supplies to families or to households including water, clothing, and food.
Arrangements for dry rations and family kits for cooking within two weeks of the disaster.

Promotive services for mental health.

- ◆ Restoration of family (including locating missing children, relatives, friends.)
- ◆ Assistance in locating missing cattle.
- ◆ Assisting students to continue with their studies.
- ◆ Services for the orphans.
- ◆ Assisting individuals with special needs (pregnant women, infants, handicapped, old etc).
- ◆ Counseling services.

Functions of Resources Desk

Maintenance of

- ◆ Books of account for all cash receipts
- ◆ Books of account for all cash disbursements
- ◆ Stock register for all relief materials
- ◆ Issue register for all relief materials
- ◆ Dead stock register for all non-consumables (inventory)
- ◆ Record of all personnel payment on TA&DA, daily wages and other incidentals made to relief personnel.
- ◆ Records of all transfer of funds (as advances) to other government departments (suspense account)
- ◆ Records of all cash vouchers and credit vouchers.
- ◆ Records of all gratuitous relief.
- ◆ Records of all compensation paid.

Preparation of records relating to finance and accounts as per the formats for dispatch to Emergency Operations Center.

General

All cash donations must be deposited with District Control Room and a receipt for the same should be obtained.

All material donations must be entered in stock register and made available for inspection to officer from the District Control Room or Site Operations Center.
Maintain record of all issue of cash vouchers and credit vouchers for petrol and diesel.

6.10 Rapid Damage Assessment and Reporting

Rapid Damage Assessment Team should be set up immediately after the disaster. It should include Z.P. members, agricultural officer to assess the crop damage, executive engineer of PWD to assess the damaged houses, S.P to maintain the law and order situation, NGOs and volunteer organizations, Tahsildar, etc. This team may immediately assess the damage undergone due to disaster and report it to the concerned department to get the immediate relief material from the government and also the foreign aid. Damage assessment procedures are required to avoid litigations and delays in gratuitous relief and compensation, including insurance.

6.11 Communication

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, 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 the truest information as far as possible. Rumours should not be spread. The correct numerical data should be published so that the public is not misguided.

6.12 Law and Order

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

6.13 Public Grievances /Missing Persons Search

A committee at the district level has to be constituted under the chairmanship of the District Collector to address the grievances of the public regarding missing persons. The search and rescue team should search for the missing persons living or dead.

6.14 Animal Care

The animal husbandry departments with necessary equipments in case of cattle death are there in the affected areas for the disposal of carcass with a view to restoration of public life and result oriented work. Make arrangements to treat the injured cattle. To vaccinate the animals against various diseases. Arrangement for pets and cattle should be made separately.

6.15 Management of Deceased

The Carcasses Disposal team is responsible for the clearing of carcasses after the disaster. The team should put in all efforts to check spread of diseases by disposing off the carcasses at the earliest and in the right manner. The health department will immediately start the procedure for post mortem of the dead persons as per the rules. Disposal of dead bodies is to be carried to prevent the outbreak of epidemics. Arrangement should be made to issue death certificates of the deceased to the relatives.

6.16 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. NGOs and Voluntary organizations would contribute in the following areas:

- ◆ Ensuring communication links both within the community and with the administration.
- ◆ Controlling rumors and panic behavior and undertaking confidence building activities.
- ◆ Organizing local work teams for immediate rescue, and relief e.g. cooked food, first aid, and assistance in law and order.
- ◆ Assisting the handicapped that need special help.
- ◆ Guarding major installations and evacuated properties till the administration takes over.

.17 NSS / NCC Students

The NSS and NCC students' help may be used during disaster for relief and rescue operation of the people. In colleges, such groups are formed and trained every year in disaster management. So, proper coordination should be developed with the college authorities to get timely help from them.

The following table provides the address and the type of group the colleges in Nanded district have:-

NCC Holder Colleges of Nanded District

SNo.	Name and address	Contact Number
01	Peoples College Nanded	02462-533511
02	NES Science College Nanded	02462-251648
03	Netaji Subhashchandra Bose College Nanded	02462-251648
04	Yashwant College Nanded	02462-254170
05	SGM College Loha	02466-242787
06	Shivaji College Kandhar	02466-223446
07	Degloor College Degloor	02463-255074
08	LBS College Dharmabad	02465-223468
09	Baliram Patil College Kinwat	02469-222040

NSS Holder Colleges

SNo.	Name and address	Contact Number
01	Peoples College Nanded	02462-533511
02	NES Science College Nanded	02462-251648
03	Netaji Subhashchandra Bose College Nanded	02462-251648
04	Yashwant College Nanded	02462-254170
05	SGM College Loha	02466-242787
06	Shivaji College Kandhar	02466-223446
07	Degloor College Degloor	02463-255074
08	LBS College Dharmabad	02465-223468
09	Baliram Patil College Kinwat	02469-222040
10	KRM Mahila College Nanded	02462-234515
11	Shahir Anna Bhau Sathe College Mukhed	02461-222210
12	DB College Bhoker	02467-222892
13	Arts & Commerce College Hadgaon	02468-222547

7. RECOVERY AND CONSTRUCTION PLAN

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.

7.1 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 government as well as affected people is significant to deal with all the issues properly.

- 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
- Reconstruction as Housing Replacement
- Policy Awareness and capacity building
- Housing insurance
- Grievance redressal

7.2 Administrative Relief

The district is the primary level with requisite resources to respond to any natural calamity, through the issue of essential commodities, group assistance to the affected people, damage assessment and administering appropriate rehabilitation and restoration measures.

The district level relief committee consisting of official and non-official members including the local legislators and the members of parliament review the relief measures.

A district is sub-divided into sub-divisions and tahsils or talukas. The head of a sub-division is called the Sub-Division Officer (SDO) while the head of a Tahsil is known as a Tehsildar.

When a disaster is apprehended, the entire machinery of the district, including the officers of technical and other departments, swings into action and maintains almost continuous contact with each village in the disaster threatened area.

7.3 Reconstruction of Houses Damaged / Destroyed

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

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

7.4 Military Assistance

If the district administration feels that the situation is beyond its control then immediate military assistance could be sought for carrying out the relief operations.

7.5 Medical Care

Specialized Medical Care may be required to help the affected population. Preventive medicine may have to be taken to prevent outbreak of diseases.

7.6 Epidemics

In the relief camps set up for the affected population, there is a likelihood of epidemics from a number of sources. The strategy should be to subdue such sources and immunize the population against them. The public health centres, health departments can practice vaccination drives, public awareness to drink boiled water, use chlorine tablets to purify the water sources.

7.7 Corpse Disposal

Disposal of dead bodies is to be carried out as a part of the operation to prevent outbreak of epidemics. Minimum official requirements should be maintained as it is a very sensitive issue. The following points may be considered by the concerned authorities at the time of corpse disposal:-

1. Mass photographs of corpses,
2. Consent of the relatives or hand over to them
3. Make a panchnama of concerned localities.

7.8 Salvage

A major effort is needed to salvage destroyed structure and property. Essential services like communications, roads, bridges, electricity would have to be repaired and restored for normalization of activities.

7.9 Outside Assistance

During disaster situations, considerable relief flows in from outside, thus there is an immediate need to co-ordinate the relief flows so that the maximum coverage is achieved and there is no duplication of work in the same area.

7.10 Special Relief

Along with compensation packages, essential items may have to be distributed to the affected population to provide for temporary sustenance.

7.11 Information

Information flow and review is essential part of the relief exercises. Constant monitoring is required to assess the extent of damage, which forms the basis of further relief to the affected areas.

7.12 Social Rehabilitation

Disabled persons

Artificial limbs fitted to affected persons.

Modern wheelchairs, supportive devices provided.

Children

Orphaned children are fostered.

Day centers 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.

Infrastructure

Power
Water supply
Public buildings
Roads and Bridges
Dams and Irrigation.

8. STANDAR OPERATIONG PROCEDURE

8.1 Standard Operating Procedures

8.1.1 Revenue Department

A. Normal Time Activities

A map of disaster prone areas in the district, history of the district, geographical conditions occupational details, settlements, rain, irrigation and industries etc. Safe alternative routes to utilize during disaster in the disaster prone areas.

Key officers of all the departments, staff, vehicles and buildings. Details of control room arrangement.

Details of geographical groups and assignment of Zonal Officer.

Details of food grain storage places in the district and the Fair Price Shops. Details of vehicles, boats and equipments available in the district for rescue operation.

Setting up of communication to communicate the messages from village to village.

Details of operating systems for District Disaster Management Committee. List of NGOs and self help groups and their addresses and phone numbers in the district in the prescribed annexure

Orientation Training to various District level officers and departments for effective functioning of control room, co-ordinations and operations.

Details of salt pan workers and fisherman who can become the victims of Disasters and sufficient arrangement to contact the owners of saltpan.

Special appointments of persons in charge of control room.

Hazard analysis, seasons, and possibilities of disasters and review of disaster history.

Review of disaster prone areas, risks, response plan, resource and utility of resources and equipments.

Strategy for disaster management To update the DDMP.

To check the condition of safe shelter during his visits in the district places and if necessary gets it repaired by co-coordinating with the local authorities, available financial resources and voluntary organizations.

Repairing of roads and ways leading to safe shelters by co-ordinating with various development plans/schemes.

Evacuation plan as a part of DDMP.

To undertake development projects like rural housing, scarcity of relief works, disposal of rainwater and water conservation and water harvesting. To co-ordinate scheme for poverty eradication, self-employment and the schemes of other departments.

B. On receiving the warning

Will review the alarming situation in the meeting of DDMC.

Assigning the work as to what to be done by which officer in case the disaster hits.

Will review and have co-ordination task

Will alert and activate the functionaries' related to early warning and communication looking to the possibilities of disaster and will see that the messages are intimated to the members.

Distribution of work for operation of round the clock control room.

Will send the vehicles with mikes and sound system for the areas of top priorities. Will instruct all the staff to remain present at their respective places.

Shifting the people living in low lying areas, seashores, and economically weaker people socially and economically backward families and houseless families to safe places.

Will workout the arrangements for search and rescue operation, shifting of people and utilization of human resources as per necessity with the help of DMTs and local community through zonal officers.

Will arrange for temporary shelter for the people evacuated by giving the warning in advance.

Will provide the vehicles to shift the people to the safer place when necessary. Will undertake the operation of forceful evacuation of people if they are not ready to leave even after warning.

Will arrange for food, drinking water, medicines at temporary shelters and relief camps with the help of local NGOs, doctors, industrial houses, etc.

Will make in advance preparations for relief activities through local NGOs, industrial houses, and donors over and above normal norms of the relief.

Will work out the financial estimates for search and rescue and immediate relief.

C. Post Disaster Activities

Will segregate the villagers and areas victimized by the disaster and activate the DMTs.

Will start relief activities including emergency relief distribution and work out the strategy of damage assessment and provide the formats for the same and explain to all the staff members.

Will guide the team members about the payments of relief accident to damage as per the rules and policies of the government before the start of duty.

Will make arrangements for the transportation and distribution of Govt. relief amount and materials.

Will make due arrangements to see that there should be no haphazard distribution of relief material so that needy people are not deprived of it.

Will arrange for drinking water and essential things at community kitchen / relief camps as per the necessity.

Will work out the primary estimates of the damage.

Will undertake the rescue operations to save the trapped people through DMTs trained police personnel and swimmers on need base.

Will requisite more vehicles for rescue work, shifting the people to temporary/permanent dispensary for treatment through DMTs, NCC, Home Guards, Local Police, and Para Military Forces etc.

Will arrange for identification of the people, who died, maintain the dead bodies till legal procedure is over.

8.1.2 Police Department

A. Normal Time Activities

The Superintendent of Police will co-ordinate the work of disaster management as nodal officer. He will prepare a separate and comprehensive plan of district regarding the department of police and also prepare details of resources as a part of DDMP. He will consider the following in it.

Details of contacts of all the staff members under the district. Maps and statistical data of district areas.

Resources and human resources useful at the time of disaster.

Details of police staff and retired officers/staff of the police and the control room. Details of functions of staff of the district control room.

Appointment of the nodal officer in the control room. Traffic arrangements towards the disaster affected areas. Details of anti social elements.

Security arrangements at relief camps and food storages. Security for the transportation of the relief material.

Immediate police procedures for human death.

To assist the authorities for the evacuation of people from disaster affected areas. Adequate equipments for communication.

List of swimmers.

Wireless stations in the district and communication network. To update the related details of Disaster Management Plan.

B. On receiving the warning

Will contact the district collector.

Make advance preparation to implement the action plan for search and rescue. Will prepare a plan for police personnel for search and rescue.

Will arrange to communicate the messages through all the equipments of communication and vehicles as per the necessity.

Will requisite vehicles after obtaining the orders for the same from the district authorities.

C. Post Disaster Activities

Will arrange law and order against theft in the disaster affected area.

Will co-ordinate the search and rescue operation through NCC/VTF/NGO. Will arrange for security at the relief camps/relief materials storages.

Will see the law and order is maintained at the time of distribution of relief material.

Will assist the authorities for evacuation of people to the safer places. Will make due arrangements for post mortem of dead persons, and legal procedure for speedy disposal.

8.1.3 Health Department

A. Normal Time Activities

While preparing the DDMP / updating the same, the health department shall take care to include the following particulars carefully.

A separate plan for disaster management regarding health. Arrangements for exchange of information in the control room. Appointment of nodal officer.

Advance arrangements for life saving medicines, insecticides and vaccines. Maintenance of vehicles such as ambulance, jeep and other equipments such as generators etc.

Distribution of work by forming groups of staff during emergency. List of private practicing doctors / medical facilities. Arrangement for survey of disaster.

Mobile dispensary units.

Information regarding proper places for on the spot medical services in various village during disaster.

Dissemination of information among the people regarding the death, injury. Primary information of disaster related relief activities to all the staff members. Training to PHC / Community Health Centre staff to prevent spreading of diseases among the people, animals, and advance planning for the same.

Blood group wise list of blood donors with contact telephone numbers and addresses.

Training of DMTs regarding first aid.

To prepare an action plan for the availability of equipments to be useful at the time of disaster management for medical treatment.

Co-ordination with various government agencies – schemes to meet the necessity of equipments in emergency.

To see that all vehicles like ambulance, jeep and equipments like generators and equipments essential for health care are in working condition.

B. On receiving the warning

Will ensure the availability of important medicines, life saving medicines, insecticides and if necessary contact for additional supply.
Round the clock control room at the district level.
Will send the health staff for duty in their areas as per the plan of disaster management.
Activate the mobile health units for the post disaster situation.

Will organize in advance to mobilize the local doctors and local voluntary agency for emergency work.
Will contact the blood donors for blood donation, on the basis of lists prepared.

C. Post Disaster Activities

Provide first aid to the injured and shifting of seriously injured people to the nearby hospital.
Send sufficient stock of medicines to the affected areas immediately.

Will make arrangements for the available additional health staff in the affected areas deputed by the state authority.
Will organize to get the insecticides to prevent spreading of diseases. Will ensure the purity of drinking water by testing the sources of water. Will depute the mobile units for first aid.
Distribution of chlorine tablets and other necessary medicines from house to house.
Will shift the seriously injured people to the hospital.
Will immediately start the procedure for post mortem of the dead persons as per the rules.

8.1.4 Water Supply Department

A. Normal time activities

The water supply dept. shall ensure the following to be included in the DDMP:-

Setting up of control room and arrangement for the control room operator.
Assign the responsibility as nodal officer to the Executive Engineer or any other officer.

Prepare an alternative contingency plan to provide drinking water in case of failure of regular water distribution system during disaster.
Detailed information of available water resources throughout the district.
Arrangement of Govt. or private tankers to provide water temporary and immediately.
Preventive measures for water borne diseases and chlorination of water. Availability of safe drinking water in the affected areas.
Inform the staff about the disaster.

B. On receiving the warning.

Organize the teams to check the sources of water / drinking water.

Standby arrangements of tankers for drinking water through tankers or any other available source.

Will make available chlorine tablets in sufficient quantity and arrange to distribute through DMTs.

C. Post disaster work.

Implement the alternative contingency plan to provide drinking water in case of failure of regular water distribution systems during disaster.

Will start work for immediate repairing of water pipes in case of damage.

Will arrange to check the water tanks, overhead tanks, and pumps, reservoirs and other water resources.

Will contact the electricity authorities to re-establish the electric supply in case of failure.

Will provide chlorinated water either by activating group water supply schemes individual schemes or through tankers.

Will provide drinking water to the relief camps / relief kitchens, shelters etc. through available resources.

8.1.5 Irrigation Department

A. Normal time activities

The irrigation department shall carefully include the following particulars while preparing / updating the DDMP:-

Contact address and phone numbers of all the staff / officers, vehicles and swimmers of the District.

Details of irrigation related factors in the district such as rivers, pools canals, large and medium dams, etc.

Control room arrangements and appointment of Nodal Officer. Details of damage prone areas.

Location of water level gauge station for flood situation.

To disseminate information /warning to the damage prone areas in case of flood situation.

Details of immediate action to be taken in case of leakage in large water storage reservoirs.

Supervision over major storage / reservoirs.

Very clear explanation of disaster and priorities during disasters to all the staff. Effective working of control room at every major dam.

Enough and ultra modern equipments for communication.

Periodical checking of Dam /Waste veer, canal –tunnel, roads leading to Dams etc. for maintenance during normal time.

B. On receiving warning

Ensure that communication equipments like telephone, mobile phone, wireless set and siren etc. are in working conditions.

Keep the technical and non-technical staff under control, ready and alert.

Get status report of ponds, dam, canal and small dams through technical persons. Will take decision to release the water in

consultation with the competent authority and immediately warn the people living in low lying areas in case of increasing flow of water or overflow.

Keep the alternative arrangements ready in case of damage to the structure of dam / check dam to leakage or overflow in the reservoirs.

Make due arrangements to disseminate the information about the increasing and decreasing water level whatever it may be to the community, media etc.

A senior office will remain and work accordingly at large storage reservoirs. Will arrange to provide the dewatering pumps, generators, trucks and bulldozers, excavator, boats for search and rescue operations wherever required.

B. Post disaster work.

Will obtain the clear picture of the condition of all the reservoirs through teams of technical officers.

Ensure about no overflow or no leakage.

If overflow or leakage is found, start immediate action to avoid adverse effect to the reservoir as per the action plan.

If there is no possibility and risk, keep the people and media informed about "everything is safe".

If overflow or any leakage is found, he will immediately warn the people living in the low lying areas.

Will take due care for the transportation of drinking water if drinking water is provided through irrigation scheme.

Will assist the local administration to use boats, dewatering pumps, etc. search and rescue operations.

8.1.6 Agriculture Department

A. Normal time activities

All the details of his subordinate staff with addresses and phone numbers and resources of irrigation for agriculture in all the villages.

Details of buildings, vehicles and equipments under his control and list of contractors with vehicles and equipments used by them.

Maps showing details of agricultural resource laboratory, seed center, agriculture training school with statistical data.

Details regarding agricultural production, extension, seed growth centers, agriculture university campus, training centers etc;

Action plan regarding the repair/alternative arrangement in case of agricultural production related facilities are disrupted.

Will prepare the action plans to avail the technical, semi technical and administrative employees along with vehicles from near by district and taluka offices.

Will inspect the sub-ordinate offices, other centers and sub-centers under his control, which are damage prone.

Will prepare a sub-plan for timely and speedy availability of machines and equipments to restoration of the economic activities in case of loss of

properties as well as crops.

Will maintain the departmental equipments such as diesel generators, dumpers, generator, cutters, tree cutters, ladders, ropes, flood lights, shovels, axes, hammers, RCC wires, fire equipments, de-dusting cutters, cable equipments etc; which can be used during emergency and ensure every 3 months those are in working condition.

Will prepare a list of public properties related to agriculture in the damage prone areas and will in advance make arrangements to lessen the damage.

Will take due care to see that the emergency services at hospital, shelters, with special reference to agriculture are not disrupted.

B. On receiving warning

Will immediately contact the District Control Room and will assist in the work assigned to him as a part of his duty.

Will ensure that the staff under this control is on duty at the headquarters.

Will assign the work to his subordinate officers and staff the work to be done regarding agriculture under DDMP and will send them to their sites.

Will receive instruction from the district liaison officer and will take necessary action.

Will ensure the availability of resources included in the DDMP and will make due arrangement to get those during emergency. Will make groups having vehicles for emergency work and will assign the areas to them.

Will set up a temporary Control Room for the dissemination of information for emergency work and will appoint a nodal officer.

C. Post Disaster Activities

Will follow the instruction of the District Liaison Officer.

Will carry out the duty assigned to him for search and rescue work.

Will deploy the resources and manpower available to manage the disaster.

Will review the matters regarding discontinuation of movement for safety measures and will see that it is restarted very soon.

Will send DMTs with necessary equipments in case the crop is washed away, and if there is water logging in a very large amount.

Will act in such a way that the human life is restored again speedily and timely in the priority areas.

Will contact the circle office or central control room if machines equipments, vehicles, man power, technical personnel are required to restore the agricultural activities.

Will make arrangement to avail the external helps to manage to disaster. Will collect the details of loss of crops to send it to the district administration. Should have the details of village wise various crops in the district.

Will prepare a primary survey report of crop damage in the area and will send the same to district control room and also to the administrative head

Will immediately put the action plan in real action during the emergency.

8.1.7 M.S.E.D.C

A. Normal time activities

While preparing a separate plan regarding M.S.E.D.C /Energy Department will prepare the list of available resource as a part of DDMP. It will include the following:

Details of the staff members with their contact addresses and telephone numbers.

Maps showing the power stations, sub-stations, Diversification of Power units (DPs), transformers and major electric lines with detail information.

Other important details like water supply scheme depending on electricity, drainage systems, railway stations, bus-depots, ports, strategically important places, army, air force, navy camps, light houses, major hospitals and for that he will check and ensure of electric supply during emergency.

Prepare an action plan for repairs / alternative arrangement in the case of electricity disruption as a part of DDMP.

Inspect at every 3 months the power stations. Sub-stations etc; which are damage prone.

The, plan should include for timely supply of electric poles, D.Ps, transformers etc; at the time of line disruption.

To prepare an action plan for immediate procurement of the required tools and equipments for restoration of electric supply on temporary bases.

To prepare a list of public properties related to M.S.E.D.C, which are in the damage prone areas and will make advance arrangements to minimize the damage.

B. On receiving the warning

To contact the District Control Room and assist in their work.

To ensure that all the employees remain present on duty at the taluka head quarter.

To assign work to all officers/employees related to M.S.E.D.C.

Will ensure to make available the resources available and will establish contacts for the same to deploy those at the time of emergency, which are included in the DDMP.

To consult the District Liaison Officer to discontinue the supply in case of damage in the line or for the safety of the people and property.

To make groups having vehicles for the emergency work and will assign the areas.

To immediately set up a temporary control room in the office for dissemination of information during the disaster and will appoint a nodal officer from MSED C for this work.

C. Post Disaster Activities

To follow the instructions of the district liaison officer.

To perform the duties assigned for the search and rescue work.

To deploy the resources and manpower required for the disaster management.

To dispatch the task forces with necessary equipments to the place where the electric supply is disrupted and ensures that the same is restarted at the earliest. Contact the circle office or the Central Control Room of MSEDCL to

procure the machines and equipments, vehicles, manpower, technical {personnel for restoration of the electric supply.

To utilize the external resources and manpower allotted to him in a planned manner for disaster management.

To immediately undertake the emergency repairing work as mentioned in the action plan.

To prepare a primary survey report regarding damage in the area and send the same to the district control room and to the own administrative head immediately.

To make temporary arrangement for electric supply to the places like hospitals, shelter, jail, police stations, bus depots etc; with D.G. sets in.

8.1.8 Public Works Department

A. Normal time activities

Details of the staff members with their contact addresses and telephone numbers. Details of buildings, vehicles and equipment as well as the names of contractors and the vehicles & equipment used by them.

Maps of the areas in the district with the statistical data related to available resources.

The position of approach roads and other road of all the villages including bridges, railway crossing etc.

To strictly observe the rules during the constructions regarding earthquake and cyclone proof materials.

The PWD will inspect periodically the buildings, residences, high rise buildings under their control.

Damage prone road bridges and arrangement for their inspections Action plan for emergency repairs.

Will appoint an officer of the rank of Assistant Engineer to coordinate during emergency at the District Control Room.

Will maintain the departmental equipments such as bulldozers, tractors, water tankers, dumpers, earthmovers excavator, de-watering pumps, generators, cutters, tree cutters, ladders, ropes, flood lights, shovels, axes, hammers, RCC cutters etc; which can be used during emergency and will quarterly check up these to ensure in working condition.

B. On receiving the warning

Will immediately contact the District Control Room for assistance.

Will ensure that all the staff members remain on duty at the headquarters.

Will send the officers and the staff assigning them specific duties for the DDMP Undertake all the action for the disaster management required to be done by the PWD after receiving instructions from district liaison officer.

C. Post Disaster Activities

Will follow the instructions of the District Liaison Officer Will remain active for search and rescue activities

Will provide all the available resources and manpower for disaster management. Will mobilize the service of technical personnel for the damage survey work to help the district administration

Will prepare a primary report of damage in the affected area within 12 hrs / 24 hrs looking to the emerging situation

Will make arrangements for electricity, water, and latrines in the temporary shelters. Will also inspect the approach roads leading to the temporary shelter and repair the same if so required.

8.1.9 Telephone Department

A. Normal time activities

Details of the staff members with their contact addresses and telephone numbers. Details of buildings, vehicles and equipments including the contractors and the vehicles and equipments used by them.

Maps showing the details of telephone exchanges, D.Ps, important telephone lines, hot lines, telex lines, microwave towers with statistical data.

Details of telephone numbers of water supplies, Control Room, hospitals, drainage system, railway stations, bus depots, strategically important places, ports, Army, Air force, Navy camps, Jail, Police Station and other sensitive places, light houses, major industrial units, and other communication channels which can be used during emergency.

Action plan for repairs/alternative arrangement in case of disruption of telephone line and microwave towers.

Inspect the telephone exchanges/sub-exchanges in the damage prone area at every 3 months.

To appoint an officer not below the rank of telephone inspector to co-ordinate the district control room during emergency.

To maintain the equipments such as diesel generators, dumpers, generator, cutters, tree cutters, ladder &, ropes, flood lights, shovels, axes, hammers, RCC cutters, cable wires, fire equipments, etc; which can be used during emergency and ensure every month that these are in working condition.

To ensure that the telephone lines at the shelters, emergency hospitals, police stations, control room and other places of emergency services, which can be used during disaster, are not disrupted.

To prepare a list of public properties related to the telephone department which are in damage prone areas and will make arrangements to lessen the damage.

B. On receiving the warning

- ◆ To contact the District Control Room and assist in the work.
- ◆ To ensure that the staff are on duty at the headquarters.
- ◆ To assign work to the subordinate officers as per the DDMP and send them to the sites.

- ◆ To receive the instructions from the District Liaison Officer and to do the needful.
- ◆ To ensure availability of resources included in the DDMP and establish contacts for the same during emergency.
- ◆ To setup a temporary control room for the exchange of information for emergency work and will appoint a nodal officer.

C. Post Disaster Activities

- ◆ To follow the instructions of District Liaison Officer.
- ◆ To perform the duties assigned for search and rescue work.
- ◆ To deploy the resources and manpower available to manage the disaster.
- ◆ To review the situation regarding disconnected telephone lines due to safety measures and reestablish the communication network as soon as possible.
- ◆ To send the Disaster Management Teams with the necessary equipments for restoration of the telephone lines speedily where the lines are disrupted and to such places, which are strategically important.
- ◆ To make arrangements to obtain external help to manage the disaster.
- ◆ To prepare a primary survey report of damage and to send the same to the District Control Room and also to the administrative head within 6 hours.
- ◆ To arrange for temporary hotline services or temporary telephone connections at the District Control Room, hospitals, shelters, ports, jails, police station, bus depots, etc.
- ◆ To immediately undertake the emergency repairing work.
To make an action plan to avail immediately and timely, telephone poles, D.Ps, transformer to the established the communication system.
To prepare an action plan to avail temporarily, technical personnel from the near by district, staff and vehicles from the district office which are not affected in consultation with the district authority.

8.1.10 Animal Husbandry

A. Normal time activities

- ◆ Addresses of members with telephone numbers.
- ◆ Details of veterinary centers, artificial insemination centers, veterinary dispensary, veterinary colleges' buildings, vehicles, mobile dispensaries and
- ◆ equipments and also the details of vehicles and equipments used often by out source.
- ◆ Maps showing the details of animal breeding laboratories, animal vaccination centers, animal husbandry training school with statistical data.
- ◆ Details of essential facilities to be provided at sensitive place such as important animal husbandry centers, veterinary college campus, training center etc;
- ◆ Arrangement of repairs/alternative arrangements in case the facilities related to animal husbandry and veterinary services are disrupted.
- ◆ To make arrangements to necessary medicines, vaccines and other material, for treatment of animals.
- ◆ To collect the details of cattle in each village of the taluka, details of safe

places for the treatment of animal, milk dairies, other private veterinary doctors and facilities related to it.

- ◆ To appoint an employee not below the rank of livestock inspector to coordinate the District Control Room during emergency.
- ◆ To maintain the equipments available such as stands to keep animals, sharp instruments, insecticides, diesel generators, dumpers, generator, cutters, tree cutters, ladders, ropes, flood lights, shovels, axes, hammers, RCC cutters, cable wires, fire equipments, de-dusting equipments etc; which can be used during emergency and will also ensure that they are in working condition.
- ◆ To see that essential services related to animal husbandry and Veterinary services are not disrupted at the time of emergencies.
- ◆ To prepare a list of public properties related to animal husbandry, which are damage prone areas and will make advance planning to lessen the damage.

B. On receiving the Warning

- ◆ To immediately contact the District Control Room and will assist in the work.
- ◆ To ensure that the staff is on duty at the headquarters
- ◆ To assign the work to be done to the subordinate officers and staff and send them to their sites.
- ◆ To receive instructions from the district liaison officer and do the needful.
- ◆ To ensure the availability of resources included in the DDMP and will make necessary arrangements to obtain those during emergency.
- ◆ To consult the Liaison Officer to prevent the probable epidemic among the cattle and also for the safety measures.
- ◆ To make groups having vehicles for emergency work and will assign the areas to them.
- ◆ To set up a temporary control room for the exchange of information for emergency work and will appoint a nodal officer.

C. Post Disaster Activities

- ◆ To follow the instruction of the District Liaison Officer.
- ◆ To carry out the duty assigned to him for search and rescue work.
- ◆ To deploy the available resources and manpower to manage the disaster.
- ◆ To review the matters to restart the milk collection activity where it has been closed for security measures.
- ◆ To send DMTs with necessary equipments in case of cattle death are there in the affected areas for the disposal of carcass with a view to restoration of public life and result oriented work. To arrange to treat the injured cattle.
- ◆ To contact the State Director of A.H. if additional equipments vehicles, manpower, technical personnel etc; are required for restoration of the cattle related activities.

8.1.11 State Transport

A. Normal time activities

- ◆ Details of the staff with contact numbers, details of bus drivers, conductors, mechanical and supervisory staff.

- ◆ Details of location of buses in all the areas of the district available round the clock.
- ◆ Details of fuel arrangements for buses for emergency work.
- ◆ Do's and Don'ts to be observed strictly during emergencies and details of priorities should be given to the staff.
- ◆ Arrangement for additional buses for evacuation of people from the affected areas.
- ◆ Details of buildings, vehicles and equipments under his control and list of contractors with vehicles and equipments used by them.
- ◆ Map showing S.T. depots, pick up stand, control point, S.T. garages and important routes with equipments of communication, telephone line, telex lines, megaphone, amplifiers with statistical data.
- ◆ Details of important telephone numbers of water supply schemes, control room hospitals, drainage system, railway stations, bus depots, strategically important places, ports, Army Air force Navy camps and other sensitive places, light houses, major industrial units, and other communication channels which can be used during emergency/calamity.
- ◆ Action plan regarding repairs/alternative arrangement in case of disruption of transport services.
- ◆ Alternative routes for the transportation and road network.
- ◆ To inspect the damage prone S. T. Depots, pick up stand, control points, garages etc; at the frequency of every three months.
- ◆ To plan out for restoration of goods transportation in case of damages observed, to the buses & parcel van.
- ◆ To prepare an action plan to procure temporary buses, the technical personnel from the near by district which are not affected.
To maintain the equipments available such as cranes, diesel generator, earth over 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.
To take due care to see that the transportation at shelters and emergency hospital is not disrupted during calamities.
To 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.

B. On receiving the warning

- ◆ To set up a temporary special control room and information center at the main bus station.
- ◆ To immediately contact the district control room and will assist in the work.
- ◆ To ensure that the staff at the headquarter is on duty.
- ◆ To assign the work to be done by the subordinate officers and staff regarding transportation under DDMP and to send them to their sites.
- ◆ To receive instructions from the district liaison officer and will do the needful. To ensure for not allowing passenger buses to move out of the S.T. Depots during final warnings of cyclone, flood etc; to take safety measures for passengers who cannot return back to their home.
- ◆ To ensure the availability of resources included in the DDMP and will make due arrangements to get those during emergency.
- ◆ To consult the Liaison Officer to close the transportation in the damage prone areas for the safety of the people and the property.

- ◆ To make groups having vehicles for emergency work and will assign the areas to them.
- ◆ To set up a temporary control room for the dissemination of information for emergency work and will appoint a nodal officer.
- ◆ To make available the sufficient number of S.T. buses to the state administration for the evacuation of the people to safe places from the disaster prone areas.
- ◆ To assist the administration to send the messages of warning to the remote areas through the drivers/conductors on transport routes.

C. Post Disaster Activities

To follow the instructions of District Liaison Officer.

To carry out the duty assigned for search and rescue work

- ◆ To engage the resources and manpower available to manage the disaster.
- ◆ To review the matter regarding closing of movement of buses for safety reason and see that those are restarted very soon.
- ◆ To send DMTs with necessary equipments if the transportation is disrupted.
- ◆ To contact the District Control Room if additional equipments, vehicles, manpower, technical personnel, which are required to restore the transportation related activities.
- ◆ To prepare a primary survey report on damage in the area and will send it to the district control room and also to the administrative head within 6 hours.
- ◆ To make temporary arrangement of transportation for control rooms, hospitals, shelters, bus depots etc.
- ◆ To immediately undertake repairs needed at the bus stations.
- ◆ To collect the details of roads, damaged and will get them repaired in co-ordination with competent authority and will restore the bus services.

8.1.12 Forest Department

A. Normal time activities

- ◆ Addresses of members with telephone numbers.
- ◆ Details of veterinary centers, artificial insemination centers, veterinary dispensary, veterinary colleges' buildings, vehicles, mobile dispensaries and equipments under his control and also the details of vehicles and equipments used often by out source.
- ◆ Maps showing the details of area with statistical data.
- ◆ Approach roads under forest department and their condition including bridges, causeways, railway crossing etc.
- ◆ Inspection of damage prone roads, bridges, check dams, causeways, under forest department

- ◆ To inspect periodically the buildings, residencies, high causeways under forest department
- ◆ To maintain the equipments available such as sharp instruments, insecticides, diesel generators, dumpers, generator, cutters, tree cutters, ladders, ropes, flood lights, shovels, axes, hammers, RCC cutters, cable wires, fire equipments, de-dusting equipments etc; which can be used during emergency and will also ensure that they are in working condition.
- ◆ To take care of public shelters, other places to be used for evacuation with primary facilities like water
- ◆ To prepare a list of public properties in the damage prone forest areas and will make advance arrangements to lessen the damage.

B. On Receiving the Warning

- ◆ To immediately contact the district control room and will assist in the work.
- ◆ To ensure that the staff at the headquarter is on duty.
- ◆ To assign the work to be done by the subordinate officers and staff regarding transportation under DDMP and to send them to their sites.
- ◆ To arrange for wireless, telephones, manpower, forest guard in advance to disseminate information of the disaster in the damage prone areas and will play a key role with the district administration to warn the public.
To make in advance arrangement for fuel wood and bamboos for priority areas.

C. Post Disaster Activities

To follow the instructions of District Liaison Officer

To carry out the duty assigned for search and rescue work.

To engage the resources and manpower available to manage the disaster. To prepare a primary report of damage for the affected areas.

To take actions to provide electricity, water and latrine to the temporary shelters in the forest areas.

To send task forces with vehicles, tree cutters, ropes, flood light, generator in case of closure of roads due to felling of trees.

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, light houses, major industrial units, and other communication channels which can be used during emergency.

Arrangement for transportation & evacuation of people from the affected areas. Action plan regarding repairs and alternative ways in case of disruption of transportation.

Plan showing the alternative routes and arrangement for transportation of goods etc; during emergencies.

C. Post Disaster Activities

To follow the instructions of District Liaison Officer.

To carry out the duty assigned for search and rescue work.

To engage the resources and manpower available to manage the disaster.

To 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. To prepare a primary survey report of damage and send it to the District Control Room and to the administrative head.

To collect the details of ports, jetties, light houses as well as approach roads connecting the damaged ports and will get them repaired in co-ordination with the competent authority and will help for restoration of the economic activities pertaining to ports.

8.2 Checklist of Various Department

8.2.1 Preparedness Checklist for the District Collector

Preparation of the DDMP with the assistance of DDMC. Setting up District Control Room.

Under the DDMP, district level agencies would be responsible for directing field interventions through various agencies right from the stage of warning to relief and rehabilitation.

At the disaster site, specific tasks to manage the disaster will be performed. Collector will be an integral part of the DCR.

Collector will be assisted by SOC.

SOC will be headed by a Site Manager.

Site Manager will co-ordinate the activities at various camp sites and affected areas. The site Operations Centre will report to the District Control Room.

The Collector will co-ordinate all the field responses which include, setting up Transit Camps, Relief Camps and Cattle Camps.

8.2.2 Preparedness Checklist for the Police Department

The department is familiar with the disaster response plan and disaster response procedures are clearly defined.

Orientation and training for disaster response plan and procedures undertaken. Special skills required during emergency operations imparted to the officials and the staff.

Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.

Adequate warning mechanisms established for evacuation. An Officer has been designated as Nodal Officer for Disaster Management. Sources of materials required for response operations have been identified.

8.2.3 Preparedness Checklist for the Health Department

The department is familiar with the disaster response plan and disaster response

Procedures are clearly defined.

Orientation and training for disaster response plan and procedures undertaken.

Special skills required during emergency operations imparted to the officials and the staff.

Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.

A hospital plan for the facilities, equipment and staff of that particular hospital based on "The Guide to Health Management in Disasters" has been developed. Hospital staff is aware of which hospital rooms / buildings are damage-proof.

All the staff of the hospital has been informed about the possible disasters in the district, likely damages and effects, and information about ways to protect life, equipment and property.

An area of hospital identified for receiving large number for casualties.

Emergency admission procedures with adequate record keeping developed.

Field staff oriented about DDMP, standards of services, and procedures for tagging.

An Officer has been designated as Nodal Officer for Disaster Management.

Sources of materials required for response operations have been identified.

8.2.4 Preparedness Checklist for M.S.E.D.C

The department is familiar with the disaster response plan and disaster response procedures are clearly defined.

Orientation and training for disaster response plan and procedures undertaken.

Special skills required during emergency operations imparted to the officials and the staff.

Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.

An Officer has been designated as Nodal Officer for Disaster Management.

Sources of materials required for response operations have been identified.

8.2.5 Preparedness Checklist for Water Supply Department

The department is familiar with the disaster response plan and disaster procedures are clearly defined. response
Orientation and training for disaster response plan and procedures
undertaken.
Special skills required during emergency operations. officials

Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.

Adequate warning mechanisms for informing people to store an emergency supply of water have been developed.
Procedures established for the emergency distribution of water if existing supply is disrupted.

An Officer has been designated as Nodal Officer for Disaster Management. Sources of materials required for response operations have been identified.

8.2.6 Preparedness Checklist for Irrigation Department

1. The department is familiar with the disaster response plan and disaster

The department is familiar with the disaster response plan and disaster procedures are clearly defined. response
Orientation and training for disaster response plan and procedures
undertaken.
Special skills required during emergency operations imparted. officials

Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.

Flood monitoring mechanisms can be activated in all flood prone areas from 1st of June.

All staff is well aware of the precautions to be taken to protect their lives and personal property.

Each technical assistant has instructions and knows operating procedures for disaster conditions.

Methods of monitoring and impounding the levels in the tanks evolved.

Methods of alerting officers on other dam sites and the district control room, established.

Mechanisms evolved for forewarning settlements in the downstream, evacuation, coordination with other dam authorities.

An Officer has been designated as Nodal Officer for Disaster Management. Sources of materials required for response operations have been identified.

8.2.7 Preparedness Checklist for Telephone Department

Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.

An Officer has been designated as Nodal Officer for Disaster Management.

Sources of materials required for response operations have been identified.

8.2.8 Preparedness Checklist for PWD

The department is familiar with the disaster response plan and disaster response procedures are clearly defined.

Orientation and training for disaster response plan and procedures undertaken.

Special skills required during emergency operations imparted to the officials and staff.

Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed.

1. All officers are familiar with pre-disaster precautions and post-disaster procedures for road clearing and for defining safe evacuation routes where necessary.

An Officer has been designated as Nodal Officer for Disaster Management. Sources of materials required for response operations have been identified.

8.2.9 Preparedness Checklist for Agriculture Department

The department is familiar with the disaster response plan and disaster response procedures are clearly defined.

Orientation and training for disaster response plan and procedures undertaken.

Special skills required during emergency operations imparted to the officials and the staff.

Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed. Information provided to all concerned officers about the disasters, likely damages to crops and plantations, and information about ways to protect the same.

The NGOs and the other relief organizations are informed about the resources of the department.

An Officer has been designated as Nodal Officer for Disaster Management. Sources of materials required for response operations have been identified.

8.2.10 Preparedness Checklist for Animal Husbandry Department

The department is familiar with the disaster response plan and disaster response procedures are clearly defined.

Orientation and training for disaster response plan and procedures undertaken.

Special skills required during emergency operations imparted to the officials and the staff.

Reviewed and updated the precautionary measures and procedures, the precautions to be taken to protect equipment, the post-disaster procedures to be followed. Hospital staff is aware of which hospital rooms / buildings are damage-proof.

All the staff of the veterinary hospitals and centers have been informed about the possible disasters, likely damages and effects, and information about the ways to protect life, equipment and property.

An area of the hospital identified for receiving large number of livestock.

Emergency admission procedures with adequate record keeping developed. An Officer has been designated as Nodal Officer for Disaster Management. Sources of materials required for response operations have been identified.

9. MONITORING, EVALUATION AND FUNDS

The existence of a Disaster-preparedness plan plays a vital role during Disasters. The officials then have at their hand, a complete set of instructions which they can follow and also issue directions to their subordinates and the affected people. This has the effect of not only speeding up the rescue and relief operations, but also boosting the morale of affected people.

Disaster plan is also useful at pre-disaster stage, when warnings could be issued. It also proves as a guide to officials at the critical time and precious time is saved which might otherwise be lost in consultations with senior officers and getting formal approval from the authorities.

Keeping all these points in mind the DDMP must be evaluated and updated by the district administration in normal time.

9.1 Plan Evaluation

The purpose of evaluation of DDMP is to determine

- the adequacy of resources co-ordination between various agencies
- community participation
- partnership with NGOs

The plan will be updated when shortcomings are observed in

- Organizational structures
- Technological changes render information obsolete
- Response mechanism following reports on drills or exercises
- 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.

9.2 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 is handy and precise. It is so designed that it will definitely help the officials to take quick actions during the disaster.

9.3 Budget and other financial allocations

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

48-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;

50 – 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.

9.4 Linking with the development plans.

Disaster management is no more confined to revenue department. It is a subject of all the departments. The following activities have been considered in mainstreaming it into development activities.

1. The Disaster Management has been included in school curriculum at CBSE level.
2. The Disaster Management is also made compulsory to NSS / NCC students at college level. So that during disasters they can be called upon for certain help.
3. Various Disaster Management courses have been offered in different institutions, colleges, universities taking its significance into account.
4. In construction work the civil engineers have to follow Bureau of Indian Standards (BIS) to construct resistant structures.
5. Special budget at district, taluka and village level should be allocated for training of various teams against disaster, purchasing of equipments to save the life and property of the people, organizing mock drills to create awareness among the people, updating the disaster management plans, etc.

6. Government officers, staff are also trained under disaster management, so that their skill will be helpful at the time of disaster.
7. Earthquake resistant principle may be followed in Indira Awas Yojana, lifeline structures, all buildings may be insured by bank, private companies.
8. At district, taluka and Panchayat level the plan should be adopted to reduce the risk and vulnerability in various activities.
9. Fund allocation should be made by Zilla Parishad, Panchayat Samiti and Gram Panchayat to carry out the following DRM activities:-
 - a. To train Serach and Rescue, First Aid groups
 - b. To create awareness among the people
 - c. To procure search and rescue materials
 - d. To evacuate and set up temporary shelter for disaster victims

10. IMPORTANT TELEPHONE NUMBERS (DIRECTORY)

1. Control Room of Major Departments

SNo.	Name of the office	Telephone Number	Fax Number
01	Collector Office, Nanded	02462-235077	02462-238500
02	District Police Control Room	02462-274720	
03	Dist. Special Branch Nanded Police	02462-234658	
04	NWMC Control Room	02462-234461	
05	Fire Brigade	02462-252555	
06	Distt. Forest Office, Nanded	02462- 255314	
07	Flood Control Room NAD	02462-263870	
08	District Information Officer	02462- 250137	
09	District Civil Surgeon	02462- 235711 Ext. 307	
10	MSRTC Nanded	02462-260621	
11	Zilla Parishad Nanded	02462-234059	
12	District Home Guard Cmdt.	02462-234261	
13	Regional Transport Officer	02462-259900	
14	MSEDCL	02462-287285	
15	PWD	02462-253711	
16	Dist Supdt Agriculture	02462-234767	
17	SRTMU Earthquake Reading Center	02462-221490	
18	Central Water Commission Office	02462-262566	

2. Dams of Telangana

SNo.	Name of the office	Telephone Number
01	District Collector Nizamabad	08462-231026
02	District Collector Hyderabad	040-23202833
03	Chief Engineer Shreeram Sagar Project	040-23326439
04	Executive Engineer Shree Ram Sagar Project	040-21610625
05	Additional Secretary Telangana State	040-23454327
06	Shree Ram Sagar Project Control Room	08483-246154 246131, 246151
07	Nizamsagar Control Room	08463-246146 246127

List of swimmers

34. ICS Glossary

Branch: That organizational level having functional/geographic responsibility for major segments of incident operations. The branch level is used in operations and logistics and is organizationally between the section and division/group.

Command: The act of directing, ordering and/or controlling resources by virtue of explicit legal, agency, or delegated authority.

Command Staff: The command staff consists of the information officer, safety officer and liaison officer. They report directly to the incident commander and may have assistants. The command staff may or may not have supporting organizations below it.

Complex: Two or more individual incidents located in the same general area which are assigned to a single incident commander or unified command.

Cooperating Agency: An agency supplying assistance other than direct suppression, rescue, support, or service functions to the incident control effort; e.g., Red Cross, law enforcement agency, Telephone Company, etc.

Deputy: A fully qualified individual who, in the absence of a superior, could be delegated the authority to manage a functional operation or perform a specific task. In some cases, a Deputy

could act as relief for a superior and therefore must be fully qualified in the position. Deputies can be assigned to the Incident Commander, General Staff, and Branch Directors.

Dispatch: The implementation of a command decision to move a resource or resources from one place to another.

Dispatcher: A person employed who receives reports of discovery and status of incident, confirms their locations, takes action promptly to provide people and equipment likely to be needed, and sends them to the proper place.

Dispatch Center: A facility from which resources are directly assigned to an incident.

Division: Divisions are used to divide an incident into geographical areas of operation. Divisions are established when the number of resources exceeds the span-of-control of the operations chief. A division is located with the Incident Command System organization between the branch and the task force/strike team.

General Staff: The group of incident management personnel reporting to the incident commander. They may each have a deputy, as needed. Staff consists of operations section chief, planning section chief, logistics section chief, and finance/administration section chief.

Group: Groups are established to divide the incident into functional areas of operations. Groups are composed of resources assembled to perform a special function not necessarily within a single geographic area or division.

Helibase: The main location within the general incident area for parking, fueling, maintaining, and loading helicopters. The helibase is usually located at or near the incident base.

Helispot: A temporary landing spot for helicopters.

Incident: A human- caused or natural occurrence that requires emergency service action to prevent or reduce the loss of life or damage to property or natural resources.

Incident Action Plan (IAP): Contains objectives reflecting the overall incident strategy and specific tactical actions and supporting information for the next operational period. The plan may be oral or written. When written, the plan may have a number of attachments, including: incident objectives, organization assignment list, division assignment, incident radio communication plan, medical plan, traffic plan, safety plan, and incident map.

Incident Base: Location at which primary logistics functions are coordinated and administered. The incident base may be co-located with the ICP or other incident facilities.

Incident Command Post (ICP): Location at which primary command functions are executed. The ICP may be co-located with the incident base or other incident facilities.

35. Resource Inventory (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](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)

The above resources are available with the various departments in Nanded district which are uploaded in the IDRN.

List of Websites

- 1) www.idrn.gov.in India disaster Resource Network
- 2) www.ndmindia.nic Natural Disaster management India. Provides current news on Flood, Drought and Cyclones, Weather Links from NIC and weather conditions/temperatures on Indian Ocean
- 3) www.nicee.org The National Information Center of Earthquake Engineering
- 4) www.imd.ernet.in Indian Meteorological Department
- 5) www.asc-india.org Amateur Seismic Centre
- 6) <http://ioc.unesco.org/itsu> IOC/ UNESCO International Coordination group for the Tsunami Warning System in the Pacific (ICG/ITSU) Paris, France
- 7) <http://www.tsunami.org> Pacific Tsunami Museum site. Includes answers to frequently asked questions, links and information related to Pacific Ocean tsunamis.
- 8) <http://www.csre.ittb.ac.in/rn/resume/landslide/IsI.htm> Landslide Information System - Center of Studies in Resource Engineering, IIT, Mumbai
- 9) <http://landslides.usgs.gov> USGS National landslide Hazards Program
- 10) www.cwc.nic.in Central Water Commission of India
- 11) <http://www.envfor.nic.in> Ministry of Environment and Forests
- 12) <http://www.iifm.org/databank/index.html> Forest Information Service – a comprehensive Internet information bank on forest and related resources in India

and around the world, prepared by Indian Institute of Forest Management, Bhopal.

- 13) www.ipaindia.org Loss Prevention Association of India Ltd. (LPA) is engaged in promoting safety and loss control through education, training and consultancy.
- 14) www.yashada.org Yashwantrao Chavan Academy of Development Administration

- 15) ~~www.dmibpl.org Disaster Management Institute~~
- 16) <http://www.nidm.net> National Institute of Disaster Management
- 17) <http://dst.gov.in> Department of Science and Technology
- 18) <http://www.icar.org.in/> Indian Council for Agriculture and Research
- 19) <http://www.iirs-nrsa.org/> Indian Institute of Remote Sensing
- 20) <http://www.bis.org.in> Bureau of Indian Standards
- 21) <http://www.gsi.gov.in/> Geological Survey of India
- 22) <http://gov.ua.nic.in/dmmc/> Disaster Mitigation and Management Centre
- 23) <http://ncdcnagpur.nic.in/> National Civil Defence College