



**DISTRICT DISASTER MANAGEMENT PLAN**  
**CHARAIDEO**  
**2024**

## **Foreword**

Northeast India is geologically a very unstable region around the globe. Charaideo is a district in Assam lies on the foothills of Naga Patkai hills range and it falls under the disaster prone zone of the state. For any anticipation a written strategy is important and utmost necessary in any field. In order to execute the plan, District Disaster Management Plan, (DDMP) is prepared for the district to withstand any emergency situation resulting from flood, earthquake, storm and other natural or manmade mishaps. Every district has an existing network of stakeholders who would be readily available to render services in any disaster, so in this plan the roles and responsibility of each and every stakeholder is well scheduled and organized. Considering all the factors of the district, the DDMP has been prepared for the year 2024.

We are thankful to all concerned who was a part in preparation of the plan.



Nibedan Das Patowary, ACS  
District Commissioner  
Charaideo

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## I. INTRODUCTION

Vagaries of nature can cause disasters of such magnitude and such intensity that it becomes impossible to respond unless there is preparedness to cope with the effect in the pre-as well as post- disaster period. Preparedness is the best response to such situations in order to mitigate the effects and to reduce losses in terms of life and property. With increasing anthropogenic pressures, natural disasters have become all the more unpredictable and the fury unleashed by natural forces on human kind all the more ferocious causing far greater loss of life and property. While there is no doubt that human kind has now got to make amends by restoring ecological balance, it is also true that human kind has got to be prepared for the worst. Every year, more than 200 million people are affected by droughts, floods, cyclones, earthquakes, wild fires, landslides and other hazards. Increased population densities, environmental degradation, and global warming adding to poverty make the impacts of natural hazards worse.

In the International decade for Natural Disaster Reduction, a World Conference on Natural Disaster Reduction was organized in 1994 under the aegis of the United Nations in partnership with non- governmental organizations (NGOs), the scientific community, business, industry, and media to deliberate on reduction of human sufferings due to natural disasters. It was concluded that disaster prevention, mitigation, preparedness and relief along with environmental protection and sustainable development are closely interrelated and hence nations should incorporate them in their development plans.

India is vulnerable to Natural Hazards such as, Earthquakes, Cloud Bursts, Floods, Drought, Land Slides, Land Subsidence, Forest Fires, Avalanche, Hailstorms, etc. Apart from natural events the state is also prone to man-made events of Building Collapses, Road Accidents, Railway Accidents, Fires, and Dam Bursts.

What are required to cope with these possible disasters are a comprehensive and integrated Disaster Management Plan which is participative and people friendly. The concise management system should incorporate both pre-and post-disaster responses with the sole aim of being prepared for prevention and mitigation with lessening loss of life and property due to natural as well as man-made disasters and also to recover congenial pre-disaster atmosphere.

### DISASTER MANAGEMENT BASIC CONCEPTS

**Hazard** is an event of occurrence that has the potential for causing injury to life or damage to property or the environment.

**Disaster** can be defined as an occurrence, due to natural causes or otherwise, which results in large-scale deaths or imminent possibility of deaths and extensive material damage. In magnitude and intensity, it ranks higher than an accident and requires special measures of mitigation, which is beyond the capabilities of the existing fire, rescue, and relief services.

**Risk** is defined as a measure of the expected losses due to a hazard event of a particular magnitude occurring in a given area over a specific time period. The level of risk depends upon:

1. The nature of the Hazard
2. The vulnerability of the elements which is affects.
3. And the economic value of those elements.

**Risk Assessment** means the quantitative evaluation of the likelihood of undesired events and the likelihood of harm or damage being caused by them, together with the value judgments made concerning the significance of the results.



**Risk Analysis** means the identification of undesired events that lead to the materialization of a hazard, the analysis of the mechanisms by which these undesired events could occur and, usually, the estimation of the extent, magnitude, and likelihood of any harmful effects.

**Risk Management** means the program that embraces all administrative and operational programs that are designed to reduce the risk of emergencies.

**Vulnerability** of an area is determined by the capacity of its social, physical and economic structures to withstand and respond to hazard events.

**Emergency Response Plan/Action Plan** means a detailed program of action emergency requiring prompt corrective measure beyond normal procedures to protect human life, minimize injury, optimize loss control and reduce; the exposure of physical assets and the environment, or in other words is the process by which the response to an extraordinary even is categorized into functional components and responsibility for each component is assigned to the appropriate individual or agency.

**Preparedness:** Those activities which governments, organizations, communities and individuals develop to minimize loss of life and damage and to organize and facilitate timely and effective rescue, relief and rehabilitation in case of disaster.

**Preventive Action** may be described as measures designed to prevent natural phenomena from causing or resulting in disaster or other related emergency situations. It involves the formulation and implementation of long-range policies and programmes to prevent or eliminate the occurrence of disasters.

**Mitigation:** The concept of mitigation spans the broad spectrum of disaster prevention and preparedness. Mitigation means reducing the actual or probable effects of extreme disaster on man and his environment.

**Response** is the first phase which occurs after the onset of an emergency and is intended to provide emergency assistance for disaster effects and casualties. This includes search, rescue, shelter, medical care, and other efforts to reduce the probability or extent of secondary damage.

#### OBJECTIVES OF PLANNING

Every planning has its own aims and objectives. The planning of any activity in the district shall be specific and down to earth. For a better development and sustainability of growth a better planning is required.

The basic objective of the District Disaster Management Plan of Charaideo is to protect all its residents and every kinds of wealth from all sorts of untoward incident through the following sectoral objectives: -

1. Institutionalization of disaster management in district administration.
2. Encouraging a culture of disaster preparedness in the district.
3. Vulnerability reduction and disaster mitigation through better planning process.
4. Creation of the best Government mechanism to handle any unprecedented events.
5. Instant response and effective decision making in disaster.
6. Better coordination of relief and rehabilitation aftermath of a disaster.
7. Better coordination of all line departments in disaster management.
8. Encouraging and empowering the local community to own disaster management.
9. Regular coordinating and updating of resources available in and around the district.
10. Mock drill to check the viability and feasibility of implementation methodology.
11. Regular updating the common people steps taken by the administration.

### Overview of the District:

District profile of Charaideo: Geographically, Charaideo District is located on the eastern part of Sivasagar District and is bounded by Dibrugarh district in the North, Nagaland and Arunachal Pradesh in the South, Sivasagar Sadar Sub-Division and Nazira Sub-Division of Sivasagar district in the West. Charaideo is situated on the foothills of Nagaland and Arunachal Pradesh and the main rivers flowing throughout the District are Desang, Towkak, Suffry, Timon and Deroi.

### **THE CHARAIDEO DISTRICT AT A GLANCE:**

• Population	- 4,71,418 (as per 2011 census)
• Geographical area	- 1069.15 Sq. km.
• No. of Revenue circles	- 1) Sonari, 2) Mahmora, 3) Sapekhati, 4) Nazira (Part)
• Total Revenue Villages	- 327Nos
• No. of Development Blocks	- 1) Lakuwa, 2) Sonari, 3) Sapekhati, 4) Mahmora 5) Nazira (part)
• Nos. of Police Stations	- 9 Nos.
• Nos. of Out Post	- 5 Nos.
• No. of Fire and Emergency Service Station	- 2 Nos.
• Hospitals-	
Sub-Divisional Civil hospital-	01 No.
Block Primary Health Centre-	02 (Sapekhati & Patsaku)
Model hospitals-	02 (Sapekhati & Lakwa)
Mini PHC-	16 nos
State Dispensaries-	01 Nos
Sub-Centers –	70 Nos
Private Nursing Home –	02 Nos

## 2. HAZARD, VULNERABILITY, CAPACITY AND RISK ASSESSMENT

### Classification of Hazards:

The various hazards that occur frequently are: Earthquake, Flood, River Erosion, Landslide, Storm, Lightning, Hailstorm, Gas leakage, Man-made Disasters etc.

### Hazard Profile of Charaideo:

Earthquake, Flood, River Erosion, Storm, Fire Incident, Hail Storm, Thunder Storm are the major hazard which can cause disaster. Charaideo district of Assam is a disaster prone district where flood, river bank erosion and storm repeat annually.

### DISASTER PROBABILITY & VULNERABILITY ANALYSIS:

Sl. No.	Type of Disaster	Time of Occurrence	Potential Impact	Vulnerable Areas
1	Flood	May to Oct	Loss of human life, livestock, crops, houses & infrastructure	<p>Kukura-Chuwa Gaon, Chula-Dhara Gaon, Chumoni Gaon, Mohan Deodhai, Lakuwa Cha-Bagicha &amp; Bheluguri Dubi, Nora Gaon, Chalapother Gaon, Dihingia Konwar Gaon Borpothar, Rongapother, Mohan Gaon, 288/313 No Grant, No 348 Grant, Na-Kachari Gaon, Borahi- Kachari Gaon, Singrajan Bagicha Na-Gaon, Tiok Bongali Gaon, Moh-Khuti Pother, Dakhin sonari Habi, Tiok Gaon, Bhojo Gaon, Rajabari Grant, Sonari town Ward No. 3,6,7,8,10,11,12,13, Banfera Grant, Banfera bagicha, Na-Kachari,</p> <p>No 1 Medelajan, Timon Bortani Gaon, No 1 Rohon Pothar, Sapekhati Reserve Forest (Rangdhali, Nabajyoti &amp; Bangaon), Sapekhati Reserve Forest (Hunalipur), Bortimon Gaon, No 2 Medelajan, Sapekhati Grant, Konwari Pothar, Balikhetia Gaon,</p> <p>Bhalukaguri, Koladubi, Timon Habi, No 1 Sorupathar, Rongsuwal Pathar, Bahboria Habi, Bahboria Pathar, Kakotibari Grant, Kakotibari Habi, Kakotibari Pathar, Hatimuria Pathar, Chahinihabi, Cahini Pathar, Da-Dhora, Japidhora, Erabari, Konwar Gaon, Dowari Gaon, Likson, No 1 Borbill, No 2 Borbill, Buragohain Bari, Bonomali, Jojoli Habi, Deshang Kush, Lukurakhan, Khukamora Laujan, Himpura F V, Garkush Habi, Khargoria Deodhai, Kachupathar, Dhemaji Bill, Mohan Deodhai, Moranjani, Kachari Pathar, Laicheng, Namoni Changmai, Hatiboruah, Moudumoni, Niz-Khaloighugura, Doba Grant, Parachoni Habi, Tiphuk Habi, Jojoli Pukhuri, Nahortoli, Deodhai, Borbhuyan, Hatiboruah, Kotokipapong, Tiphuk Kachari, No 1 Sologuri, Sepon, No 2 Sologuri, Rukang</p>
2	Earthquake	Any time	Loss of human life, livestock, infrastructure, houses, disruption of communication network etc.	Entire district
3	Storms	Any time	Loss of human life, livestock, infrastructure, houses, disruption of communication network etc.	Entire district
5	Fire Incident	Any time	Loss of life, houses, infrastructure, properties	Entire district

6	Bank Erosion	May to Dec	Loss of lands, house, crops, infrastructure, disruption of road communication etc.	Bank of River Desang
7	Road Accident	Any time	Loss of life and property	Entire District



The most vulnerable areas with repeated disaster and proposed Relief Camps/Raised Platform are as below:

Sl. No.	Name of Zone	Name of village	Relief camp	Name of H/M/Principal of the relief camp
1	2	3	4	5
1.	Sonari	Sonari Town ward No. 7,8,9	Sonari Town L.P.School	Smti Mousida Begum 9401627039
		Banfera Grant/ Sonari Town Ward No.6	Banfera L.P.School	Sri Keshadhar Baruah 9954906623
		Mohan Gaon, Borpothar288/313 No Grant	Mohan Gaon Community Hall	Sri Hemanta Changmai 9954355226
		348 No Grant	Barahi Bagisa Prathamik Vidyalaya,	ANUPAM GOGOI 8011395629
		Tiok Bangali Gaon	Tiok Bangali Gaon LP School	Sri Sapun Hussain 9954471787
		Sigrajan Bagisha	Haji Siddique Ali ME School, Bhojo	Sri Sanjib Singh 9435227608
		Na- Gaon	Kuhiarbari Prathamik Vidyalaya	Sri Ratneswar Das 6001903550
		Sonari Town ward No. 7,8,9	Sonari Town L.P.School	Smti Mousida Begum 9401627039
		Banfera Grant/ Sonari Town Ward No.6	Banfera L.P.School	Sri Keshadhar Baruah 9954906623
		Mohan Gaon, Borpothar288/313 No Grant	Mohan Gaon Community Hall	Sri Hemanta Changmai 9954355226
		348 No Grant	Barahi Bagisa Prathamik Vidyalaya,	ANUPAM GOGOI 8011395629
		Tiok Bangali Gaon	Tiok Bangali Gaon LP School	Sri Sapun Hussain 9954471787
		Sigrajan Bagisha	Haji Siddique Ali ME School, Bhojo	Sri Sanjib Singh 9435227608
		Na- Gaon	Kuhiarbari Prathamik Vidyalaya	Sri Ratneswar Das 6001903550
		Sonari Town ward No. 7,8,9	Sonari Town L.P.School	Smti Mousida Begum 9401627039

2.	Mahmora	Kakotibari Habi, Kakotibari Grant, Hatimuri Pathar, Deepling Grant, Deepling Pathar, Cahini Habi/Pathar	Mahmora Deepling H.S. School	George Kr. Singh Koiri 7002436062
		Bonomali.	Bonomali Bagicha Bungloo	Smt. Nirupoma Garh. 7896122150
		Kachupathar.	Lechaihabi L.P. School	Sri Dimbeswar Gogoi 9101977924
		Bhalukaguri, Naharanubam	Khagesuwari Saikia L.P. School	Sri Jogydhar Deoghorla 9101152787
		Koladubi, Hatibondha	Koladubi L.P. School	Sri Mukunda Saikia. 9101998241
		Deoghona NC	Deoghona Adarsha L.P. School	Sri Rafijuddin Ahmed 9957159335
		Khukamora Gaon	Khukamora Gorbosti L.P. School	Sri Narayan Garh 8720925952

Tiphuk Kachari, Sepon	Namoni Tiphuk L.P. School	Sri Nakul Phukon 7099839899
Timon, Bahboria Habi, 1 no Sarupathar, Ronsual pathar	Timon Factory Shed	Sri Chidananda Phukon 6000454637
1 no Borbill, 2 no borbill	Borbill PHE	Sri Dharma Chetia. 9101298726 Sri Durga Baruah 9864580105
Deoghoria NC	Deoghoria Adarsha L.P. School	Sri Rafijuddin Ahmed 9957159335
Khukamora Gaon	Khukamora Gorbosti L.P. School	Sri Narayan Garh 8720925952
Niz- Khaloighugura	Public Auditorium (Niz-khloighugura)	Sri Rohini Baruah 9101737314
Nahortoli	Beltol Balika Vidyalay	Sri Gunaram Rajkhowa 9101960161
Jojoli Pukhuri	Gorpara M V School	Dandeswar Mohan 9859264382
Doba Grant, Jojoli Pukhuri( Part), Parasani Habi	Doba Tiniali High School	Sri Arun Gogoi 9854609544
Pahusungi Gaon, Pahuchungi Pathar , Rangabam Habi	Pahuchungi M.V School	Smti Anima Baruah 8638705492
Borbhuya , Deodhai, Kotoki Papong, Hatibaruah	Akoya L.P. School	Sri Lila Kanta Phukon 8402965535
1 no Hologuri, Lai- Peleng, Rukang	Ghilaguri M.E . School	Sayad Mujakir Hussain 9954239090
Dhemaji Bill, Mohan Deodhai.	Dhemaji Desangpani H.S.School	Dr. Bijoya Konwar 8638124779
Moranjan, Kachupathar( part)	Moranjan L.P. School	Sri Tirtha Phukon 9101343591
Da-dhara, Tiphuk habi, Chelleng Habi	Da-dhora L.P. School	Sri Uma Khamon 7896521231
Nahortoli	Beltol Balika Vidyalay	Sri Gunaram Rajkhowa 9101960161
Jojoli Pukhuri	Gorpara M V School	Dandeswar Mohan 9859264382 ( HM)
Doba Grant, Jojoli Pukhuri( Part), Parasani Habi	Doba Tiniali High School	Sri Arun Gogoi 9854609544
Pahusungi Gaon, Pahuchungi Pathar , Rangabam Habi	Pahuchungi M.V School	Smti Anima Baruah 8638705492
Borbhuya , Deodhai, Kotoki Papong, Hatibaruah	Akoya L.P. School	Sri Lila Kanta Phukon 8402965535
1 no Hologuri, Lai- Peleng, Rukang	School	Sayad Mujakir Hussain 9954239090
Dhemaji Bill, Mohan Deodhai.		Dr. Bijoya Konwar 8638124779

3	Sapekhati	No. 1 Medelajan	SALKATHANI M.E SCHOOL	Sri Dipen Gogoi, Head Teacher, Phn No.-7002169574
		No. 2 Medelajan	Salkathani Bagicha L.P. School	Sri Krishna Aich, Head Teacher, Phn No-6000154533
		Konwari Pother	KONWARIPOTHE R LP SCHOOL	Sri Atul Borthakur, Head Teacher, Phn No-8134823669
			Timon Bortani L.P School	Sri Tankeswar Changkakoty, Head Teacher, Phn No-9957862068
		No.1 Rohan Pathar	ROHAN HIGH SCHOOL	Sri Bishnu Dutta, Head Teacher, Phn No. 9854481362
		Timon Bortani Gaon	Timon Mukh L.P School (Dharam Pother)	Sri Moni Gogoi, Head Teacher, Phn No.-9577082960
		Sapekhati Grant	Sapekhati Higher Secondary School	Sri Robin Baruah, Principal, Phn No-7002114932
		Bortimon Gaon	SAPEKHATI BLOCK LP SCHOOL	Smt Ranu Phukan, Head Teacher, Phn No-6000824677
		Sapekhati Forest village (Rangdhali, Sonalipur, Baksu, Nabajyoti & Bangaon)	KATHIAKHUNDA LP SCHOOL	Sri Sukumar Been, Head Teacher, Phn No-9957721312
		Sapekhati Forest village (Rangdhali, Sonalipur, Baksu, Nabajyoti & Bangaon)	Gudam Chariali M.E. School	Sri Jugal Dulakakharia, Head Teacher, Phn No-7896130085
			Godadhar High School	Sri Dilip Kumar Gogoi, Head Teacher, Phn No-9954634219
			Atal Pothar L P School	Smt Anjali Changing, Head Teacher, Phn No-7002582901
		Baregaon	Baregaon L.P. School	Sri Dilip Kalita, Head Teacher, Phn No-7002278922
		Baregaon	Baregaon M.E. School	Sri Haren Gogoi, Head Teacher, Phn No-8472977634



### 3. INSTITUTIONAL ARRANGEMENT FOR DISASTER MANAGEMENT

The roles and responsibilities of the DDMA have been elaborated in Section 30 of the DM Act, 2005. The DDMA will act as the planning, coordinating and implementing body for DM at the District level and take all necessary measures for the purposes of DM in accordance with the guidelines laid down by the NDMA and SDMA. It will, inter alia prepare the District DM plan for the District and monitor the implementation of the National Policy, the State Policy, the National Plan, the State Plan and the District Plan. The DDMA will also ensure that the guidelines for prevention, mitigation, preparedness and response measures laid down by the NDMA and the SDMA are followed by all the Departments of the State Government at the District level and the local authorities in the District. The DDMA will further ensure that the areas in the district vulnerable to disasters are identified and measures for the prevention of disasters and the mitigation of its effects are taken, ensure that the guidelines for prevention of disasters, mitigation of its effects, preparedness and response measures as laid down by the National Authority and the State Authority are followed by all departments, lay down guidelines for prevention of disaster management plans by the department of the Government at the districts level and local authorities in the district, monitor the implementation of disaster management plans prepared by the Departments of the Government at the district level, lay down guidelines to be followed by the Departments of the Government at the district level for purposes of integration of measures for prevention of disasters and mitigation in their development plans and projects and monitor the implementation of the same, review the state of capabilities and preparedness level for responding to any disaster or threatening disaster situation at the district level and take steps for their up gradation as may be necessary, organize and coordinate specialized training programs for different levels of officers, employees and voluntary rescue workers in the district, facilitate community training and awareness programs for prevention of disaster or mitigation with the support of local authorities, governmental and non- governmental organizations, set up, maintain, review and upgrade the mechanism for early warnings and dissemination of proper information to public, prepare, review and update district level response plan and guidelines.

The DDMA will also coordinate response to any threatening disaster situation or disaster, coordinate with, and provide necessary technical assistance or give advice to the local authorities in the district for carrying out their functions, examine the construction in any area in the district and issue direction the concerned authority to take such action as may be necessary to secure compliance of such standards as may be required for the area, and identify buildings and places which could, in the event of any threatening disaster situation or disaster, be used as relief centers or camps and make arrangements for water supply and sanitation in such buildings or places, The DDMA will encourage the involvement of non- governmental organizations and voluntary social-welfare institutions working at the grassroots level in the district for disaster management ensure communication systems are in order, and disaster management drills are carried out periodically.



GOVT OF ASSAM  
OFFICE OF THE DISTRICT COMMISSIONER, CHARAIDEO

NOTIFICATION

No.CRR.DDMP.2022

Dtd:01/11/2023

1. Sri Nibedan Das Patowary, ACS - Chairman.  
District Commissioner, Charaideo  
Ph. No.03772-256567)  
Mobile No.9435186322
2. Sri Bidit Das, ACS - Co- Chairman  
CEO, Zila Parisad,  
Charaideo Mobile  
No.7896906118
3. Abhijit Gogoi, ACS - Member  
CEO, District Disaster Management  
Authority Mobile No. 8402051631
4. Sri Hiranya Kumar Barman, APS - Member  
Spt of Police  
Mobile No.9435562135
5. Dr. Sayed Taufique Hussain - Member  
Joint Director of Health  
Services, Charaideo  
Ph No. 9435053906
6. Sri Anjan Dey - Member  
E.E.,PWD- RR ,  
Charaideo, Sonari  
Mobile No-  
9435158711
7. Sri Pranjal Bhagawati, - Member  
Ex. Engineer, Water Resource Deptt. Sivasagar  
Mobile No.8638796623

The District Disaster Management Authority of Charaideo District will come into force with effect from the date of issue of this notification.

District Commissioner  
Charaideo

Memo No.CRR.DDMP.2022

Dtd:01/11/2023

Copy to:

1. The Chief Executive Officer, Assam State Disaster Management Authority Dispur Guwahati for favour of kind information and necessary action.
2. All line department for kind information and necessary action.

Sd/-  
District Commissioner  
Charaideo



**GOVERNMENT OF ASSAM**  
**OFFICE OF THE DISTRICT COMMISSIONER: CHARAIDEO**  
**DISTRICT DISASTER MANAGEMENT AUTHORITY**  
**SONARI:: ASSAM**

No. CRR.DDMP.2022

Dated: 01/11/2023

**NOTIFICATION**

In pursuance of notification No. RGR/ASDMA/08/2014/02, Dated 20<sup>th</sup> May 2014, in Assam Disaster Management Manual 2015, Government of Assam has accepted Incident Response System (IRS) as the preferred disaster response system in the State. In connection of the above notification, Charaideo district Incident Response Team (IRT) is hereby notified with the following members:

1. Responsible Officer: District Commissioner  
Nibedan Das Patowary, 9435186322
2. Incident Commander: Chief Executive Officer (CEO)  
District Disaster Management Authority (DDMA)  
Abhijit Gogoi, 8402051631
3. Deputy Incident Commander: Branch Officer, Disaster Management (DM) Branch  
Sri Anjan Jyoti Doley, 9387287027
4. Safety Officer: Addl. District Commissioner, Law and Order  
Smt Mirzana Hussain, 8811063335
5. Liaison Officer: District Project Officer,  
District Disaster Management Authority  
Bijoylakshmi Gogoi, 8638412050
6. Information and Media Officer: District Information and Public Relation Officer  
Sri Homen Gogoi, 9101571030 (i/c)
7. Operation Section Chief: Superintendent of Police (SP)  
Hiranya Kumar Barman, APS, 9435562135/9954003450
  - a. Staging Area Manager: District Transport Officer (DTO)  
Deepjyoti Neog, 7896211311
  - b. Rescue and Response Branch:
    - i. Natural Disasters: Sr. Station Officer, Fire and Emergency Service  
Hemkanta Bora, 8822967008
    - ii. Epidemic & Health Hazard: Joint Director, Health and Family Welfare  
Dr. Sayed Taufik Hussain, 9435053906
    - iii. Manmade Disasters: Superintendent of Police  
Hiranya Kumar Barman, APS, 60026900267/ 9435562135
  - c. Transport Branch (Road, Rail Water & Air unit): District Transport Officer (DTO)  
Deepjyoti Neog, 7896211311
8. Planning Section Chief: Addl. District Commissioner, Development  
Palash Rajkumar Ahom, 8011983038
  - a. Situation Unit: District Project Officer, DDMA  
Bijoylakshmi Gogoi, 8638412050
  - b. Resource Unit: District Project Officer, DDMA  
Bijoylakshmi Gogoi, 8638412050
  - c. Documentation Unit: Field Officer, DDMA  
Sonari Revenue Circle; Dhruva Jyoti Gogoi, 7002407603  
Sapekhati Revenue Circle; Nabajyoti Gogoi, 7002339511  
Mahmora Revenue Circle; Sourav Jyoti Saikia, 9101700591
  - d. Demobilization Unit: Field Officer, DDMA  
Sonari Revenue Circle; Dhruva Jyoti Gogoi, 7002407603  
Sapekhati Revenue Circle; Nabajyoti Gogoi, 7002339511  
Mahmora Revenue Circle; Sourav Jyoti Saikia, 9101700591
9. Logistic Section Chief: Addl. District Commissioner, Nazarat  
Palash Rajkumar Ahom, 8011983038
  - a. Service Branch: ADC, Nazarat
  - i. Communication Unit: In-Charge, APRO  
Harimon Pangang, 9954231634

ii. Medical Unit:	CM & HO (CD), Health & FW Deptt. Duleswar Gogoi, 9864499770
iii. Food Unit:	Asstt. Director, FCS&CA Deptt. L.C. Bori 9954962665
b. Support Branch:	
i. Resource Provisioning Unit:	Executive Engineer, PWD (Road) Anjan Dey, 9435158711/7002376748
ii. Facilities Unit:	Asst. Executive Engineer, PWD (Building) Anjan Baruah, 9435574982
iii. Ground Support:	Executive Engineer, PHE Nirud Saikia, 9435391228/8403001927
c. Finance Branch:	
i. Time Unit:	Nazir Konseng Shyam, 9101230080
ii. Compensation/Claim Unit:	Branch Officer, Relief Branch Sri Anjan Jyoti Doley, 9387287027
iii. Cost Unit:	Procurement Unit: Finance &Accounts Officer (FAO) i/c Smt. Mohsina Nasrin, 7002326576 Treasury Officer i/c Smt. Mohsina Nasrin, 7002326576

The District Level Incident Response Team (IRT) will be activated in the occurrence of any disaster for the year 2024-2025.

District Commissioner  
Charaideo

**District Disaster Management Committee:**

<b>Sl No</b>	<b>Name</b>	<b>Designation</b>	<b>Contact no</b>
1	Sri Nibedan Das Patowary, ACS	District Commissioner & Chairman, DDMA	9435186322
2	Sri Abhijit Gogoi, ACS	ADC Disaster Management & Member Secretary, DDMA	9957018044
3	Sri Bidit Das, ACS	CEO, Zila Parishad	7896906118
4	Mirzana Hussain, ACS	ADC, Law & Order	8811063335
5	Sri Hiranya Kumar Barman, APS	SP, Charaideo	60026900267
6	Smti. Namrata Das, ACS	Circle Officer, Sonari	8486974467
7	Sri Biswajit Bora, ACS	Circle Officer, Sapekhati	7002365072
8	Smti. Indica Gogoi, ALRS	Circle Officer, Mahmora	7638091050
9	Dr Bijoylakshmi Gogoi	District Project Officer, DM	8638412050
10	Sri Homen Gogoi	i/c DIPRO	9101571030
11	Sri Deepjyoti Neog	DTO, Charaideo	7896211311
12	Sri Anjan Dey	EE, PWD, Roads	9435158711
13	Sri Anowar Hussain	EE, Irrigation, Charaideo	8638300550
14	Sri Pranjal Bhagawati	EE. Water Resources Dept.	9954027462
15	Jalal Mollah	Supdt. H&T	9957390895
17	Sri Robin Yein	DAO, Charaideo	7002254645
18	Sri Ram Chandra Thaosen	SDFDO, i/c, Charaideo	9365862374
19	Sri Pranab jyoti Borah	DVO, Charaideo	7002287244
20	Dr. Sayed Taufique Hussain	Joint Director of Health Services, Charaideo	9435354429
21	Sri Anjan Baruah	AEE, PWD, (B) Sonari	9435574982
22	Sri Deben Ch Kalita	Divisional Forest Officer, Sonari Range (T)	9435517949

**IMPORTANT TELEPHONE NUMBERS (DISTRICT ADMINISTRATION)**

District Control Room : 03772-255123/ 1077 / 6002670501 (M)

District Commissioner : 03772-2565657/ (L)

Additional Deputy Commissioner : 8402051631

DPO (DM) Charaideo: 9435675008

**Contact numbers of OC's under Charaideo District:**

Sl. No.	Name of Police Station	Contact No.
1.	Sonari P.S. Officer in-charge	8638353869
2.	Sapekhati P.S. Officer in-charge	9365012830
3.	Namtola P.S. Officer in-charge	9957743293
4.	Borhat P.S. Officer in-charge	7002149054
5.	Kakotibari P.S. Officer in-charge	7002073479
6.	Moranhat P.S. Officer in-charge	9954690771
7.	Mathurapur P.S. Officer in-charge	7002107935
8.	Simaluguri P.S. Officer in-charge	8638113815
9.	Charaipung P.S. Officer in-charge	9854545944
Sl. No	Name of Out Post	Contact No.
1.	I/c, Lakwa O.P.	7002151325
2.	I/c, Tengapukhuri O.P.	9101613370
3.	I/c, Sepon O.P.	7399692804
4.	I/c, Tingalibam O.P.	7086495607
5.	I/c, Suffry O.P.	8638416996

**Country Boat: List of Owners and Driver with Contact nos:**

Sl. No.	Revenue Circle	Machine/ Country Boat	Owners Name	Address	Contact No.
1	Mahmora	Country Boat	Sri Laikhya Jyoti Gogoi, S/O Khirode Gogoi	Namoni Changmai Gaon	9854791744 (G B)
2		Country Boat	Sri Debajit Boruah, S/O Tideswar Boruah	Nizkhaloighugura Gaon	9613526784 (G B)
3		Country Boat	Sri Dimbeswar Boruah, S/O Susil Boruah	Nizkhaloighugura Gaon	9613526784 (G B)
4		Country Boat	Sri Jugo Mahon, S/O Jaluk Mahon	Nizkhaloighugura Gaon	9613526784 (G B)
5	Sapekhati	Country Boat	Sri Taranga Buragohain, S/O Lt. Benu Buragohain	Nahar Pukhuri Changmai Gaon	8011520260
6		Country Boat	Sri Dimbeswar Dutta	No. 1 Rahan pothar	9864582064
7		Country Boat	Sri Pankaj Baruah	Timon Bortani	9954672654
8	Sonari	Country Boat	Sri Tek Bahadur Newar, S/O Lt. Mon Bahadur	Mouza-Abhoypur Village-Borpathar	9854853197
9		Country Boat	Sri Ratna Newar, S/O Lt. Lal Bahadur Newar	-Do-	9854885036
10		Country Boat	Sri Raju Newar, S/O Lt. Ratna Newar	-Do-	9577192655
11		Country Boat	Sri Ron Bahadur Newar, S/O Lt. Mon Bahadur Newar	-Do-	985954504
12		Country Boat	Sri Bikram Newar, S/O Mon Bahadur Newar	-Do-	7086896284



13		Country Boat	Sri Miri Das, S/O	-Do-	8011955867
14		Country Boat	Sri Dipok Das, S/O Dhirendra Das	-Do-	8474878503
15		Country Boat	Sri Ajit Das, S/O Arendra Das	-Do-	9957865462
16		Country Boat	Sri Raju Das, S/O Digendra Das	-Do-	8011512451
17		Country Boat	Sri PorimolDas, S/O Lt. Prafulla Das	-Do-	
18		Country Boat	Sri lakub Ali, S/O	-Do-	8761826780
19		Country Boat	Sri Inuj Ali, S/O Lt. Monirot Ali	-Do-	9954672654
20		Country Boat	Sri Manu Logon, S/O Md Samsul Lagun	-Do-	9854813656



**Fire and Emergency Department:****Nos of Fire Vehicle – 3**

Contact No – 03772-256699/ 8822967008

**SDRF and NDRF:**

**SDRF:** Sonari ( 3 boats + 10 Manpower)

Contact: Hemkanta Borah - 8822967008 ( in-charge SDRF)

**NDRF:** Itanagar Doimukh Division (Dibrugarh)

Commander- 9485235464, 8667357834

**Medical Department: Nos of Ambulance**

<b><u>Hospital</u></b>	<b><u>Contact Nos</u></b>	<b><u>Vehicle Nos</u></b>
Kanaklata Nurshing Home	9435158959	AS 04-G-1124
Naphuk TE Hospital	9435091747	AS 01-CC-5226
Suffry TE	7896295482	AS 01-CC-5223
Joboka TE	9435333562	AS 06-AC-1163
Tiok TE	9957604902	AS 04-CC-5203
Sonari S.D.C.H	9957232493	AS 01-CC-6844
HS Agency	7086364912	AS 04-S-0917

**District Disaster Response & Information Centre (Control Room)** - The District Disaster Response & Information Centre (Control Room), under the control of the District Commissioner, will be the nerve centre. 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.

**Role of State Government Departments at District Level:**

It shall be the responsibility of every department of the Government to prepare DMP with respect to their respective departments as per the guidelines issued by DDMA, take measures necessary for prevention of disasters, mitigation, preparedness and capacity-building in accordance with the guidelines laid down by the National Authority, the State Authority and the District Authority. The departments will inter alia integrate into its development plans and projects, the measures for prevention of disaster and mitigation, allocate funds for prevention of disaster, mitigation, capacity-building and preparedness, respond effectively and promptly to any threatening disaster situation or disaster in accordance with the DMP and director issued by the SEC or the DDMA, review the enactments administered by it, its policies, rules and regulations with a view to incorporate therein the provisions necessary for prevention of disasters, mitigation or preparedness, provide assistance, as required, by the National Executive Committee, the State Executive Committee and District Authorities, for drawing up mitigation, preparedness and response plans, capacity- building, data collection and identification and training of personnel in relation to disaster management, assessing the damage from any disaster, and carrying out rehabilitation and reconstruction.

The department will also make provision for resources in consultation with the State/District Authority for the implementation of the District Plan by its authorities at the district level, make available its resources to the National Executive Committee or the State Executive Committee or the District Authorities for the purposes of responding promptly and effectively to any disaster in the State, including measures for- providing emergency communication with a vulnerable or affected area, transporting personnel and relief goods to and from the affected area, providing evacuation, rescue, temporary shelter or other immediate relief, carrying out evacuation of persons or live-stock from an area of any threatening disaster situation or disaster, setting up temporary bridges, jetties and landing places, and providing drinking water, essential provisions, healthcare and services in an affected area and such other actions as may be necessary for disaster management.

**District Administration:**

At the District level, DDMA's will act as the District planning, coordinating and implementing body for disaster management and will take all measures for the purposes of disaster management in the district in accordance with the guidelines laid down by NDMA and SDMA or the SEC.

**Other Institutional Arrangements:****Armed Forces:**

Conceptually, the Armed Forces are called upon to assist the civil administration only when the situation is beyond their coping capability. In practice, however, the Armed Forces form an important part of the Government's response capacity and are immediate responders in all serious disaster situations. On account of their vast potential to meet any adverse challenge, speed of operational response and the resources and capabilities at their disposal, the Armed Forces have historically played a major role in emergency support functions. These include communication, search and rescue operations, health and medical facilities, and transportation, especially in the immediate aftermath of a disaster. Airlift, heli-lift and movement of assistance to neighboring countries primarily fall within the expertise and domain of the Armed Forces. The Armed Forces will participate in imparting training to trainers and DM managers, especially in CBRN aspects, heli-insertion, high-altitude rescue, waterman ship and training of paramedics. At the National level, the Chief of the Integrated Defense Staff to the Chairman Chiefs of Staff Committee has already been included in the NEC. Similarly, at the State and District levels, the local representatives of the Armed Forces will be included in their executive committees to ensure closer coordination and cohesion.

**Central Paramilitary Forces:**

The Central Paramilitary Forces (CPMFs), which are also the Armed Forces of the Union, play a key role at the time of immediate response to disasters. Besides contributing to the NDRF, they will develop adequate disaster management capabilities within their own forces and respond to disasters which may occur in the areas where they are posted. The local representatives of the CPMFs located in the district will be co-opted/invited in the DDMA meeting for better coordination.

**State Police Forces and India Reserve Battalions:**

The State Police Forces and the India Reserve Battalions are crucial for immediate responders to disasters. The existing Police Forces located in the district will be trained in advanced SAR and MFA techniques so that their services can be utilized in disaster situations/events.

## **Fire Services and Home Guards:**

The Home Guards and Fire Services will be assigned an effective role in the field of disaster management. They will be deployed for community preparedness, conduct of mock drill and public awareness. A culture of voluntary reporting to duty stations in the event of any disaster will be promoted. The Fire Services upgraded to acquire multi-hazard rescue capability. The existing set up of these services would be strengthened to take up the new role more effectively.

## **Role of National Cadet Corps (NCC), National Service Scheme (NSS), Scouts and Guides, Youth and Women Organizations:**

NCC, NSS, Scouts and Guides, as organizations would be roped in DM. They will be trained in search and rescue (SAR) and medical first aid (MFA) and other aspects of DM as per the need. The potential of these organization would be also be used for education and awareness generation in DM. And a database of trained personnel would be created and uploaded regularly in the DDMA website.

## **Role of Deputy Commissioner in Disaster Management:**

The Act prescribes responsibilities to various authorities at all levels. The roles and responsibilities of DDMA has been elaborated in Section 30, 31, 33, and 34 of the Act. Keeping in view the provisions of the Act, the Deputy Commissioner, the Chairman of the DDMA shall ensure the following: -

- i. Preparation of the Disaster Management Plan (DDMP) for the District with the assistance of the DDMA and other experts as per the provisions of the Act, guidelines issued by the NDMA, SDMA and the State Executive Committee (SEC);
- ii. Preparation of DDMP by the departments of the Government and other agencies based on the DDMP;
- iii. Periodic mock drill to test the efficacy of the DDMPs;
- iv. Integration of Disaster Risk Reduction (DRR) into development programs and policies of all departments;
- v. To monitor the implementation of the DDMA and regular updation of the same; vi. Setting up the district control room and making it function effectively;
- vii. Earmarking and entrusting responsibility to the various departments including Emergency Support Functions (ESF) and appointment of Nodal Officers by various departments to perform the ESFs;
- viii. Coordination with all the line departments of the State, Central, Armed Forces and other agencies;
- ix. Periodic review of preparedness of departments at all levels;
- x. To liaise with the Government periodically about the disaster and the action taken;
- xi. Integrating the MARG (Mutual Aid and Response Group) of the industrial belt with the disaster management committee;
- xii. Equip and prepare the district machinery before the disaster;
- xiii. Identification of building/open spaces for relief camps and setting up relief camps and transit camps whenever needed;
- xiv. Conducting relief and rescue operations;



xv. Establishing GO-NGO Coordination during normal time so that it works during emergencies and to coordinate the actions of NGOs/CBOs, relief agencies and departments for effective disaster response and relief;

xvi. Organizing Training and conducting mock drills to the Government officials, community and other stakeholders;

xvii. Ensure public awareness on all the hazards which the district face regularly;

xviii. Transmission of Early Warning alters to the vulnerable community with the effective means of communication;

xix. Maintaining the supply of essential commodities;

xx. Stocking of minimum essential relief material for ready availability; and

xxi. Any other action which is needed for the requirement of the situation or to comply with the provisions of the DM Act and instructions issues by the NDMA, SDMA.

The Deputy Commissioner would be assisted to perform the roles assigned to him and the DDMA by the District Emergency Operation Centre (Control Room). The DEOC would perform the following functions: -

- i. District control room would be the nerve centre for the disaster management;
- ii. To monitor, coordinate and implement the actions for disaster management;
- iii. Activate the ESF in the event of a disaster and coordinate the actions of various departments/agencies;
- iv. Ensure that all warning, communication systems and instruments are in working conditions;
- v. Receive information on a routine basis from the district departments on the vulnerability of the various places and villages (parts of the districts);
- vi. Receive reports on the preparedness of the district level departments and the resources at their disposal to arrange and meet their requirements;
- vii. Upgrade the Disaster Management Action according to the changing scenario;
- viii. Maintain a web-based inventory of all resources through the India Disaster Resource Network (IDRN);
- ix. Provide information to the Relief Commissioner' Office of the disaster/emergencies/accidents taking place in the district regularly and maintain a database of disasters and losses caused by them;
- x. Monitor preparedness measures and training activities;
- xi. Providing information at district level, local level and disaster prone areas through appropriate media;
- xii. Brief the media of the situations and prepare day to day reports during the disasters;
- xiii. To report the actual scenario and the action taken by the District Administration;
- xiv. Maintain a database of trained personnel and volunteers who could be contacted at any time;
- xv. Liaise with on-site operation centre, State EOC and other emergency services. The Assistant Commissioner to Deputy Commissioner shall be the Nodal Officer for Disaster Management would be in-charge of the DEOC. The design, layout, equipment and operation of the DEOC would be as per the EOC Manual prepared at the State level.

#### **Measures to be taken for Disaster Management:**

Generally speaking the following measure would help in dealing with disasters in the district:-

- i) Preparation of Disaster Management Plans at District and local Level ii) Implementing of Disaster Management Plans iii) Holding regular meetings at District and Sub-Division level to reviewing the readiness of the administrative machinery to deal with disasters. iv) Constitution of Relief Committees at all levels. v) Regular training programmes of Government functionaries, PRIs, ULBs and other stakeholders in various facets of disaster management. vi) Public awareness and education in disaster management. vii) Community training and empowerment viii) Taking preventive and mitigation measures for the identified hazards ix) Integration of Disaster Risk Reduction (DRR) into on-going development programmes of all departments. x) Establishing effective early warning system for the vulnerable areas and communities. xi) Improving the response capacities of the search and rescue teams.
- xii) Conducting regular mock drills.

**Action during Disasters:**

The following would be the broad guidelines for actions during disaster:

a) Assess the full extent of the disaster/calamity and the damages/losses incurred b) Plan and supervise search and rescue operations c) Allocate clear responsibilities to the officers and provide them necessary resources along with necessary delegations d) Mobilize resources from outside the district if the situation so warrants e) Finalize the relief to be provided to the affected persons and ensure its timely distribution f) Collect and maintain full information of the disaster and steps taken to tackle it g) Document the disaster including the lessons learnt h) Last but not least, keeping informing the higher authorities about the whole incident.



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.

**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.

**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, avoiding the hazard by shifting 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. A proper preparedness and mitigation measure 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. Preparedness 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:-

#### 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, Hospital, etc. at Circle and district level should be functional.
2. Plan Updating Disaster Management Plan needs updating at every interval. It includes the skilled manpower, their addresses and contact numbers, necessary equipment, medicinal stock, daily necessities, list of vulnerable 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 team, disaster management teams at village, Circle, and district level. These teams will provide timely help during any type of disaster. Provision of wireless sets at all Sub-division and circle offices for effective communication of storm/heavy rainfall/flood warning. Fire Brigades at all the Municipal Offices. 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 a year as per the calendar of natural disaster events that is likely to occur.

#### Community Awareness on Various Disasters:

- a. Construction of Earthquake Resistant Structures b. Retrofitting the weak structures c. House insurance d. Construction of embankments for flood control e. Rehabilitation of people in safe lands.
- f. Development of plans for shifting people from vulnerable area to safer area.

6. Mitigation measures (Disaster wise) A. Floods and Storm frequency is quite frequent in three circle 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 flood. Persons living in the low lying parts of floodplains, river 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 response are:-

**a.** Issuing warnings at the local levels **b.** Participating in flood fighting  
by organizing work parties to repair Embankments or clear debris from drainage areas, pile sandbags  
Stockpile needed materials **c.** Facilitating agricultural recovery **d.** Planning emergency supplies of  
flood and clean drinking water **e.** To conduct trainings on search and rescue for Search and Rescue **f.** Teams formed at  
District, circle and Village level from time to time. There is need for trained full time fire brigade personnel in each area who  
will help in search and rescue. The Public health department needs to be equipped with more water quality monitoring  
centres for effective surveillance of water quality during flood events. Provision of wireless communication equipment to all  
circle offices so that information about approaching disaster 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. 2. The onset of storm is extensive and often destructive.

**A** Hazard map will illustrate the areas vulnerable to the storm in any given year. 3. Land use control will reduce the danger of life and property when waters inundate the floodplains. 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. 4. 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. 5. Flood Control aims to reduce flood damage; measures such as reforestation, protection of vegetation, clearing of debris, conservation of ponds and lakes, etc. 6. Structural measures include storage reservoirs, flood embankments, drainage channels, anti-erosion works, etc. and non-structural measures include flood forecasting, flood proofing, disaster preparedness, etc.

**B** Road Accidents 1. Setting up of a Highway Safety Patrol, which will be a specialized division of the police to tackle road accidents. 2. Provision of full time trained fire brigade personnel in at least all the circles. 3. Provision of adequate signboards, speed breakers and guard stones near the accident prone spots. 4. Some hospitals 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 Public 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 Circles. • 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.

### Approach:

Relief, rehabilitation, reconstruction and recovery are important phases of post disaster response. Relief is no longer perceived only as gratuitous assistance or provision of emergency relief supplies on time. It is on the contrary, viewed as an overarching system of facilitation of assistance to the victims of disaster for their rehabilitation in States and ensuring social safety and security of the affected persons. The relief needs to be prompt, adequate and of approved standards.

The recovery phase starts after the immediate threat to human life has subsided. During reconstruction it is recommended to consider the location or construction material of the property. The approach to the reconstruction process has to be comprehensive so as to convert adversity into opportunity. Incorporating disaster resilient features to 'build back better' will be the guiding principle. This phase requires the most patient and painstaking effort by all concerned. The administration, the stakeholders and the communities need to stay focused on the needs of this phase, as, with the passage of time, the sense of urgency gets diluted. The appropriate choice of technology and project impact assessment needs to be carried out to establish that the projects contemplated do not create any side effects on the physical, socio-cultural or economic environment of the communities in the affected areas or in their neighborhood. The involvement of community in decision making is important. Systems for providing psychosocial support and trauma counseling would be developed for implementation during the reconstruction and recovery phase.

### Response:

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. In fact, during disaster the ICS management tool will be more effective to handle the situation in proper way within limited time. 1 Response Structure during Warning Stage at district level, before the occurrence of disaster and immediately after the disaster, the district administration will alert the district control room so that proper information will be provided to the concerned authorities. 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

District Level Incident Response at the district level, there will be one District Headquarters Team with the primary function of assisting the Deputy Commissioner 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. 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 Deputy Commissioner depending upon their fitness, ability and aptitude for any of the emergency situation 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. 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 Deputy Commissioner will be preferred if Deputy Commissioner feel so. The District Level Incident Command Teams will function under the overall control of Deputy Commissioner



**Relief:**

The victims of disaster would need to be provided relief as per the relief code of the State. Displaced population may require to be housed in temporary shelters. The DDMA's would identify locations for setting up temporary camps and make an inventory in advance and make inventory of them. Use of premises of educational institutions for setting up relief camps need to be discouraged as it hampers early recovery. Relief camps will have adequate provision of drinking water, and bathing, sanitation and essential health care facilities. The disaster affected population can also be roped in to manage community kitchens. Guidelines/SOPs for efficient governance of relief camps such as identification cards, rationing, entitlement, management of donations, procurement, packaging, transportation and storage etc. may be issued in advance. The stock-piling of essential relief material at suitable locations is also important. Pre- contracting of relief supplied with agencies is important during pre-disaster phase.

In case of devastating disaster extreme weather conditions can be life threatening or when the period of stay in temporary shelters is likely to be long and uncertain, construction of site specific befitting the local environment, ecology and culture, immediate shelters with suitable sanitary facility will be undertaken to ensure a reasonable quality of life to the affected people. The DDMA's in consultation with the SDMA will plan such shelters which are cost effective and as per the local needs with multi-use potential. Pre-identification of their availability, supply and testing in the local conditions will be done.

The relief supplies would pay attention to the needs of special categories such as pregnant or lactating mothers, infants, newborns, adolescents, and aged people.

**Owner Driven Construction:**

Reconstruction plans and designing of houses need to be participatory process involving the affected community, NGO, corporate sector and the Government. Having a clear cut policy on entitlement, criteria for GIA and land ownership, relocation, exchange of land will facilitate speedy reconstruction. After the planning process is over, while the owner driven construction is preferred option, participation of NGO, corporate sector and technical experts will be encouraged to ensure safe and better reconstruction. Reconstruction programme will be within the confines and the qualitative specifications laid down by the Government. In order to have acceptability for the safe and quality standards it will be better if the safe construction norms, designs and guidelines are finalized during normalcy so that community is well aware of them. Reconstruction of Social Infrastructure

Essential services, social infrastructure and intermediate shelters/camps will be established in the shortest possible time. State Government and Departments of State Government should create dedicated project teams to speed up the reconstruction process.



## **Socio-Economic Rehabilitation**

Disasters destroy development and livelihood sources. In the post disaster situation there is great need to generate temporary livelihood options for the affected community. The relief and reconstruction programmes would be used to generate livelihood options for the needy. Ongoing or new programmes may be launched which may help the affected community to earn their livelihood. It would be ensured that such programmes result in the creation of assets, infrastructure, and amenities community and equally important is that such assets are hazard resistant, durable, and sustainable. Disasters may also end up in destroying the existing village or housing sites and re- settlement in the existing locations may no longer be possible. Possible sites for re- location of habitation would be identified.

### **Linking Recovery with Safe Development/Reconstruction – 'Building back Better'**

It will be ensured that the post disaster development/reconstruction does not end up in re-building the existing vulnerability. The reconstruction phase would be utilized to incorporate the building codes, safe construction practices, and zoning regulations. Contingency plans for reconstruction in highly disaster prone areas would be drawn out during the period of normalcy, which may include architectural and structural designs in consultation with the various stakeholders. Emphasis will be laid on plugging the gaps in the social and economic infrastructure and infirmities in the backward and forward linkages. Efforts will be made to support and enhance the viability of livelihood systems, education, health care facilities, care of the elderly, women and children, etc. Other aspects warranting attention will be roads, housing, drinking water sources, provision for sanitary facilities, availability of credit, supply of agricultural inputs, up gradation of technologies in the on- farm and off-farm activities, storage, processing, marketing, etc.

**For Incident Rescue in the District, a Quick Response Team is formed with following members-**

<b>Designation of the members</b>	<b>Contact no</b>
1. Superintendent of Police, Charaideo	60026900267/9435562135
2 Station Officer, Fire Station, Sonari Fire	8822967008
3 Executive Engineer PWD (Rural Roads) PWD (RR)	9435384432
4 Asstt. Commandant 149 Bn CRPF Towkak	8132888136
5. Army Commandant, 63Fd Regiment Maibella	9401965913
<b>Medical team / First Aid Team</b>	<b>Contact no</b>
1. Joint Director of Health Services, Charaideo	9435354429
2. Sub-Divisional Medical & Health Officer, Sonari	7637984589
3. Sub-Divisional Medical & Health Officer, Sapekhati	8638449004
4. Sub-Divisional Medical & Health Officer, Patsaku	9435249333

**Blood Donor List:****Contact Details:****Dr. Sayed Taufique Hussai- 9435354429**

<b>SIN</b>	<b>Name</b>	<b>Group</b>	<b>Contact Numbers</b>
1	Shri Bhakta Narzary	B(+ve)	9957635950
2	Shri Nripen Dehengia	A(+ve)	8474867330
3	Md Papu Ahmed	B(+ve)	9859098176
4	Shri Madhurjya Buragohain	O(+ve)	9577089432
5	Sri Ratu Gogoi	O(+ve)	9957081299
6	Md Nasim Ahmed	O(+ve)	9401767443
7	Shri Manuj Konwar	AB(+ve)	9854828490
8	Shri Girish Gogoi	O(+ve)	9678947301
9	Shri Dibakar Phukan	B(+ve)	
10	Md Momin Ali	B(+ve)	9954727098
11	Shri Uttam Changmai	O(+ve)	9854433838
12	Shri Devojit Narzary	O(+ve)	9859787014
13	Shri Partha Pratim Gogoi	AB(+ve)	9854257083
14	Shri Niranjan Borgohain	O(+ve)	9531106268
15	Shri Suruj Gogoi	B(+ve)	9859347885
16	Ankuran Borgohain	B(+ve)	7663031635
17	Shri Humen Chutia	A(+ve)	9678320188
18	Shri Dipankar Barhoi	O(-ve)	9954729415
19	Shri Dipmoina Gogoi	AB(+ve)	9854481550
20	Shri Poran Borgohain	O(+ve)	8486345727
21	Md Abdul Chatter	B(+ve)	9954182916
22	Md Kutubuddin Ahmed	A(-ve)	8486345727

**Public Grievances /Missing Persons Search** A committee at the district level has to be constituted under the chairmanship of the Deputy Commissioner to address the grievances of the public regarding missing persons. The search and rescue team should search for the missing persons living or dead.

**Animal Care** The animal husbandry departments with necessary equipment 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. District Animal Husbandry & Veterinary Officer will be the Nodal person and he may form a committee to meet the exigency. Contact

– **A.B Kesari (Veterinary Officer)- 7002102453**

**Carcass Disposal Team:**

1. Superintendent of Police, Charaideo, Police Administration
2. The Chairman, Sonari Municipality Board, Municipal Administration.
3. The Chairman, Moran Municipality Board.



## 6. PROCEDURE AND METHODOLOGY FOR MONITORING, EVALUATION, UPDATING AND MAINTENANCE OF DDMP.

The following monitoring and evaluation procedure would be followed to make the plan functional and a living document:-

a) The DDMA shall regularly review the implementation of the plan. b) In order to improve the plan the DDMA would check the efficiency of the plan after any major disaster/emergency in the district and see what did work and what did not work and make amendments to the plan accordingly. c) As per Sub Section (4) of Section 31 of the Disaster Management Act, 2005 the plan would be reviewed and updated annually and the year in which the plan has been reviewed would be clearly mentioned in shape of header in each page of the plan. d) Resource inventory of the district fed into the IDRN would be regularly updated and appended to the plan. e) Names and contact details of the officers/officials who are the nodal officers or the in charge of resources to be updated on regular basis. f) A soft copy of the plan would always be kept in the DDMA website for reference by all concerned. g) A Copy of the plan would be sent to all the stakeholder departments, agencies and organizations so that they know their role and responsibilities and they are also prepare their own plans. h) Regular Mock Drills should be conducted to test the efficiency of the plan and check the level of preparedness of various departments and other stakeholders. i) Regular training and orientation of the officers/officials responsible to implement the plan should be done so that it becomes and useful document to the district administration. j) Regular interaction and meetings with the CPMFs and Army or any other central government agency would be done by the DDMA should that there is no problem of coordination during disasters. The representatives of these organizations should be invited as expert for the DDMA meeting. A copy of the DDMP should also be shared with them. k) The DEOC would assist the DDMA in keeping the plan in updated form and collecting and processing the information. l) The DDMP would be comprehensively reviewed in the year 2017 latest by June and incorporating feedback from the departments and field officers

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 moral 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. 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.

Plan Update The DDMP is a "living document" and the Deputy Commissioner 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 Deputy Commissioner. 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.

Budget and other financial allocations 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.



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. 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, Circle and village level should be allocated for training of various teams against disaster, purchasing of equipment 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 PMAY, lifeline structures, all buildings may be insured by bank, private companies. 8. At district, circle 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 and Gram Panchayat to carry out the following activities :-

1. To train Search and Rescue, First Aid groups
2. To create awareness among the people
3. To procure search and rescue materials
4. To evacuate and set up temporary shelter for disaster victims.

## 7. STANDARD OPERATING PROCEDURES

### BY VARIOUS DEPARTMENTS

#### OPERATING PROCEDURE GUIDELINES FOR FOREST DEPARTMENT

##### Planning Assumptions:

1. There is no substitute for maintaining standards of services and regular maintenance during normal times. This affects the response of the department to any disaster situation.
2. The department is required adopt appropriate measures to ensure that community participates substantially.
3. For effective preparedness, the department must have a disaster response plan or disaster response procedures clearly defined in order to avoid confusion, improve efficiency in cost and time.
4. Orientation and training for disaster response plan and procedures accompanied by simulated exercise will keep the department prepared for such eventualities. Special skills required during emergency operations need to be imparted to the officials and the staff. Select personnel can be deputed for training as "NODAL OFFICER – FOREST" at district level. Action plan objective in a disaster situation
5. Forest protection Activities on Receipt of Warning or Activation of District DDMP (DDMP)
6. Within the affected district all available personnel will be made available to the District Project Officer, DDMA. If more personnel are required, then out of station officer or those on leave may be recalled.
7. All personnel required for Disaster Management should work under the overall supervision and guidance of District Project Officer, DDMA.
8. Establish communications with District control room and your departmental offices within the division.
9. Appoint one officer as "NODAL OFFICER – Forest" at district level.
10. Review and update precautionary measures and procedures and review with staff the precautions that have been taken to protect equipment and the post- disaster procedures to be followed.
11. Fill departmental vehicles with fuel and park them in a protected area.
12. Check available stocks of equipments and materials which are likely to be most needed after disaster.
13. Provide information to all concerned, about disasters, likely damages, and information about ways to protect the same.
14. All valuable equipments and instruments should be packed in protective covering and stored in room the most damage-proof.
15. Establish work schedules to ensure that the adequate staff are available Relief and Rehabilitation
16. Assess the extent of damage to forests, nurseries and storage facilities and the requirements to salvage or re plantation
17. Establish contact with remote sensing department to assess damage
18. Afforestation measures should be coordinated with DRDA to ensure employment assurance to disaster hit people, with Soil Conservation Officer to ensure stabilization of slopes and district control room.

19. Ensure that the adequate conditions through cleaning operations are maintained to avoid water-logging and salinity in low lying areas.
20. A pests and disease monitoring system should be developed to ensure that a full picture of risks is maintained.
21. Plan for emergency accommodations for forest staff from outside the area.
22. Information formats and monitoring checklists should be used for programme monitoring and development and for reporting to DCR. This is in addition to existing reporting system in the department.
23. Establishment of a public information centre with a means of communication, to assist in providing an organized source of information. The department is responsible for keeping the community informed of its potential and limitations in disaster situations.
24. The NGOs and other relief organizations should be aware of the resources of the department.
25. Ensure availability of fuel and fodder for disaster effected people.

#### OPERATING PROCEDURE GUIDELINES FOR POLICE DEPARTMENT

##### Planning Assumptions

1. For effective preparedness the need is for the disaster response procedures to be clearly defined.
2. Orientation and training for disaster response plan and procedures accompanied by simulated exercises will keep the department prepared for such eventualities. Special skills required during emergency operations need to be imparted to the officials and the staff. Select personnel can be deputed for training as "NODAL OFFICER – Police" at the district level.

##### NORMAL TIME ACTIVITY:

1. Assess preparedness level and report the same as per the format to District Control Room every six months
2. Maintain a list of disaster prone areas in the district
3. Organize training on hazardous chemicals for police officers to facilitate handling of road accidents involving hazardous materials.
4. Designate an area, within police station to be used as public information centre.

##### Action Plan Objective in a Disaster Situation :

1. Maintain Law and order Activities On Receipt of Warning or Activation of DDMP
2. Within the district, all available personnel will be made available to the District Disaster Management Chairman. If more personnel are required, then out of station officers or those on leave may be recalled.
3. All personnel required for disaster management should work under the overall supervision and guidance of District Disaster Management Authority, Chairman.

Establish radio communications (and assist in precautionary evacuation activities) with **a.** State Emergency Operations Centre. **b.** District control room **c.** Departmental offices **d.** All district level officials of the department would be asked to report to the DDMA. **e.** Appoint one officer as "Officer-in-Charge – Police" at the district level **f.** The DDMA shall provide "Officer-in-Charge - Police" or the field staff as the need be, with all needed authorizations with respect to **g.** Recruiting casual laborers. **h.** Procuring locally needed emergency tools and equipment and needed materials. **i.** Expending funds for emergency needs. **j.** The "Officer-in-Charge - Police" will ensure that all field staff and other officers submit the necessary reports and statement of expenditure in a format as required by DDMA **k.** Provide guards as needed for supply depots such as cooperative food stores and distribution centers. **l.** Identify anti-social elements and take necessary precautionary measures for confidence building.



### Evacuation:

- All evacuations will be ordered only by the DC, SP.
- For appropriate security and law and order, evacuation should be undertaken with assistance from community leaders.
- All evacuations should be reported to Deputy Commissioner or Superintendent of Police immediately.

### Relief and Rehabilitation :

- Immediately after the disaster, dispatch officers to systematically identify and assist people and communities in life threatening situations.
- Help identify the seriously injured people, and assist the community in organizing emergency transport of seriously injured to medical treatment centers.
- Ensure that the police stations are functioning immediately after the disaster at all required locations, as may be requested by the district control room, and that staff are available for the variety of needs that will be presented.
- Assist and encourage the community in road-clearing operations.
- Identify roads to be made one-way, to be blocked, alternate routes, overall traffic management and patrolling on all highways, and other access roads to disaster site.
- Provide Security in transit and relief camps, affected villages, hospitals and medical centers and identify areas to be cordoned off.
- Transport carrying transit passengers (that is, passengers traveling through buses and passing through the district), should be diverted away from the disaster area.
- Provide security arrangements for visiting VVIPs and VIPs.
- Assist district authorities to take necessary action against hoarders, black marketers and those found manipulating relief material.
- In conjunction with other government offices, activate a public information center to respond to personal inquiries about the safety of relatives in the affected areas
- Compile statistics about affected communities, deaths, complaints and needs
- Respond to the many specific needs that will be serve as a rumor control centre
- Reassure the public
- Make officers available to inquire into and record deaths, as there is not likely to be time nor personnel available, to carry out standard post-mortem procedures.
- Monitor the needs and welfare of people sheltered in relief camps.
- Coordinate with military service personnel in the area.

### OPERATING PROCEDURE GUIDELINES FOR HEALTH DEPARTMENT

- *There is no substitute for maintaining standards of services and regular maintenance during normal times. This affects the response of the department to any disaster situation.*
- for effective preparedness, the department must have disaster response procedures clearly defined in order to avoid confusion, improve efficiency in cost and time.
- Orientation and training for disaster response plan and procedures, accompanied by simulated exercises, will keep the department prepared for such eventualities. Special skills required during disaster situations need to be imparted to the officials and the staff.
- Select personnel can be deputed for training as "NODAL OFFICER".



## ACTION PLAN OBJECTIVE IN A DISASTER SITUATION

- Providing efficient and quick treatment
- Preventing outbreak of epidemics.

## ACTIVITIES ON RECEIPT OF WARNING OR ACTIVATION OF IRT:

- Within the affected district all available personnel will be made available to the District Project Officer, DDMA. If more personnel are required, then out of station officers or those on leave may be recalled.
- All personnel required for disaster management should work under the overall supervision and guidance of District Project Officer, DDMA.
- Ensure that personnel working within the district come under the direction and control of the DDMA.
- Appoint one person as "NODAL OFFICER". Review and update precautionary measures and procedures, and review with staff, the precautions that have been taken to protect equipment and the post-disaster procedures to be followed.
- Stock emergency medical equipment which may be required after a disaster.
- Determine type of injuries/illnesses expected and drugs and other medical items required, and accordingly ensure that extra supplies of medical items be obtained quickly.
- Provide information to all hospital staff about the disasters, likely damages and effects, and information about ways to protect life, equipment and property.
- Discharge all ambulatory patients whose release does not pose a health risk to them. If possible, they should be transported to their home areas.
- Non-ambulatory patients should be relocated to the safest areas within the hospital.
- The safest rooms are likely to be: 1. On Ground Floor 2. Rooms in the center of the building away from windows 3. Rooms with concrete ceilings.
- Equipment supplies such as candles, matches, lanterns and extra clothing should be provided for the comfort of the patients.
- Surgical packs should be assembled and sterilized. A large enough number should be sterilized to last four to five days. The sterilized surgical packs must be stored in protective cabinets to ensure that they do not get wet. Covering the stock with polythene is recommended as an added safety measure.
- All valuable instruments, such as surgical tools, ophthalmoscopes, portable sterilizers, CGS, dental equipments, etc., should be packed in protective coverings and store rooms considered to be the most damage-proof.
- Protect all immovable equipment, such as x-ray machines, by covering them with tarpaulins or polythene.
- All electrical equipments should be unplugged when disaster warning is received.
- Check the emergency electrical generator to ensure that it is operational and that a buffer stock of fuel exists. If an emergency generator is not available at the hospital, arrange for one on loan.
- All fracture equipment should be readied.
- If surgery is to be performed following the disaster, arrange for emergency supplies of aesthetic gases.
- Check stocks of equipments and drugs which are likely to be most needed after the disaster. These can be

categorized generally as:

1. Drug used in treatment of cuts and fractures, such as tetanus toxic, analgesics and antibiotics.
2. Drugs used for the treatment of diarrhea, water-borne diseases and flu  
(Including oral rehydrating supplies).

3. Drugs required to treat burns and fight infections.
4. Drugs needed for detoxication including breathing equipments. Assess the level of medical supplies in stock, including :

1. Fissure materials
2. Surgical dressings Splints, Plaster rolls
3. Disposable needles and syringes
4. Local antiseptics.

- Prepare an area of the hospital for receiving large number of casualties.
- Develop emergency admission procedures (With adequate record keeping).
- Orient field staff with DDMA, standards of services, procedures including tagging.
- Hospital administrators should o Establish work schedules to ensure that adequate staff is available for in- patient needs.
- organize in-house emergency medical teams to ensure that adequate staff are available at all times to handle emergency casualties.
- Set up teams of doctors, nurses and dressers for visiting disaster sites. RELIEF

#### AND REHABILITATION

- Transport should be arranged for the transfer of seriously injured patients from villages and peripheral hospitals to general hospitals. If roads are blocked, a method should be established to request helicopter transport.
- Establish health facility and treatment centers at disaster sites.
- The provision of medical services should be coordinated by the CMO with district control room.
- Maintain check posts and surveillance at Transport depots and all entry and exit points from the affected area, especially during the threat or existence of an epidemic
- An injury and disease monitoring system should be developed to ensure that a full picture of health risks is maintained.
- Monitoring should be carried out for epidemics, water and food quality and disposal of, waste in transit and relief camps, feedings centers and affected villages.
- Plan for emergency accommodations for auxiliary staff from outside the area.
- Information formats and monitoring checklists should be used for programme monitoring and development and for reporting to Emergency Operations Centre. This is in addition to existing reporting system in the department.
- Seek security arrangements from district police authorities to keep curious persons from mentoring hospital area and to protect staff from hostile actions.
- Establishment of a public information centre with a means of communication to assist in providing an organized source of information. The hospital is responsible for keeping the community informed of its potential and limitations in disaster situations.
- The Local Police, rescue groups, and ambulance teams should be aware of the resources of each hospital.

## OPERATING PROCEDURE GUIDELINES FOR IRRIGATION AND PUBLIC HEALTH DEPARTMENT.

### Planning Assumptions

- There is no substitute for maintaining standards of services and regular maintenance during normal times. This affects the response of the department to any disaster situation.
- Operating procedures for mobilizing community participation during various stages of disaster management. The department is required to adopt appropriate measures to ensure that community participates substantially.
- For effective preparedness, the department must have a disaster response plan or disaster response procedures clearly defined in order to avoid confusion, improve efficiency in cost and time.
- Orientation and training for disaster response plan and procedures accompanied by simulated exercise will keep the department prepared for such eventualities. Special skills required during emergency operations need to be imparted to the officials and the staff. Select personnel can be deputed for training as "NODAL OFFICER – Water supply" and "Officer-in-Charge – Water supply" at state and district level respectively.
- To the extent possible, preventive measures as recommended in the preparedness and mitigation document of DDMP should be undertaken to improve departmental capacity to respond to a disaster. Normal Time Activity
- Assess preparedness level and report the same as per the format to the District Control Room every six months.
- Identify flood prone rivers and areas and activate flood monitoring mechanisms.
- Mark water level gauges on rivers, dams, and reservoirs.
- Establish disaster management tool kits with at sub-divisional levels consisting of ropes, pulley blocks, jungle knives, shovels, cement in bags, concrete pans, gunny bags, cane baskets.

### Action Plan Objective in a Disaster Situation

- Restoration of water supply to the affected area
- Monitor flood situation
- Monitor and protect irrigation infrastructure.
- Restore damaged infrastructure

### Activities on Receipt of Warning or Activation of DDMA

- Within the affected district/sub-division all available personnel will be made available to the District Project Officer, DDMA. If more personnel are required, then out of station officer or those on leave may be recalled.
- All personnel required for Disaster Management should work under the overall supervision and guidance of District Project Officer, DDMA.
- Establish communications with Emergency operations center at State HQ, District Control Room and your departmental and field offices within the division.
- Appoint one officer as "Officer-in-Charge – Water Supply and Irrigation" at district level.
- Review and update precautionary measures and procedures and review with staff the precautions that have been taken to protect equipment and the post-disaster procedures to be followed.
- Fill departmental vehicles with fuel and park them in protected area.
- Make sure that the hospital storage tank is full and hospital is conserving water.
- Inform people to store an emergency supply of drinking water.
- Organize on the receipt of disaster warning continuous monitoring of
- Wells, Intake structures, Pumping stations, Buildings above ground, Pumping mains, The treatment plant, Bunds of Dams, Irrigation Channels, The inlet and outlet to tanks should be inspected to ensure that waterways are unobstructed by trees and vegetation. Any repairs/under construction activity should be well secured with sandbags rock falls, etc.



### Relief and Rehabilitation:

- Carry out emergency repair of all damages to water supply system
- Assist health authorities to identify appropriate source of potable water.
- Identify unacceptable water sources and take necessary precautions to ensure that no water is accessed from such sources, either by sealing such arrangements or by posting department guards.
- Arrange for alternate water supply and storage in all transit camps, feeding centers, relief camps, cattle camps, and also the affected areas, till normal water supply is restored.
- Ensure that potable water supply is restored as per the standards and procedures laid down in "Standards of Potable Water".
- Continue round the clock inspection and repair of bunds of dams, irrigation channels, control gates and overflow channels.
- Continue round the clock inspection and repair of pumps, generators, motor equipment and station building
- Plan for emergency accommodations from staff from outside the area.
- Report all activities to the head office.

### On the recommendations of "NODAL OFFICER – "Water Supply"/ Deputy Commissioner/District

#### Control Room

- Provide for sending additional support along with food, bedding, tents
- Send vehicles and any additional tools and equipments needed.
- Standby diesel pumps or generators should be installed in damage proof buildings.
- A standby water supply should be available in the event of damage.
- Establish procedures for emergency distribution of water if existing supply is disrupted.
- Make provisions to acquire tankers and establish other temporary means of distributing water on an emergency basis.
- Make provisions to acquire containers and storage tanks required for storing water on an emergency basis.
- Prepare plan for water distribution to all transit and relief camps, affected villages and cattle camps and ensure proper execution of these plans.
- A minimum level of stock should be maintained for emergencies, and should include extra lengths of pipe, connections, joints, hydrants and bleaching powder Adequate tools should be on hand to carry out emergency repair.
- Make sure auxiliary generators and standby engines are in good working order.
- Acquire a buffer stock of fuel for the motors and store in a protected place.
- Establish emergency work gangs for immediate post-disaster repair.

### Standards of Services (Water Supply):

- After any repair on the distribution system, the repaired main should be flushed and disinfected with a chlorine solution of 50 mg/liter for contact period of 24 hours, after which the main is emptied and flushed again with potable water.
- If the demand for water is urgent, or the repaid main cannot be isolated, the concentration of the disinfecting solution may be increased to 100mg/liter and the contact period reduced to 1 hour.
- At the end of disinfection operations, but before the main is put back into service, samples should be taken for bacteriological analysis and determination of chlorine residue.
- When a water treatment plant, pumping station, or distribution system is so badly damaged that operation cannot be restored for some time, other methods described in the following paragraphs must be used.

#### Private System (open well or tube):

- Water from these sources, with adequate chlorination as necessary, can be connected to distribution system or hauled to points of consumption. Springs and wells (non-private)
- Ground water originating from deep aquifers (such as is obtained from deep wells and certain springs) will be free from contamination if certain simple protective measures are taken.
- When springs are used as a source of water supply for disaster area, careful attention must be paid to geological formations. Limestone and certain rocks are liable to have holes and cracks, especially after earthquake, that may lead to the contamination of ground water.
- A sanitary survey of the area surrounding a well site or spring is of utmost importance. This survey, which should be carried out by a qualified professional environmental health worker, should provide information on source of contamination, geological structures (with particular reference to overlying soil and rock formations) quality and quantity of ground water, direction of flow etc.
- The well selected as a source of water, should be at least 30m away from any potential source of contamination, and should be located higher than all such sources. The upper portion of the well must be protected by an external impervious casing, extending at least 3m below and 30cm above ground level. The casing should be surrounded by a concrete platform at least 1m wide, that slope to allow drainage away from the well, it should connect to the drain that will carry the spilled water away. The opening for drop pipes should be sealed to prevent outside water from entering the well. The rim of manholes should project at least 8cm above the surrounding surface, and the manhole cover must overlap this rim.
- Immediately after construction or repair, the well should be disinfected. First the casing and lining should be washed, and scrubbed with strong chlorine solution containing, 100mg of available chlorine per litre. A strong solution is then added to produce concentration of 50- 100 mg/litre in the water stored in the well. After adequate agitation, the well water is left to stand for at least hours, then pumped out. The well is then allowed to refill. When the residual chlorine of the water drops below 1 mg/litre the water may be used.
- Most of water is stated above applies also to the location and protection of springs. The following points may be added:
- The collection installation should be so built as to prevent the entrance of light.
- The overflow should be so located as to prevent the entrance of surface water at times of heavy rainfall.
- The manhole covers and gates should be locked.
- Before using the water, the collection chamber should be disinfected with a chlorine solution.
- An area within a radius of 50m around the spring should be fenced off to prevent ground surface contamination.

#### Surface water :

- Surface water should be used as source of water supply only as a last resort.
- Measures should be taken to protect the watershed from pollution by animals and people. As it is usually difficult to enforce control regulations, the point of intake for water supply should be located above any tributary carrying grossly contaminated water. The pump intake should be screened and placed so that it will not take in mud from the stream bed or floating debris. The device can be something extremely simple, such as perforated drum, fixed in the middle of the stream.

#### Treatment:

- Water should be tested for the presence of E. coli and unsafe concentrations of nitrate as soon as possible. Detection of E. coli indicates contamination by human waste and therefore requires immediate protective and corrective measures.
- Monitoring of water quality should be restored or initiated immediately. During the disaster, daily determination of the chlorine residual in public water supply is sufficient.



### Disinfections:

- Chlorine and chlorine-librating compounds are the most common disinfectants. Chlorine compounds for water disinfections are usually available in three forms:

#### 1. Chlorinated lime or bleaching powder, which has 20% by weight of available chlorine

when fresh. Its strength should always be checked before use. 2. Calcium hypochlorite, a more stable compound sold under various proprietary names. This compound contains 70% by weight of available chlorine. If properly stored in tight container and in dark cool place, it preserves its chlorine contents for Considerable period. o Sodium hypochlorite, usually sold as solution of approximately 5% strength under a variety of proprietary names. Its use in water disinfections is limited to small quantities and special circumstances.

### Methods of chlorination:

#### Gas chlorinator

- These machines draw chlorine gas from a cylinder containing liquid chlorine, mix it in water and inject into supply pipe. Mobile gas chlorinators are made for field use.

#### Hypo chlorinators:

- These are less heavy than gas chlorinator and more adaptable to emergency disinfection. Generally, they use a solution of calcium hypochlorite or chlorinated lime in water and discharge it into a water pipe or reservoir. They can be driven by electric motors or petrol engines and their output can be adjusted.
- Hypo chlorinators are small and easy to install. They consists usually of a diaphragm pump and standard accessories, including one or more rubber-lined, solution tanks and a chlorine residual testing set. The usual strength of solution is 0.1% and it seldom rises above 0.5%.

### The Batch Method :

- In the absence of the chlorinators, water is disinfected by batch method. This method is more likely to be used in emergencies. It involves applying a predetermined volume of chlorine solution of known strength to a fixed volume of water by means of some gravity arrangements. The strength of the batch solution should not be more than 0.65% of chlorine by weight as this is about the limit of solubility of chlorine at ordinary temperatures. For example 10g of ordinary bleaching powder (25% strength) dissolved in 5 litres of water gives a stock solution of 500mg/litre. For disinfection of drinking water, one volume of the stock solution added to 100 volumes of water gives a concentration of 5mg/litre. If after 30 minutes contact the chlorine residual is more than 0.5mg/litre this dosages could be reduced.
- After the necessary contact period, excess chlorine can removed to improve the taste by such chemicals as sulphur dioxide, activated carbon, or sodium thiosulphate. The first two are suitable for permanent installations, whereas sodium thiosulphate is more suitable for use in emergency chlorination. One tablet containing 0.5g of anhydrous sodium thiosulphate will remove 1mg/litre of chlorine from 500 litres of water.



### Continuous Chlorination :

- This method, in which porous containers of calcium hypochlorite or bleaching powder are immersed in water, is used mainly for wells and springs but is also applicable to other types of water supply. A free residual chlorine level of 0.7 mg/litre should be maintained in water, treated for emergency distribution. A slight taste and odour of chlorine after half an hour gives an indication that chlorination is adequate. In flooded areas where the water distribution system is still operating, higher chlorine residual should be maintained. Occasionally, an unpleasant taste develops from the reaction of chlorine with phenolic or the other organic compounds. This taste should be accepted, as it is an indication of safe disinfection.

### Filtration-Disinfection :

- In this method water is mixed with diatomaceous earth, then passed through the filter unit in which filtering partitions (septa) are installed. Mobile purification units using this process have been produced with capacities up to 50,000 litres per hour. They consist essentially of:
  - A centrifugal pump driven by a rope-started gasoline engine.
  - A filter (diatomic)
  - A hypo chlorinator
  - A slurry feeder and an air compressor.
  - A pre coat and re-circulating tank.
  - A chlorine solution tank.
  - Hose adapters
  - Valves (pump suction, inlet, drain, outlet, flow control air release, etc) and
  - A tool box. Instructions in the manuals supplied with such units must be followed. Physical

### Protection :

- In disaster situation, physical protection of water supplies for use, is a major consideration. In addition to such barriers as walls and fences, guards may be necessary to prevent mobs from overrunning and damaging treatment units, pumping stations, tankers, distribution stations, and temporary collection facilities. Intake structures, wells and springs should also protect against misuse. The character and extent of such protection will depend on the local situation. Ice Supply
- Required ice should be supplied from a commercial manufacturing plant where it is made from safe water

and where sanitary regulations are observed.

- It should be distributed in trucks designed for the purpose, equipped with tools for the safe handling of ice.
- After drinking water is secured within stricken areas, making water available for domestic use (such as

leaning and washing) should be considered.

### Coagulation-Disinfection :

Removal of the organic matter greatly lessens the amount of chlorine needed for disinfections. There are many factors that govern the coagulation process. These include:

1. Hydrogen-ion concentration. The optimum pH value for coagulation is the value that the best floc formation and setting. The pH value of water changes when coagulants are used and has to be adjusted to its optimum value by addition of alkali or acids.
2. Mixing. Coagulants must be thoroughly mixed with the water to give satisfactory results. This may be accomplished by (a) pump action, whereby the coagulant solution is added to the suction pipe of the pump and pump does the mixing; (b) the drip bottle method i.e. hanging a drip-bottle over the discharge pipe or hose of raw water that feeds the tank and letting the coagulant solution drip on to the water jet; or (c) dissolution, i.e. allowing the discharge of raw water to splash on to a basket containing solid coagulant.

3. Coagulant dosage. The amount of the coagulant and chemicals required to adjust the pH value of water may be calculated when the pH and the type of alkalinity are known. However the optimum dosage for a given water may be determined approximately using the jar test. Coagulation-Filtration-Disinfection. In this method filtration is added to the procedures described above. If temporary reservoir can be arranged, it is preferable to let the water settle before filtering it. In mobile purification units, however the water is filtered through a pressure filter without setting. They usually have a capacity of 4000- 7000 litres per hour, and consist essentially of: A centrifugal pump directly coupled to a gasoline engine., A filter (pressure, rapid and filter), A hypochlorinator, A chemical solution tank (one for alum and one for soda ash), A chlorine solution tank, Hose adapters, Valves (pump suction, inlet, drain, outlet, flow control air release, etc) and A tool box. Instructions in the manuals supplied with such units must be followed.

#### OPERATING PROCEDURE GUIDELINES FOR ANIMAL HUSBANDRY DEPARTMENT

##### Planning Assumptions:

- There is no substitute for maintaining standards of services and regular maintenance during normal times. This affects the response of the department to any disaster situation.
- Operating procedures for mobilizing community participation during various stage of disaster management have been given in section on "Areas of Community Participation". The department is required to study these and adopt appropriate measures to ensure that community participates substantially.
- For effective preparedness, the department must have a disaster response plan or disaster response procedures clearly defined in order to avoid confusion, improve efficiency in cost and time.
- Orientation and training for disaster response plan and procedures accompanied by simulated exercise will keep the department prepared for such eventualities. Special skills required during emergency operations need to be imparted to the officials and the staff. Select personnel can be deputed for training as "NODAL OFFICER -Veterinary Services" at district level respectively.
- To the extent possible, preventive measures as recommended in the preparedness and mitigation document of DDMP, should be undertaken to improve departmental capacity to respond to a disaster.
- Hospital staff be aware of damage - proof hospital rooms/buildings.
- A standby generator be made available for every hospital
- At least one kerosene - powered refrigeration unit be made available for storage of drugs.
- Orientation and training for disaster response plan and procedures, accompanied by simulated exercise will keep the department prepared for such eventualities. Special skills required during disaster situation need to be imparted to the officials and the staff
- To the extent possible, preventive measures as recommended in the preparedness and mitigation document of DDMP, should be communicated to the community to prevent extensive loss of livestock.

#### Action Plan Objective in a Disaster Situation:

- Treatment of injured cattle.
- Protection and care of abandoned/lost cattle.

#### Activities on Receipt of Warning or Activation of DDMA

- Within the affected district all available personnel will be made available to the District Project Officer, DDMA. If more personnel are required, then out of station officer or those on leave may be recalled.
- All personnel required for Disaster Management should work under the overall supervision and guidance of District Project Officer, DDMA.
- Establish communications with
  - District control room
  - Veterinary aid centers and hospitals (including private practitioners) within the district.
- The Deputy Director, Veterinary Dept. will act as "Nodal Officer – Veterinary Services".
- Review and update precautionary measures and procedures and review with staff the precautions that have been taken to protect equipments and the post-disaster procedures to be followed.
- Fill departmental vehicles with fuel and park them in protected area.
- Stock emergency medical equipments, which may required after disaster.
- Determine what injuries/illnesses may be expected, and what drugs and other medical items will be required, in addition to the requirements of setting up cattle camps, and accordingly ensure that extra supplies of medical items and materials be obtained quickly.
- Provide information to all staff of veterinary hospitals and centres about the disasters, likely damages and effects, and information about ways to protect life, equipment and property.
- Surgical packs should be assembled and sterilized.
- Arrange for emergency supply of aesthetic drugs.
- Prepare an area of the hospital for receiving large number of injured livestock.
- Establish work schedules to ensure adequate staff are available round the clock.
- Set up teams for visiting disaster site.

#### Relief and Rehabilitation:

- Organize transfer of injured livestock from village to veterinary aid centers wherever Possible.
- The provision of medical services should be coordinated by Nodal Officer-Veterinary Services with District Control Room, and cattle camps.
- Establish cattle camps and additional veterinary aid centers at disaster sites and designate an Officer- in-Charge for the camp.
- Estimate the requirement of water, fodder and animal feed, for cattle camps and organize the same.
- Ensure the adequate sanitary conditions though cleaning operations are maintained in order to avoid outbreak of any epidemic
- An injury and disease monitoring system should be developed, to ensure that a full picture of risks is maintained.
- Plan for emergency accommodations for veterinary staff from outside the area.
- Information formats and monitoring checklists as given in Annexure should be used for programme monitoring and development and for reporting to Emergency Operations Centre. This is in addition to existing reporting system in the department.
- Establishment of public information centre with a means of communication, to assist in providing an organized source of information. The hospital is responsible for keeping the community informed of its potential and limitations, in disaster situations.



- The local police and rescue group should be aware of the resources of each veterinary aid centre and hospital.
- Provide information to all staff of veterinary hospital and centres about the disaster likely damages and effects, and information about ways to protect life, equipment and property.
- Surgical packs should be assembled and sterilized.
- Enough stock of surgical packs should be sterilized to last for four to five days.
- The sterilized packs must be stored in protective cabinets to ensure that they do not get wet. Covering the stock with polythene is recommended as an added safety measure.
- All valuable equipments and instruments should be packed in protective coverings and stored in room the most damage-proof.
- Check the emergency electrical generators, to ensure that it is operational, and that a buffer stock of fuel exists. If an emergency generator is not available at the hospital, arrange for one on loan.
- Arrange for emergency supplies aesthetic drugs.
- Check stocks of equipment and drugs, which are likely to be most needed after disaster.
- Fill hospital storage tanks and encourage water savings. If no storage tank exists, water for drinking should be drawn in clean container and protected.
- Prepare an area of hospital for receiving large number of injured livestock.
- Develop emergency admission procedure (with adequate record keeping).
- Cattle camps and hospital administrator should
- Establish work schedules to ensure that adequate staff are available
- Set up teams of veterinary doctors, and assistants for visiting disaster sites. Standards for

#### Cattle Camps

1. The minimum number of cattle in the cattle camp should be about 100 and the maximum 500.
2. The cattle camp should be located at suitable sites, bearing in mind, the adequate supply of water and shade are most essential for well being of the cattle.
3. Cattle sheds constructed should not exceed 20 sq. feet per animal. Suitable arrangements for water trough and manger(s) should be made.
4. The feeding centers for cattle should be located in such a manner that
  - There is adequate supply of drinking water
  - There is sufficient shade for cattle to rest during the afternoon
  - They are located as near the rail head as possible
  - They are conveniently located, not beyond a radius of 8 Km from the affected villages.

The cattle will require 6 Kg per cattle head per day of fodder, and 1 to 1½ Kg per cattle head per day, of the concentrate like Bag molasses. Each cattle camp will have a minimum of one camp manager, two labourers and two sweepers.

#### OPERATING PROCEDURE GUIDELINES FOR PWD DEPARTMENT

##### Planning Assumptions :

- There is no substitute for maintaining standards of services and regular maintenance during normal times. This affects the response of the department to any disaster situation.
- The department is required to adopt appropriate measures to ensure that the community participates substantially.
- For effective preparedness, the department must have a disaster response plan or disaster response procedures clearly defined in order to avoid confusion, improve efficiency in cost and time.
- Orientation and training for disaster response plan and procedures accompanied by simulated exercise will keep the department prepared for such eventualities. Special skills required during emergency operations need to be imparted to the officials and the staff. Select personnel can be deputed for training as "NODAL OFFICER – PWD" at district level respectively.
- To the extent possible, preventive measures as recommended in the preparedness and mitigation document of DDMAP, should be undertaken to improve departmental capacity to respond to a disaster.

#### Action Plan Objective in a Disaster Situation :

- Restoration of roads to their normal condition. Repair/reconstruction of public utilities and buildings. Activities on Receipt of Warning or Activation of DDMA
- Within the affected district all available personnel will be made available to the District Project Officer, DDMA. If more personnel are required, then out of station officer or those on leave may be recalled.
- All personnel required for Disaster Management should work under the overall supervision and guidance of District Project Officer, DDMA.
- Establish communications with District control room and your departmental offices within the division.
- All district level officials of the department would be asked to report to the Deputy Commissioner/DDMA.
- Appoint one officer as "Nodal Officer - PWD" at district level.
- The "Nodal Officer - PWD" will be responsible for mobilizing staff and volunteers to clear the roads in his section, should a disaster strike.
- The "NODAL OFFICER - PWD" should be familiar with pre-disaster precautions and post disaster procedures for road clearing and for defining safe evacuation routes where necessary.
- All officers<sup>3</sup> should be notified and should meet the staff to review emergency procedures.
- Review and update precautionary measures and procedures and review with staff the precautions that have been taken to protect equipment and the post-disaster procedures to be followed.
- Vehicles should be inspected, fuel tanks filled and batteries and electrical wiring covered as necessary.
- Extra transport vehicles should be dispatched from HQ and stationed at safe and strategic spots along routes likely to be effected.
- Heavy vehicles should be moved to areas likely to be damaged and secured in a safe place.
- Inspection of all roads, bridges, government buildings and structures must be done and structures which are endangered by the impending disaster identified.
- Emergency tool kits must be made available and should include 1. Crosscut saws 2. Axes 3. Power chain saw 4. Sharpening Files 5. Chains and tightening wrenches 6. Pulley block with chain and rope
- The designation of routes strategic to evacuation and relief should be identified and marked in close coordination with the DCR.
- Establish a priority listing of roads which will be opened first, the most important being roads to hospitals and main trunk routes.
- Give priority attention to urgent repair works in disaster affected areas.
- Identify locations for setting up transit and relief camps, feeding centres and quantity of construction materials required and inform the DCR accordingly.

### Relief and Rehabilitation :

- All works teams should be issued two-way communication link.
- Provide a work team carrying emergency tool kits, depending on the nature of the disaster, essential equipments such as
- Towing vehicles.
- Earth moving equipments.
- Cranes etc.
- Each unit should mobilize a farm tractor with chain, cables and a buffer stock of fuel.
- Adequate road signs should be installed to guide and assists the drivers.
- Begin clearing roads. Assemble casual labor to work with experienced staff and divide into work gangs.
- Mobilize community assistance for road clearing by contacting community organizations.
- Undertake clearing of ditches, grass cutting, burning, removal of debris and the cutting of dangerous trees along the roadside in the affected area through maintenance engineer's staff.
- Undertake repair of all paved and unpaved road surfaces including edge metalling, potholes patching and any failure of surface, foundations in the affected areas by maintenance engineer's staff and keep monitoring their conditions.
- Undertake construction of temporary roads to serve as access to temporary transit and relief camps and medical facilities for disaster victims. As per the decision of the district control room, undertake construction of relief camps, feeding centres, medical facilities, cattle camps.
- An up-to-date report of all damages and repairs should be kept in the district office report book and communicate the same to the district control room.
- If possible, review of the extent of damage (by helicopter) should be arranged for the field Officer-in- Charge, in order to dispatch most efficiently road clearing crews and determine the equipments needed.



## STANDARDS FOR RELIEF CAMPS

- Tent Camps

The layout of the site should meet the following specifications.

1. 3-4 hectares of land/1000 peoples. 2 .

Roads of 10 meters width.

3. Minimum distance between edge of roads and tents of 2 mtrs.

4. Minimum distance between tents of 8 mtrs.

5. Minimum floor area/tent of 3 square meters per person.

- Water distribution in camp sites consists of

1. Minimum capacity of tanks of 200 litres

2. Minimum capacity per capita of 15 litres/day

3. Maximum distance of tanks from farthest tent of 100 meters.

- Solid waste disposal containers in tent camps should be

1. Waterproof

2. Insect-proof and

3. Rodent-proof

4. The waste should be covered tightly with a plastic or metallic lid

5. The final disposal should be by incineration or by burial

- The capacities of solid waste units should be 1 litre/4-8 tents; or 50-100 litres/25-50 persons.
- Excreta and liquid waste should be disposed in bore-holed or deep trench latrines in tent camps. Specifications for these are:

1. 30-50 meters from tents.

2. 1 seat provided/10 persons

3. Modified soakage pits should be used for waste water by replacing layers on earth and small pebbles with layers of straw, grass or small twigs. The needs to be removed on a daily basis and burned.

### Buildings :

Buildings used for accommodating disaster victims should provide the following:

1. Minimum floor area of 3.5 sq. meters/person.

2. Minimum air space of 10 sq. meters/person.

3. Minimum air space circulation of 30 cubic meters/person/hour and

4. There should be separate washing blocks for men and women.

5. Washing facilities to be provided are: 1 hand basin/10 persons, 1 wash bench of 4-5 meters/100 persons and 1 shower head/50 persons in temperate climates

6. Toilet accommodation in buildings housing displaced persons, should meet these requirements: 1 seat/25 women, 1 seat plus 1 urinal/35 men, Maximum distance from building of 50 meters. 7. Refuse containers are to be plastic or metallic and should have closed lids. To be provided are: 1 container of 50-100 liters capacity/25-50 persons.

## OPERATING PROCEDURE GUIDELINES FOR AGRICULTURE DEPARTMENT

### Planning Assumptions

- There is no substitute for maintaining standards of services and regular maintenance during normal times. This affects the response of the department to any disaster situation.
- The department is required to adopt appropriate measures to ensure that community participates substantially.
- For effective preparedness, the department must have a disaster response plan or disaster response procedures clearly defined in order to avoid confusion, improve efficiency in cost and time.
- Orientation and training for disaster response plan and procedures accompanied by simulated exercise will keep the department prepared for such eventualities. Special skills required during emergency operations need to be imparted to the officials and the staff. Select personnel can be deputed for training as "NODAL OFFICER –Agriculture" at district level. To the extent possible, preventive measures as recommended in the preparedness and mitigation document of DDMP, should be communicated to the community to prevent extensive loss of crops and plantations.

### Action Plan Objective in a Disaster Situation :

- Restore the agricultural operations (including soil conditions)
- Crop protection
- Restore agriculture produce market.

### Activities on Receipt of Warning or Activation of DDMP

- Within the affected district all available personnel will be made available to the District Project Officer, DDMA. If more personnel are required, then out of station officer or those on leave may be recalled.
- All personnel required for Disaster Management should work under the overall supervision and guidance of District Project Officer, DDMA.
- Establish communications with District control room and your departmental offices within the division.
- Appoint one officer as "NODAL OFFICER – Agriculture" at district level.
- Review and update precautionary measures and procedures and review with staff the precautions that have been taken to protect equipment and the post-disaster procedures to be followed.
- Fill departmental vehicles with fuel and park them in a protected area.
- Check available stocks of equipments and materials which are likely to be most needed after disaster.
- Stock agricultural equipments which may be required after disaster.
- Determine what damage, pests of diseases may be expected, and what drugs and other insecticides items will be required, in addition to requirement of setting up extension terms for crop protection, and accordingly ensure that extra supplies and materials, be obtained quickly.

- Provide information to all concerned, about disasters, likely damages to crops and plantations, and information about ways to protect the same.
- All valuable equipments and instruments should be packed in protective covering and stored in room the most damage-proof.
- All electrical equipments should be unplugged when disaster warning is received.
- Extension officers should be assisted to establish work schedules to ensure that the adequate staff are available, Set up the teams of extension personnel and assistants for disaster sites. Assess the extent of damage to soil, crop, plantation, micro-irrigation systems and storage facilities and the requirements for re plantation or salvaging
- Make extensive use of soil and water testing laboratories.
- Provision of agricultural services should be coordinated with irrigation department, DRDA, District Control Room.
- Estimate the requirement of 1. Seeds 2. Fertilizers 3. Pesticides and labour.
- Organize transport, storage and distribution of the above with adequate record keeping procedures.
- Ensure that the adequate conditions through cleaning operations are maintained to avoid water- logging and salinity in the low lying areas.
- A pests and disease monitoring system should be developed to ensure that a full picture of risks is maintained.
- Plan for emergency accommodations for agriculture staff from outside the area. Information formats and monitoring checklists as given in section on "Information and Monitoring Tools" should be used for programme monitoring and development and for reporting to DCR. This is in addition to existing reporting system in the department.
- Establishment of a public information centre with a means of communication, to assist in providing an organized source of information. The department is responsible for keeping the community informed of its potential and limitations in disaster situations.
- The NGOs and other relief organizations should be aware of the resources of the department.
- Assist farmers to re-establish their contacts with agriculture produce market and ensure that appropriate prices to offer to them.