

FY 2022



**DISTRICT DISASTER MANAGEMENT AUTHORITY  
(DDMA)**

**KAMRUP METROPOLITAN  
DISTRICT**

सत्यमेव जयते



# **District Disaster Management Plan (DDMP)**

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GOVT. OF ASSAM  
**OFFICE OF THE DEPUTY COMMISSIONER:  
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## FOREWARD

Assam as a state is highly prone to various types of disaster. Every year disasters like flood, storm, lightning etc. causes extensive damage to the people of Assam both socially and economically. Also as placed in earthquake Seismic Zone V. In the last three decades we have witnessed drastic development of the Guwahati city in terms of high-rise buildings, over bridges and other infrastructure of basic services. If a major disaster happens (which Heaven forbid) to a city with more than 12 lakhs population the intensity of Devastation will be beyond imagination. State Government has taken various steps to mitigate the impact of such disasters. From District Administration, Kamrup Metropolitan district we have to play a major role regarding safety and security of the citizens of the city in particular and state in general.

The District Disaster Management Authority (DDMA), Kamrup Metropolitan district has been constituted under the Chairmanship of Deputy Commissioner under Section 25 of the Disaster Management Act, 2005, is responsible for preparation of the District Disaster Management Plan as per Section 31 of the National Disaster Management Act, 2005. The District Disaster Management Authority (DDMA), Kamrup Metropolitan Chaired by Deputy Commissioner Kamrup Metro is the sole authority to exercise emergency power in issuing directives to all the departments and to provide emergency response services.

The District Disaster Management Plan for Kamrup Metropolitan district is of prime importance for the multi-hazard prone Kamrup Metropolitan districts and of course Guwahati being the gateway to the North-East India has been prepared and updated by District disaster management authority, Kamrup Metropolitan district for the sake of this safety and security of the people of the district.

The objective of the preparation of the plan was to develop a holistic, co-coordinated, proactive strategy for the management of disasters through a mindset of prevention, mitigation and preparedness to generate a prompt and effective response in the event of an emergency. In the preparation of DDMP for Kamrup Metropolitan districts, the guidelines given in the National Disaster Management Policy, template provided by the NDMA and State Level Model Framework for District Disaster Management Plan (DDMP), Assam provided by Assam State Disaster Management Authority (ASDMA) is fully followed. This plan deals with significant issues like hazards, risks and vulnerability and the consequent response mechanism in disaster management. This plan has been the most significant tool to the response manager to deal with the crisis within the limited period and to make optimum use of the available resources hopefully, this plan will help district administration and other stakeholders of the district and other stakeholders as well as public to tackle such kind of natural calamities in a systematic and efficient way.

**Pallab Gopal Jha, IAS**

Deputy Commissioner & Chairman

District Disaster Management Authority (DDMA)

Kamrup Metropolitan District



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**OFFICE OF THE DEPUTY COMMISSIONER:  
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Date: 02/05/2022

## ACKNOWLEDGEMENT

On the behalf of District Disaster Management Authority, (DDMA) Kamrup Metropolitan District, I am pleased to present the District Disaster Management Plan of Kamrup Metropolitan District for the year 2022-23.

I am privileged to have been involved in the entire process of planning, preparation and bringing to fore the District Disaster Management Plan of Kamrup Metropolitan District. I owe my sincere gratitude to Shri Pallav Gopal Jha, IAS, Deputy Commissioner and Chairman DDMA Kamrup Metropolitan district who's suggestions, guidance and imports become very handy in formulating this plan.

I am grateful to all the Officers and staff of District Disaster Management Authority, (DDMA) Kamrup Metropolitan who have coordinated with the different line departments for collection of data and analyses of the same for preparation of this plan

District Disaster Management Plan of Kamrup Metropolitan District will play a significant role to address the unexpected natural or man-made disasters that occur in the district effectively. The information available in DDMP is valuable in terms of its use during disaster. I hope and expect that this effort will prove useful to all the stakeholders who are engaged in champion the cause of disaster ricks reduction.

**Gauri Shankar Das, ACS**

Additional Deputy Commissioner & CEO  
District Disaster Management Authority (DDMA)  
Kamrup Metropolitan District

## ABBREVIATION

ADC – Additional Deputy Commissioner	DM – Disaster Management
AIR – All India Radio	DMTs – Disaster Management Teams
AH & V – Animal Husbandry & Veterinary	DM&HO – District Medical & Health Officer
ANM – Auxiliary Nursing Midwifery	DP - Display Processor
ATF – Aviation Turbine Fuel	DIPRO – District Information Public Relation Officer
AWW –Anganwadi Workers	DRR - Disaster Risk Reduction
BDO – Block Development Officer	DSS – Decision Support System
BDMC – Block Disaster Management Committee	DTO – District Transport Officer
BDMP – Block Disaster Management Plan	DUL - Documentation Unit Leader
BIS – Bureau of Indian Standards	EOC - Emergency Operations Centre
BSNL – Bharat Sanchar Nigam Limited	ESF – Emergency Support Function
CBOs – Community Based Organizations	Fac. UL - Facilities Unit Leader
CBDM - Community Based Disaster Management	FB - Finance Branch
CBDP - Community Based Disaster Preparedness	FBD - Finance Branch Director
CD & HG – Civil Defence & Home Guards	FOs - Field Officers
CDMC – Circle Disaster Management Committee	FUL - Food Unit Leader
CDRN - Corporate Disaster Resource Network	GIS – Geographical Information System
CEO – Chief Executive Officer	GPS – Global Positioning System
CHC – Community Health Centre	GSU - Ground Support Unit
CM – Chief Minister	GSUL - Ground Support Unit Leader
Com. UL - Communication Unit Leader	HAZCHEM – Hazardous Chemicals
Com./CUL - Compensation/Claims Unit Leader	HF – High Frequency
CPWD – Central Public Works Department	HQ – Head Quarter
C&RD – Community & Rural Development	HRVA - Hazard Risk Vulnerability Analysis
CS – Chief Secretary	IAP – Incident Action Plan
CSR – Corporate Social Responsibility	IC – Incident Commander
CUL – Cost Unit Leader	ICP – Incident Command Post
CWC – Central Water Commission	IDRN - India Disaster Resource Network
DA – District Administration	IDP -Incident Demobilization Plan
DC – Deputy Commissioner	IEC – Information, Education & Communication
DCMG - District Crisis Management Group	IMO - Information & Media Officer
DDMA – District Disaster Management Authority	IMD – India Meteorological Department
DDMP –District Disaster Management Plan	IPR – Information & Public Relations
DDMF – District Disaster Mitigation Fund	IRS-Incident Response System
DDRF – District Disaster Response Fund	IRT – Incident Response Team
DEOC – District Emergency Operations Centre	IT – Information Technology
Demob. UL - Demobilization Unit Leader	LO - Liaison Officer
	L&O – Law & Order
	LS – Logistic Section
	MUL - Medical Unit Leader

MUDA – Meghalaya Urban Development Authority	SAR – Search and Rescue
NCC – National Cadet Corps	SBD - Service Branch Director
NDMA – National Disaster Management Authority	SDO – Sub Divisional Officer
NDMP – National Disaster Management Plan	SDMA - State Disaster Management Authority
NDRF - National Disaster Management Force	SDMP – State Disaster Management Plan
NEC – National Executive Committee	SDRF - State Disaster Response Force
NGOs – Non-Governmental Organizations	SDRF - State Disaster Response Fund
NHAI – National Highway Authority of India	SDMF - State Disaster Mitigation Fund
NIC – National Informatics Centre	SEC – State Executive Committee
NO – Nodal Officer	SEOC – State Emergency Operations Centre
NSS – National Service Scheme	SOP – Standard Operating Procedure
NYK – Nehru Yuva Kendra	SO - Safety Officer
ORS – Oral Rehydration Solution	SP – Superintendent of Police
OS – Operations Section	SUL - Situation Unit Leader
OSC - Operations Section Chief	Sup. BD - Support Branch Director
PHC – Public Health Centre	TB - Transportation Branch
PHE – Public Health Engineering	TBD -Transportation Branch Director
PRA – Participatory Rural Appraisal	TL - Team Leader
PS – Planning Section	TS - Technical Specialists
PSC – Planning Section Chief	TUL -Time Unit Leader
PUL - Procurement Unit Leader	UC – Unified Command
PWD – Public Works Department	UHC- Urban Health Officer
PWDs – People with Disabilities	ULB – Urban Level Body
QRT – Quick Response Team	URR – Urban Risk Reduction
RC - Relief Camp	VDMC – Village Disaster Management Committee
RO – Responsible Officer	VDMP - Village Disaster Management Plan
RPUL - Resource Provisioning Unit Leader	VDMTs - Village Disaster Management Teams
RUL - Resource Unit Leader	VHF – Very High Frequency
SA – Staging Area	VLMCC – Village Land Management & Conservation Committee
SAM – Staging Area Manager	

## EXECUTIVE SUMMARY

As Mandated by the Disaster Management Act 2005, the Government of Assam has adopted the Act with notification in the official Gazette in the month of December 2006. The State Government has established the Assam State Disaster Management Authority (ASDMA) chaired by the Hon'ble Chief Minister, Assam with Hon'ble Minister Revenue and Disaster Management as its Vice Chairperson. The Secretariat of ASDMA has become functional since 2009. As per the Disaster Management Act 2005, Chapter IV Clause 25, and every district shall form the District Disaster Management Authority (DDMA) under the Chairmanship of the Deputy Commissioner and the Addl. Deputy Commissioner (Revenue and Disaster Management) as the Chief Executive Officer of DDMA.

The Disaster Management Act, 2005 was enacted to provide the requisite institutional mechanisms for formulating and monitoring the implementation of Disaster Management Plans, ensuring measures by various wings of the Government for preventing and mitigating the effects of disasters and for undertaking a holistic, coordinated and prompt response to any disaster situation.

The District Disaster Management Authority (DDMA) has been constituted for every district in the State under the chairmanship of the Deputy Commissioner under Section 25 of the Disaster Management Act 2005. The DDMA shall act as the district planning, coordinating and implementing body for Disaster Management and take all measures for the purposes of Disaster Management in the district as per the guidelines laid down by the Assam State Disaster Management Authority (ASDMA). The district authority will prepare the District Disaster Management Plans, review capabilities and preparedness measures, give directions to the concerned departments at the district level, organize and coordinate specialized training programmes for different level of officers, employees, voluntary rescue workers and take all such measures as may be appropriate for a holistic and pro-active approach to disaster management.

There has been a paradigm shift in dealing with disasters in the country. The approach of the Government for dealing with disasters has undergone a change from Relief Oriented Approach to planning, preparedness and mitigation. The focus on capacity building of all the stakeholders is being given due emphasis by the State Government for better management of disasters. The impact of these disasters like earthquake, flood, cyclone etc hindered overall development effort in the State/District. Government and the community need to be aware of the risks and take concrete actions to prepare for and mitigate against the natural disasters affecting their place of living and livelihood.

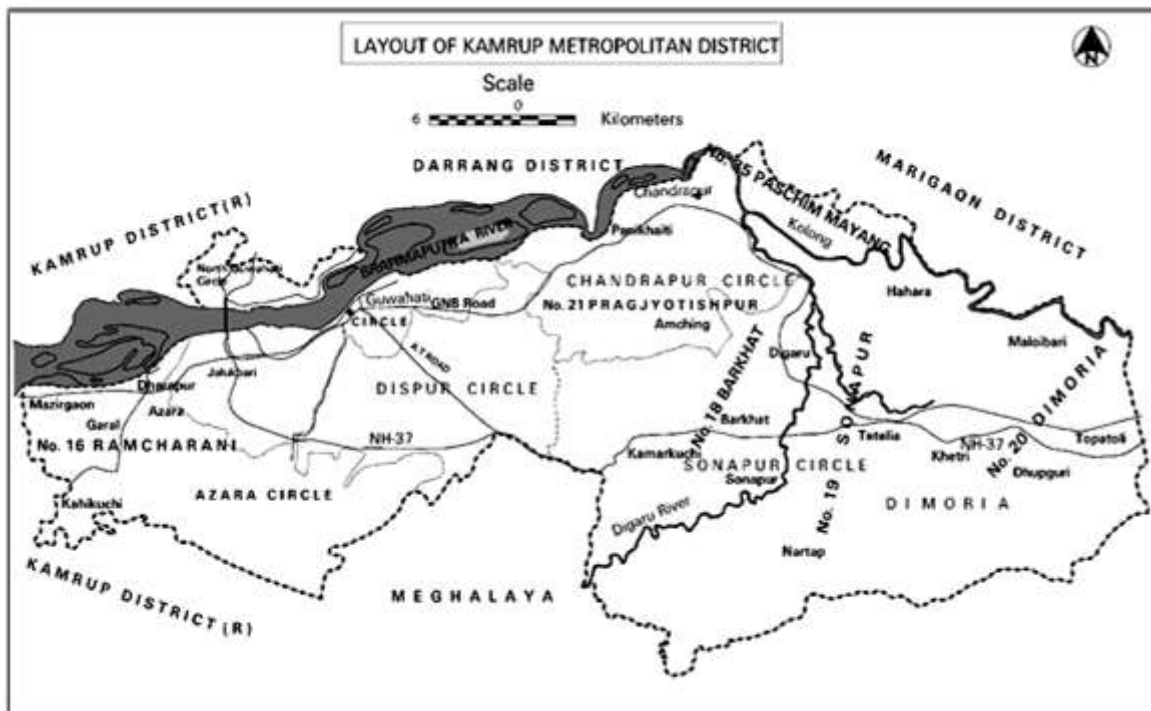
This document comprises of 12 (twelve) Chapters namely- Introduction, Hazard Vulnerability Capacity Analysis (HVCA), Institutional Arrangements for Disaster Management, Prevention and Mitigation Measures, Preparedness Measures, Capacity Building and Training Measures, Response and Relief Measures, Reconstruction, Rehabilitation and Recovery Measures, Financial Resources for implementation of DDMP, Procedure and methodology for monitoring, evaluation, updation and maintenance of DDMP, Coordination Mechanism for implementation of DDMP and Standard Operating Procedures (SOPs) and checklist.

This document is the guide for achieving the objective i.e. mitigation, preparedness, response and expected to meet the requirements for dealing with disasters, however, since the community is the first responder to any disaster, the community needs to be empowered for coping with disasters and as well as the need to mobilize their capabilities and capacities for effective Disaster Management with sense of urgency in a planned way to minimize human, property and environmental loss.

## CHAPTER-I INTRODUCTION

The Present Assam was referred to as Kamrup in many of the ancient Indian literature. It was also known as Pragjyotishpur due to the astrological (Jyotish Shashtra) practices that prevailed in this part of the country during that time. However, "Kamrup" became a more predominant name in the later part of the history.

Kamrup metropolitan district is located between 25°43' and 26°51' N latitude and 90°36' – 92°12' E longitude. Covering an area of 1528 Sq. Km, total population of 12, 60,419 (as per 2011 Census) i.e. 1,313 people per sq. km. Out of the total population for 2011 census, 82.70 % lives in urban regions of district in total 1,037,011 people lives in urban areas and 17.30 % population lives in rural areas of villages in total 216,927 people lives in rural areas. Kamrup Metro District is sharing border with Darrang District to the East and Kamrup District to the North. Kamrup Metro District occupies an area of approximately 1527.84 square kilometers. It's in the 55 meters to 51 meters elevation range. This District belongs to Eastern India.



Kamrup Metropolitan District is vulnerable to various hazards like flood, landslide, storm, riverbank erosion and other manmade disasters occur from time to time. Out of these hazards urban flash food and water logging are annual disaster which occurs in Kamrup (Metro) district every year. In the recent past Guwahati city has witnessed a number of devastating landslides in its hilly belt. This is mainly because of inadequate urban land-use planning and the demand for land becomes such that communities build houses in areas which are environmentally unstable with risks of landslides.

Flood occurs generally in the low lying areas of the district during the months of April to October every year. The occurrence of flood in the district is due to the river Brahmaputra and its Tributaries. During rainy days the city of Guwahati also witnesses localized flood due to poor drainage system of the city. Besides, the district is located in the most seismically active region

of the country i.e. Zone V and very vulnerable due to high density of population and urban conglomeration of non-engineered or inadequately designed multi-storied buildings.

### **1.1 Aims and Objectives of the DDMP:**

The aim of DDM Plan is to ensure that all components of Disaster Management are addressed to facilitate planning, preparedness, operational, coordination and community participation enabling the District to be disaster resilient with focus on sustainable development by concerted efforts of all stakeholders.

Section 31 of Disaster Management Act 2005 (DM Act), makes it mandatory to have a disaster management plan for every district. DDMP shall include Hazard Vulnerability Capacity and Risk Assessment (HVCRA), prevention, mitigation, preparedness measures, response plan and procedures.

The objectives are:

1. To identify the areas vulnerable to major types of the hazards in the district.
2. To adopt proactive measures at district level by all the govt. departments to prevent/ know disaster and mitigate its effects.
3. To define and assign the different tasks and responsibilities to stakeholders during the pre-disaster and post-disaster phases of the disaster.
4. To enhance disaster resilience of the people in the district by way of capacity building.
5. To enhance the capacity of the most vulnerable section of the society including People with disabilities (PWDs)
6. Reduce the loss of public and private property, especially critical facilities and infrastructure through proper planning.
7. Manage future development to mitigate the effect of natural hazards in the district.
8. To set up an Emergency Operations Centre at the District level to function effectively in search, rescue, response.
9. To develop the standardized mechanism to respond to disaster situation to manage the disaster efficiently.
10. To set up the early warning system so as to prepare the community to deal with the disaster and responsive communication system based upon fail-proof proven technology.
11. To prepare the response plan based upon the guidelines issued in the State Disaster Management Plan so as to provide prompt relief, rescue and search support in the disaster affected areas.
12. To adopt disaster resilient construction mechanism in the district by way of using Information, Education and Communication for making the community aware of the need of disaster resilient future development.
13. To make the use of media in disaster management.
14. Rehabilitation plan of the affected people and reconstruction measures to be taken by different govt. departments at district level and local authority.

### **1.2 Authority for DDMP: Disaster Management Act 2005 (DM Act)**

As per Section 31 of the DM Act 2005, there shall be a plan for disaster management for every district of the State. The District Authority shall prepare the District Plan and the District Disaster Management Authority shall review and update the district plan annually after consultation with the local authorities and having regard to the National Plan and the State Plan,

to be approved by the State Authority.

The District Disaster Management Plan shall include:

1. To identify vulnerable areas to different forms of disasters in the District North.
2. The capacity-building and preparedness measures required to be taken by the Departments of the Government at the district level and the local authorities in the district to respond to any threatening disaster situation or disaster.
3. Measures to be taken, for prevention and mitigation of disaster, by the Departments of the Government at the district level and local authorities in the district.
4. The response plans and procedures, in the event of a disaster, providing for –
  - Allocation of responsibilities to the Departments of the Government at the district level and the local authorities in the district.
  - Prompt response to disaster and relief thereof.
  - Procurement of essential resources.
  - Establishment of communication links.
  - The dissemination of information to the public.

### **1.3 Evolution of DDMP**

The DDMP was first evolved in 2004 during the implementation of Government of India-United Nations Development Programme Disaster Risk Management Programme. With the enactment of the National DM Act, 2005 it provides for the preparation of the District Plan as per Section 31.

### **1.4 Stakeholders & their responsibilities**

The District Disaster Management Authority (DDMA), Kamrup (Metro) chaired by Deputy Commissioner, Kamrup (Metro) is the sole authority to exercise emergency power in issuing directives to all the departments and to provide emergency response services. The DDMA shall act as the district planning, coordinating and implementing body for disaster management. Along with the DDMA, different committees for addressing emergency issues are also being formed in the district.

The Deputy Commissioner, Kamrup (Metro) designated as Response Officer (RO), and other line departments at District HQ are responsible to deal with all phases of disaster management within district.

Other technical institutions, community at large, local self-governments, NGOs etc. are also stakeholders of the DDMP. The role of the stakeholders have been prepared with the avowed objective of making the concerned organizations understand their duties and responsibilities regarding disaster management at all levels and accomplishing them.

#### **1.4.1 Deputy Commissioner (DC)**

- Facilitate and coordinate with local Government bodies to ensure that pre and post Disaster Management activities in the district are carried out.
- Assist community training, awareness programmes and the installation of emergency facilities with the support of local administration, non-governmental organizations and the private sector.
- Function as leader of the team and take appropriate actions to smoothen the response

and relief activities to minimize the adverse impact of disaster.

- Recommend Relief Commissioner and State Government for declaration of disaster.

#### **1.4.2 Different Departments at District level**

- To provide assistance to the Deputy Commissioner in disaster management activities.
- To ensure training of its officers and employees and maintenance of resources so as to be readily available for use, in the event of a disaster.
- To undertake capacity building measures and awareness and sensitization of the community
- To ensure that all construction projects under it conform to the standards and specifications lay down.
- Each department of the Government in a district shall prepare a disaster management plan for the district. The local authorities need to ensure that relief, rehabilitation and reconstruction activities in the affected area, within the district, are carried out.
- Trust/Organizations managing places of worships & congregation
  - Each establishment/organization identified as “Critical Infrastructure and Key Resource”,
  - Including places of congregation in a district shall prepare “On-Site” and “Off-Site” Disaster Management plan.
  - Carry out mitigation, response, relief, rehabilitation and reconstruction activities.

#### **1.4.3 Private Sector**

- The private sector should be encouraged to ensure their active participation in the pre-disaster activities in alignment with the overall plan developed by the DDMA or the Collector.
- They should adhere to the relevant rules regarding prevention of disasters, as may be stipulated by relevant local authorities.
- As a part of CSR, undertake DRR projects in consultation with district collector for enhancing district’s resilience.

#### **1.4.4 Community Groups and Volunteer Agencies**

- Local community groups and voluntary agencies including NGOs normally help in prevention and mitigation activities under the overall direction and supervision of the DDMA or the Collector.
- They should be encouraged to participate in all training activities as may be organized and should familiarize themselves with their role in disaster management.

#### **1.4.4 Citizens**

It is the duty of every citizen to assist the District Collector or such other person entrusted with or engaged in disaster management whenever demanded generally for the purpose of disaster management.

- Ensure that all construction projects under it conform to the standards and specifications laid down.
- Carry out relief, rehabilitation and reconstruction activities in the affected area within the district.

#### **1.4.6 Private Sector & Corporate**

- Encourage for their active participation in the pre-disaster activities in alignment with the overall plan developed by the DDMA or the DC.
- Adhere to the relevant rules regarding prevention of disasters, as may be stipulated by relevant local authorities.
- As a part of Corporate Social Responsibility (CSR) undertakes DRR projects in consultation with the DC for enhancing district's resilience.

#### **1.4.7 NGOs/CBOs and Volunteer Agencies**

- Assist in prevention and mitigation activities under the overall direction and supervision of the DDMA or the DC.
- Participate in all training activities organized and should familiarize themselves with their role in Disaster Management.

#### **1.4.8 Citizens**

It is the duty of every citizen to assist the DC or such other person entrusted with or engaged in Disaster Management whenever demanded generally for the purpose of Disaster Management.

#### **1.5 How to use the Plan:**

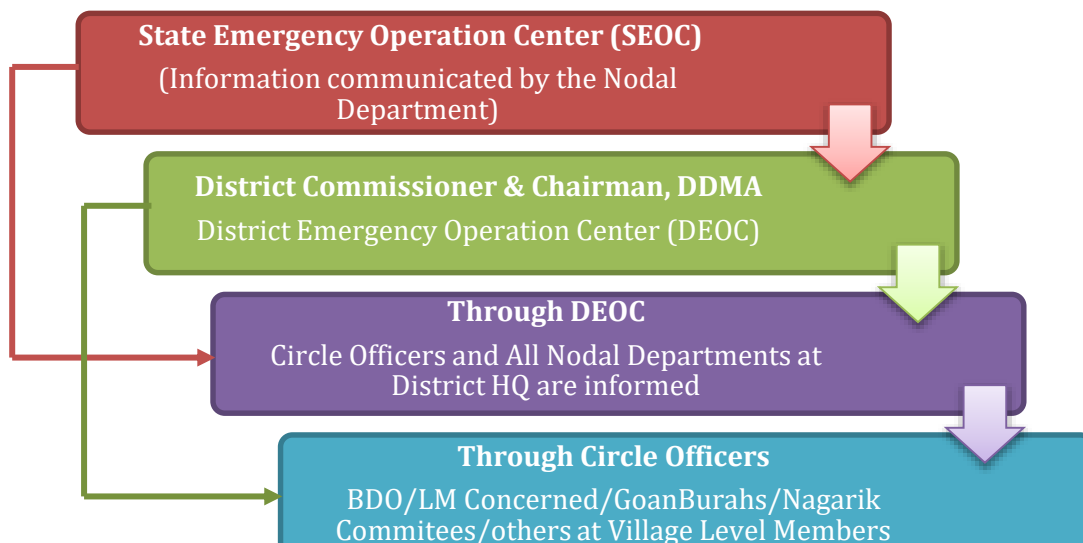
- i. Section 31 of DM Act 2005 makes it mandatory for every district to prepare a disaster management plan, for the protection of life and property from the effects of hazardous events within the district.
- ii. In significant emergencies or disasters, District Magistrate or the chairperson of DDMA will have the powers of overall supervision direction and control as may be specified under State Government Rules/ State Disaster Management Plan guidelines.
- iii. The district EOC will be staffed and operated as the situation dictates. When activated, operations will be supported by senior officers from line departments and central government agencies; private sector and volunteer organizations may be used to provide information, data and resources to cope with the situation.
- iv. The DDMA may recommend for action under Sec 30 of DM Act.
- v. Facilities that have been identified as vital to operation of the district government functions have been identified.
- vi. The DM or his designee will coordinate and control resources of the District.
- vii. Emergency public information will be disseminated by all available media outlets through the designated media and information officer.
- viii. Prior planning and training of personnel are prerequisites to effective emergency operations and must be considered as integral parts of disaster preparations.
- ix. Coordination with surrounding districts is essential, when an event occurs, that impacts beyond district boundaries. Procedure should be established and exercised for inter district collaboration.
- x. Departments, agencies and organizations assigned either primary or supporting responsibilities in this document must develop implementation documents in order to support this plan.

- xi. When local resources prove to be inadequate during emergency operations, request for assistance will be made to the State or higher levels of government and other agencies in accordance with set rules and procedures.
- xii. District authority will use normal channel for requesting assistance and/or resources, i.e., through the District Emergency Operations Center (DEOC) to the State EOC. If state resources have been exhausted, the state will arrange to provide the needed resources through central assistance.
- xiii. The District EOC will coordinate with the State EOC, Agencies of the Govt. of India like IMD /CWC to maintain upto-date information concerning potential flooding, cyclones etc. As appropriate, such information will be provided to the citizens of the affected areas in the district.
- xiv. Upon receipt of potential problems in these areas, DEOC / designated officials will appropriately issue alert and notify action to be taken by the residents.
- xv. Disaster occurrence could result in disruption of government functions and, therefore, all levels of local government and their departments should develop and maintain procedures to ensure continuity of Government action.

There will be two types of trigger mechanism that will be set up depending upon the warning signals availability as mentioned below:

**1.5.1 Warning Signal Available:**

After early warning signals/advisory received by the State Govt., the SEOC will communicate it to the DEOC urgently. The DEOC will communicate such warning to the departments at the district level. The information flow in such cases will be as follows:



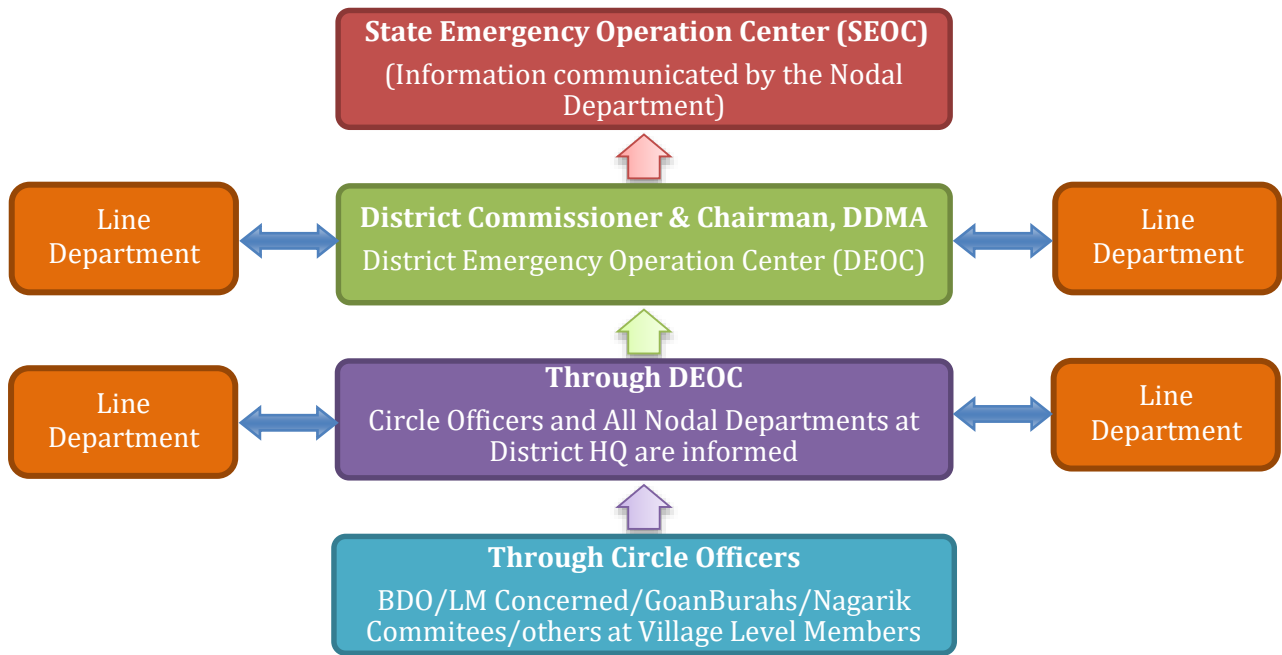
**Figure: Warning Information flows from Top - Down**

**1.5.2 Without Early Warning Signal:**

When disaster occurs without any early warning in that case the information starts from the place of incident through government agency or otherwise and the institutional mechanism in such cases will be as follows:-

- i. The concerned village will report to the Panchayat- Gaon Burahs, Block, Police Station/CO/ADC and the information will be sent to the Deputy Commissioner.

- ii. DDMA will assess the information and assess the disaster to be of the level L0, L1, L2 or L3.
- iii. DEOC will be activated and if required the SEOC will be kept at alert if assistance needed; otherwise information of the incident will be passed on to SEOC.
- iv. DDMA meeting will be convened and plan the management of the disaster as Incident Response Plan.
- v. The respective Incident response teams will be rushed to the site for effective management.



**Figure: Warning Information flows from Down - Top**

## CHAPTER-II

# HAZARD VULNERABILITY CAPACITY ANALYSIS

Kamrup (M) District suffers from both general flood and urban flood every year. The general flood occurs in areas under Sonapur, Chandrapur and Azara Circle. This kind of flood basically occurs due to the geographical setting of the region, high intensity rainfall, easily erodible geographical formations, earthquake Zone, massive deforestation, great amount of land used, and explosive population growth.

Monsoons rains from June to Septembers feeds the Brahmaputra along with their tributaries with excessive water. The cyclonic Depressions in the Bay of Bengal too are responsible for devastating floods. Besides the natural calamities, harmful human activities like deforestation, accelerated rated of land use, filling up low lying areas of for the construction of buildings and reckless urban developments are also responsible for floods in the district. High rate of population growth in the form of high birth rate and immigration from border countries has led to unscientific encroachment. Moreover the unplanned expansion of the city to accumulate increasing population has lead to severe encroachment in the wetlands, low lying areas, hills and shrinkage of forest cover (Thakur and Goswami, 1993). These denuded hills and loss of wetlands thus lead to artificial floods and water logging. Immediately after every down pour the city drains gets silted up with silts coming with storm water running down the hills flooding the streets. The wetlands also cannot accumulate the excess storm water of the city.

### Administrative Units:

- The district has one Sub-Divisions-Kamrup Metropolitan Sadar Sub-Division.
- The Kamrup Metropolitan district has 5 (Five) Revenue Circles viz. Guwahati RC, Chandrapur RC, Dispur RC. Sonapur RC and Azara RC and total of 316 nos. of Revenue Villages
- There are total 3 (three) development Blocks in Kamrup Metropolitan district, i.e. Chandrapur, Dimoria, Rani, Development Block.
- 60 Municipal wards in the city Guwahati and 6 nos. of ZPCs

### 2.1 Hazard Analysis:

The following table depicts about the various type of natural hazard that are prone in Kamrup Metropolitan district, its period of occurrence, potential impacts and the vulnerable areas of Kamrup Metropolitan District.

Type of Hazards	Time of occurrence	Potential Impact	Vulnerable areas
• Flood	May to Aug	Loss of life, livestock, crop and infrastructure	Flood prone areas
• Landslide			
• Thunderstorm	April - May		
• Earthquake	Any time	Loss of life and infrastructure	(Various Buildings in Guwahati City)

PROBABILITY PERIOD / SEASONALITY OF DISASTERS													
Name of Disaster	Month												
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
Flood & Landslide			←————→										
Thunderstorm				←————→									
Earthquake	←————→												

Below is the format for the Hazard Analysis which is a single table divided into two major components:

- (i) Details of lives impacted
- (ii) Details of infrastructure damage

Hazard Analysis							
Revenue Circle	Hazard Type	Year Of Occurrence	No. Of Affected Villages	No Of Affected Households	No Of Affected People	No Of Deaths	No Of Cattles Affected
Guwahati	Flood	2020 -2021	10	-	-	Nil	Nil
	Fire	2020-2022	22	15	100	1	Nil
	Storm	2020-2022	-	-	-	Nil	Nil
	Drowning	2020-2022	-	-	-	Nil	Nil
	Landslide	2020 -2021	15	2	5	2	Nil
Dispur	Flood	2020	6	1987	8796	Nil	Nil
		2021	-	-	-	Nil	Nil
	Landslide	2020	6	1	5	1	Nil
		2021	1	-	-	1	Nil
	Earthquake	2021	18	64	-	Nil	Nil
	Storm	2020	1	1	5	Nil	Nil
		2021	2	1	4	Nil	Nil
	Drowning	2020-2022	-	-	-	Nil	Nil
	Hail Strom	2020-2022	-	-	-	Nil	Nil
	Fire	2020	6	19	76	2	Nil
		2021	4	11	17	Nil	Nil
		2022	8	23	63	Nil	Nil
Accidental Death	2020	9	9	9	9	Nil	
	2021	3	3	3	3	Nil	
Sonapur	Flood	2020	35	2895	14475	1	Nil
	Fire	2021	1	1	5	Nil	Nil
	Storm	2020	14	66	268	Nil	Nil
	Landslide	2020	-	-	-	2	Nil
	Accidental Drowning	2020	-	-	-	2	Nil
		2022	-	-	-	1	Nil
	Electrocution	2020	-	-	-	1	Nil
	Hail Strom	2022	6	313	1216	Nil	Nil
Chandrapur	Flood	2020	23	3258	22556	Nil	Nil
	Fire	2020	1	-	-	Nil	Nil
	Storm	2020	9	37	173	Nil	Nil
	Drowning	2020	1	1	-	1	Nil
	Flood	2021	11	2865	14301	Nil	Nil
	Storm	2021	1	1	4	Nil	Nil
	Drowning	2021	1	1	-	1	Nil
	Landslide	2021	-	-	-	2	Nil
Fire	2022	1	1	2	Nil	Nil	

	Hail Strom	2022	10	580	2416	Nil	Nil
Azara	Flood	2020	7	-	-	-	Nil
		2021	2	-	-	Nil	Nil
	Storm	2020 -2021	1	1	1	Nil	Nil
		2022	-	-	-	Nil	Nil
	Drowning	2020	1	1		1	Nil
	Landslide	2020 -2021	-	-	-	Nil	Nil
	Hail Strom	2020-2022	-	-	-	Nil	Nil
	Accidental Death	2020	2	2	2	2	Nil
	Fire	2020	1	1	4	Nil	Nil
2022		1	1	4	Nil	Nil	

Revenue Circle	Infrastructure Damage (Sub Dist level)											
	Roads		Crops		Houses		Schools		Hospitals/ Health Centers		Other Govt. Infrastructure	
	Area in Km	Economic Loss (in Rs.)	Area in hectares	Economic Loss (in Rs.)	Number	Economic Loss (in Rs.)	Number	Economic Loss (in Rs.)	Number	Economic Loss (in Rs.)	Number	Economic Loss (in Rs.)
Guwahati	-	-	Nil	-	-	-	-	-	-	-	-	-
Dispur	-	-	Nil	-	-	-	-	-	-	-	-	-
Sonapur	-	-	462.8 Ha	-	-	-	-	-	-	-	-	-
Chandrapur	-	-	450 Ha	-	-	-	-	-	-	-	-	-
Azara	-	-	142.1 Ha	-	-	-	-	-	-	-	-	-

## 2.2 Vulnerability Assessment:

Earthquakes are one of the most destructive of natural hazards in the seismically active Assam. The State of Assam has experienced several devastating earthquakes in the past resulting in a large number of deaths and severe property damage. Active seismicity of the North Eastern region has caused extensive landslides, rock falls on the hill slopes, subsidence and fissuring of ground in the valley, and changes in the course and configuration of river tributaries and Brahmaputra mainstream. These changes, especially in river morphology have a significant impact on the hydrologic regime and vulnerability of the communities which are in its proximity and are dependent upon this natural system as their source of livelihood. The district experiences several low to medium intensity earthquakes regularly. Apart from earthquakes, it is affected by a number of landslides, storms, flash floods, fire accidents, road accidents and other kinds of hazards.

Type of Hazards	Year of Occurrence	Impact on				
		Area	Population	Life	Livelihood	Livestock
Earthquake	1897, 1950, 2021	Yes	Yes	Yes	Yes	Yes
Thunderstorms/ Thunder squall & Hailstorm	2000, 2001, 2002, 2003, 2004, 2005, 2006, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021	Yes	Yes	-	Yes	Yes
Flash Flood	1999, 2001, 2002,	Yes	Yes	Yes	Yes	Yes

	2003, 2004, 2005, 2006, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2017, 2018, 2019, 2020, 2021					
Landslide	1999, 2001, 2002, 2003, 2004, 2005, 2006, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021	Yes	Yes	Yes	Yes	Yes
Incessant Rainfall	1999, 2001, 2002, 2003, 2004, 2005, 2006, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2017, 2018, 2019, 2020	Yes	Yes	Yes	Yes	Yes
Fire	1999, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021	-	Yes	Yes	Yes	Yes

This section should focus on vulnerability analysis concerning women, children, elderly and people with special needs.

Vulnerability Analysis				
Hazard Type	Revenue Circle	No of Vulnerable Villages	Major vulnerability in the Revenue Circle	Explain the vulnerability in relation to the hazard
Landslide	Guwahati	20	<ul style="list-style-type: none"> <li>• Kharghuli Ramsa Hill,</li> <li>• Noonmati,</li> <li>• Choonchali,</li> <li>• Kamakhya,</li> <li>• Gotanagar, Pandu,</li> </ul>	<ul style="list-style-type: none"> <li>• Landslide and</li> <li>• Flood</li> </ul>
Flood	Dispur	6	<ul style="list-style-type: none"> <li>• Tintukura Nonke</li> <li>• Kharghuli</li> <li>• Hengrabari</li> <li>• Noonmati Garden</li> <li>• Kalitakuchi</li> <li>• 1No.Mothgharia</li> </ul>	<ul style="list-style-type: none"> <li>• Flood</li> </ul>

Landslide		41	<ul style="list-style-type: none"> <li>• Power House Kahilipara</li> <li>• Shantipur 4th APBN</li> <li>• Kachari Basti-Christian Basti</li> <li>• Geetanagar Hill side</li> <li>• Khanapara-Koinadhara</li> <li>• 8<sup>th</sup> Mile</li> <li>• Baghorbori-Botahghuli</li> <li>• Panjabari</li> <li>• Hengarabari</li> <li>• 1No.Mothgharia</li> </ul>	<ul style="list-style-type: none"> <li>• Landslide</li> </ul>
Landslide		6	<ul style="list-style-type: none"> <li>• Shankardevnagar,</li> <li>• Adarshnagar,</li> <li>• Hastinapur,</li> <li>• Ambher,</li> <li>• Amerigog NC,</li> <li>• 11thMile</li> </ul>	<ul style="list-style-type: none"> <li>• Landslide</li> </ul>
Flood	Sonapur	35	<ul style="list-style-type: none"> <li>• Durung</li> <li>• Murkata</li> <li>• No.1,2,3 Ouzari</li> <li>• Niz Dimoria</li> <li>• Uttar Dimoria</li> <li>• Maloibari Goan</li> <li>• Maloibari Pathar &amp;Jungle</li> <li>• Pub-Maloibari</li> <li>• Maloibari N.C.</li> <li>• Hahara</li> <li>• Mitani &amp; Mitani Pathar</li> <li>• Amarapathar</li> <li>• Bagibari</li> <li>• Bejeni Goan</li> <li>• Barbila</li> <li>• Gomaria Grant</li> <li>• Gomaria Pathar</li> <li>• Bejeni Grant</li> <li>• Hahara Pathar</li> <li>• Teteliguri Pathar</li> <li>• Digarupar Goan</li> <li>• Digarupar</li> <li>• Juboi</li> <li>• Ghagua (Pt)</li> <li>• Dhangiri (Pt)</li> <li>• Sonapur Goan(Pt)</li> <li>• Sonapur Pathar</li> <li>• Kachutali Pathar</li> <li>• Chamatapathar</li> <li>• Damarapathar</li> <li>• Baruabari(Pt)</li> </ul>	<ul style="list-style-type: none"> <li>• Flood</li> </ul>
Flood	Chandrapur	5	<ul style="list-style-type: none"> <li>• Thakurkuchi village.</li> <li>• Paschimmayong.</li> <li>• Dhipujjaan pam.</li> <li>• Dhamkhunda.</li> <li>• Hajongbari.</li> </ul>	<ul style="list-style-type: none"> <li>• Flood</li> </ul>

Landslide	Azara	2	<ul style="list-style-type: none"> <li>• Matiya Pahar,</li> <li>• Garbhanga Hill,</li> <li>• Mazirgaon,</li> <li>• Dharapur,</li> <li>• Garal,</li> <li>• Kendukuchi</li> </ul>	<ul style="list-style-type: none"> <li>• Landslide and</li> <li>• Flood</li> </ul>
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### 2.3 Capacity Assessment & Risk Score:

Capacity Analysis									
Hazard Type	Revenue Circle	No of Relief Shelter	No of trained officials/ frontline workers/ volunteers				Details of inventory of resources prepared including human resources		
			Relief	Recovery	Reconstruction	Mitigation	Departments	Private sector	Others (NGO's/ University)
Flood & Landslide	Guwahati	5	22	18	-	18			
Flood & Landslide	Dispur	10	32	16	-	10			
Flood	Sonapur	11	30	35	-	11			
Flood	Chandrapur	3	4	12	-	4			
Flood & Landslide	Azara	8	20	10	-	5			

Based on the above analysis, a risk score for each hazard should be provided. Multiply the score in Column C with Column D to get the final score for a specific hazard in any Revenue Circle

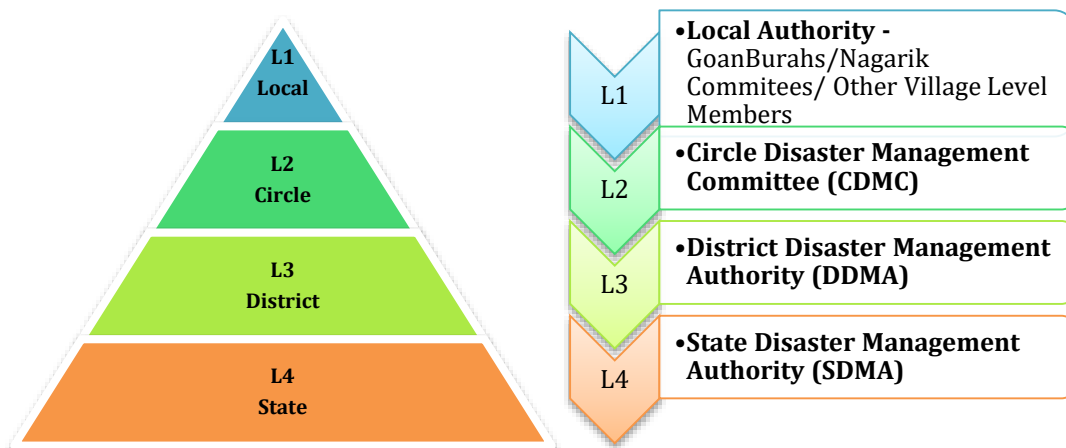
Risk Score								
A. Hazard	B. Revenue Circle	C. Severity of Hazard	D. Likelihood of occurrence					Score (C x D)
		1.Very High 2.High 3.Moderately High 4.Low 5.Negligible	Very Frequent (5 Points)	Frequent (4 points)	Moderately Likely (3 Points)	Occasional (2 Points)	Unlikely (1 Points)	
Flood & Landslide	Guwahati	2	-	-	3	-	-	-
	Dispur	2	-	-	3	-	-	-
	Sonapur	1	-	4	-	-	-	-
	Chandrapur	1	-	4	-	-	-	-
	Azara	2	-	4	-	-	-	-

## CHAPTER-III

# INSTITUTIONAL ARRANGEMENTS FOR DISASTER MANAGEMENT

On the 23<sup>rd</sup> December 2005, the Government of India enacted the DM Act which envisaged the creation of NDMA, headed by the Prime Minister; the NEC headed by the Secretary to the Government of India, Ministry of Home Affairs; the SDMA headed by respective Chief Ministers; the SEC headed by the respective Chief Secretaries and the DDMA headed by the respective DCs.

The DM Act, 2005 provides for an effective institutional mechanism for drawing up and monitoring implementation of DDMP for prevention and mitigating effects of disasters and for taking a holistic, coordinated and prompt response to any disaster situation. Under Section 78 of the DM Act 2005, powers are conferred to the State Government for making rules to carry out the provisions of this Act and notify such rules in the official gazette.

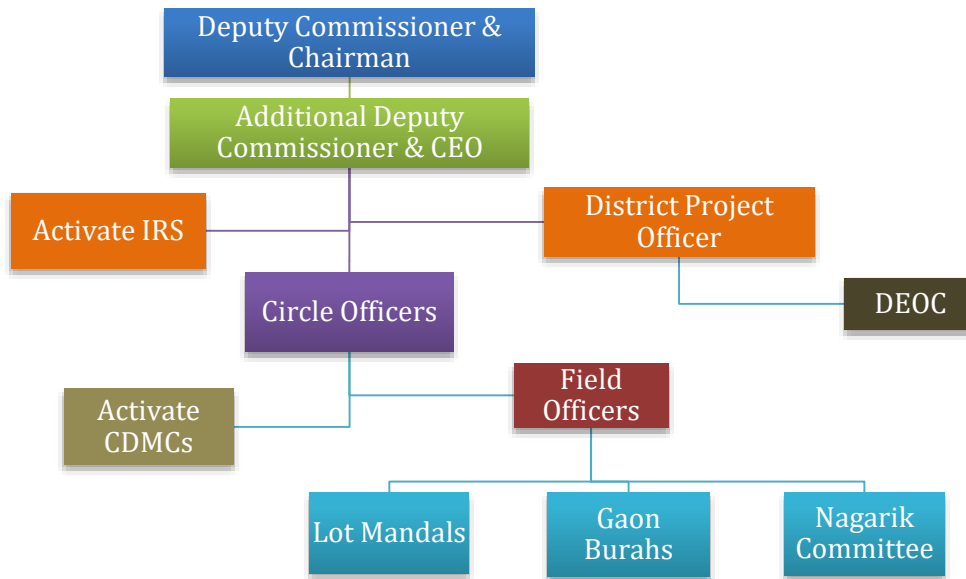


### 3.1 District Disaster Management Authority (DDMA):

The DDMA under the chairmanship of the Deputy Commissioner was constituted as per the Section 25 of DM Act 2005. DDMA acts as the planning, coordinating and implementing body for DM in the District and take all measures for the purposes of DM in accordance with the Guidelines laid down by the NDMA and SDMA. The DDMA will prepare the DDMP and monitor the implementation of the National Policy, the State Policy, the National Plan and the State Plan. The DDMA also ensures that the Guidelines for prevention, mitigation, preparedness and response measures lay down by NDMA and SDMA are followed by all Departments of the State Government and the Local Authorities in the District.

All the line departments such as Health, Veterinary, Irrigation, Police, Revenue, Electrical, PWD (B &R), CWC, ULBs etc. are instructed to stay prepared with the equipment's and manpower before the specified disaster seasons. They will give a list of their resources and requirements to the Deputy Commissioner well in advance so that proper preparatory measures will be at place. The NCC, NSS and Paramilitary Forces will have to prepare a list of task force for the rescue, evacuation and relief operation.

**3.2 District Crisis Management Group (DCMG):**



The composition of DDMA is as follows:

- |  |                  |
|--|------------------|
| 1. The Deputy Commissioner                             | Chairperson      |
| 2. Mayor, GMC  | Co-chairman      |
| 3. Chief Executive Officer<br>(An ADC Nominated by DC) | Member Secretary |
| 4. Commissioner of Police, Guwahati City               | Member           |
| 5. Jt. Director, Health Services                       | Member           |
| 6. Executive Engineer, PWD (R)                         | Member           |
| 7. Executive Engineer, PWD (B)                         | Member           |
| 8. Executive Engineer, Water Resources                 | Member           |

The composition of CDMCs is as follows:

- |   |          |
|---|----------|
| 1. Circle Officer of the Revenue Circle   | Chairman |
| 2. Field Officer DM                       | Convener |
| 3. BDO of the concerned Development Block | Member   |
| 4. Agricultural Development Officer       | Member   |
| 5. Assistant Engineer, Water Resources    | Member   |
| 6. Assistant Engineer, PHE                | Member   |
| 7. Extension Officer AH & Veterinary      | Member   |
| 8. Range Officer, Environment & Forest    | Member   |

The composition of Circle Level Task Force is as follows:

- |   |                  |
|---|------------------|
| 1. Circle Officer of the Revenue Circle | Chairman         |
| 2. Field Officer DM                     | Member Secretary |
| 3. Assistant Engineer, GMC              | Member           |
| 4. Assistant Engineer, PWD (B)          | Member           |
| 5. Assistant Engineer, PWD (R)          | Member           |

6. Assistant Engineer, PWD, NH	Member
7. Assistant Engineer, PHE	Member
8. Assistant Engineer, Irrigation	Member
9. Assistant Engineer, Water Resource	Member
10. Assistant Fishery Officer, Fishery	Member
11. Senior Demonstrator, Sericulture	Member
12. Sub-Inspector of Schools, Elementary Education	Member
13. Agriculture Development Officer, Agriculture	Member
14. Veterinary, Officer, AH & Veterinary	Member
15. Senior MNHO, Health and FW	Member
16. Supervisor, Social Welfare	Member
17. Inspector, Handloom and Textile	Member
18. Range Officer, Soil Conservation	Member
19. Range Officer, Environment & Forest	Member
20. Office in charge concerned Police Stations	Member

### 3.3 Incident Response System (IRS):

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

Vide Govt. of Assam, Revenue and Disaster Management notification no. RGR/ASDMA/08/2014/02 dated 20<sup>th</sup> May, 2014 regarding implementation of Incident Response system in the District level, the Kamrup Metropolitan District Level Incident Response Team is notified/ constituted.

### 3.4 District Emergency Operations Centre (DEOC):

District Disaster Response & Emergency Centre is situated in the DC's Office, Kamrup (M) where during flood season every year from 15<sup>th</sup> May to 15 October, staffs are detailed 24X7 for receiving and discrimination of flood related information.

The main task of the DDR & IC is to collect damage related information's in prescribed format from the concerned revenue Circles and departments. During flood it also works as Emergency No. for the public for any complaints suggestions etc.

The Telephone No. of the Control Room: 0361-277053 / 9365429314 (M)  
Toll Free No.: 1077

#### 3.4.1 Objectives of the Emergency Operations Centre:

The EOC at the District level is the nerve centre for coordination and management of disasters. The objectives of the EOC shall be to provide centralized direction and control of any or all of the following functions:

- Receive and process disaster alerts and warnings from nodal agencies and other sources and communicate the same to all designated authorities.
- Monitor emergency operations
- Facilitate Coordination among ESF of Departments/Agencies.
- Requisitioning additional resources during the disaster phase

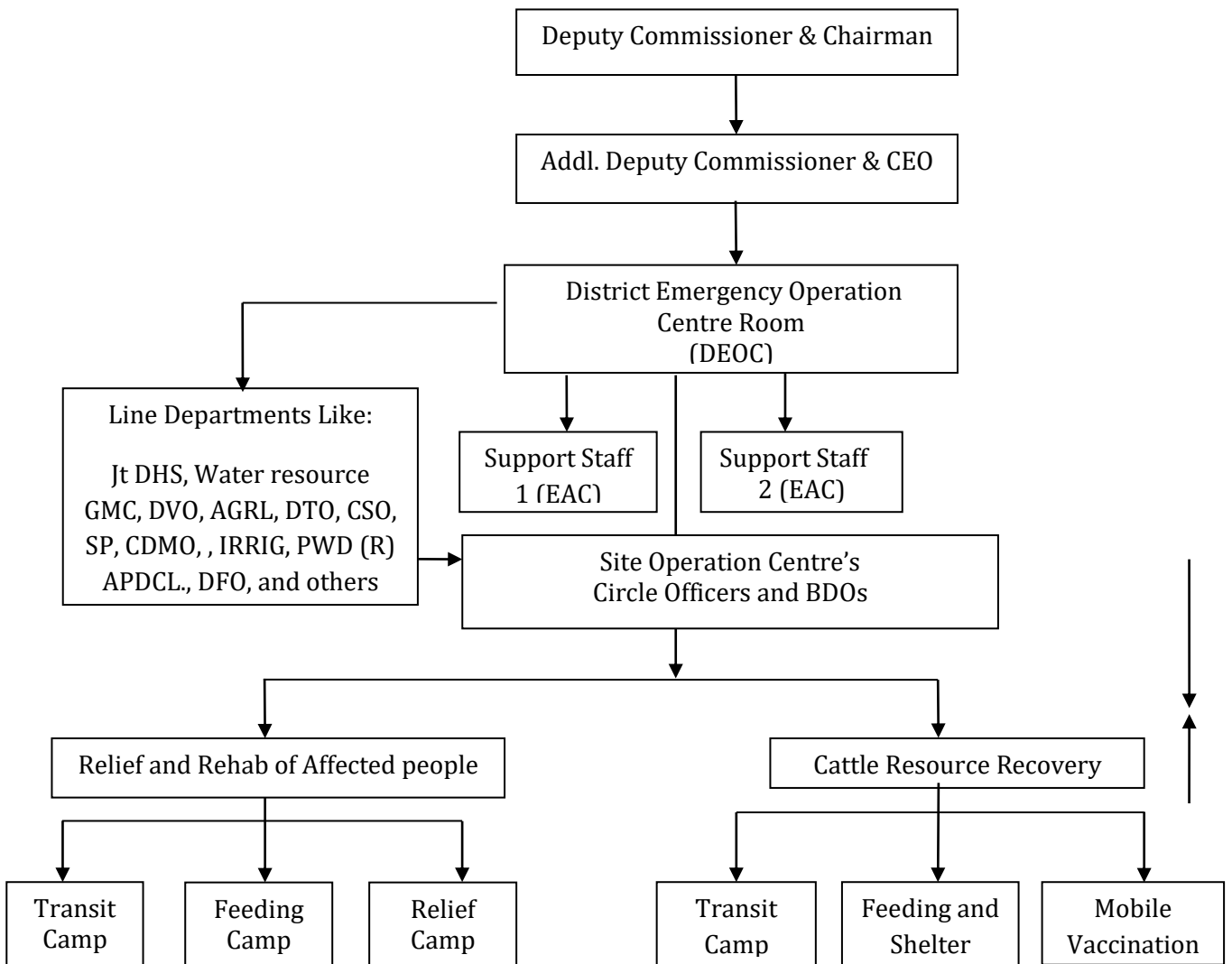
- Issuing disaster/incident specific information and instructions specific to all concerned;
- Consolidation, analysis, and dissemination of damage, loss and needs assessment data;
- Forwarding of consolidated reports to all designated authorities.

The DEOC will be connected with the SEOC. The control room will function on 24x7 basis and will be functional round the year. Suitable personnel will be selected and imparted training in the operation of Control Room who will be posted to man the EOC.

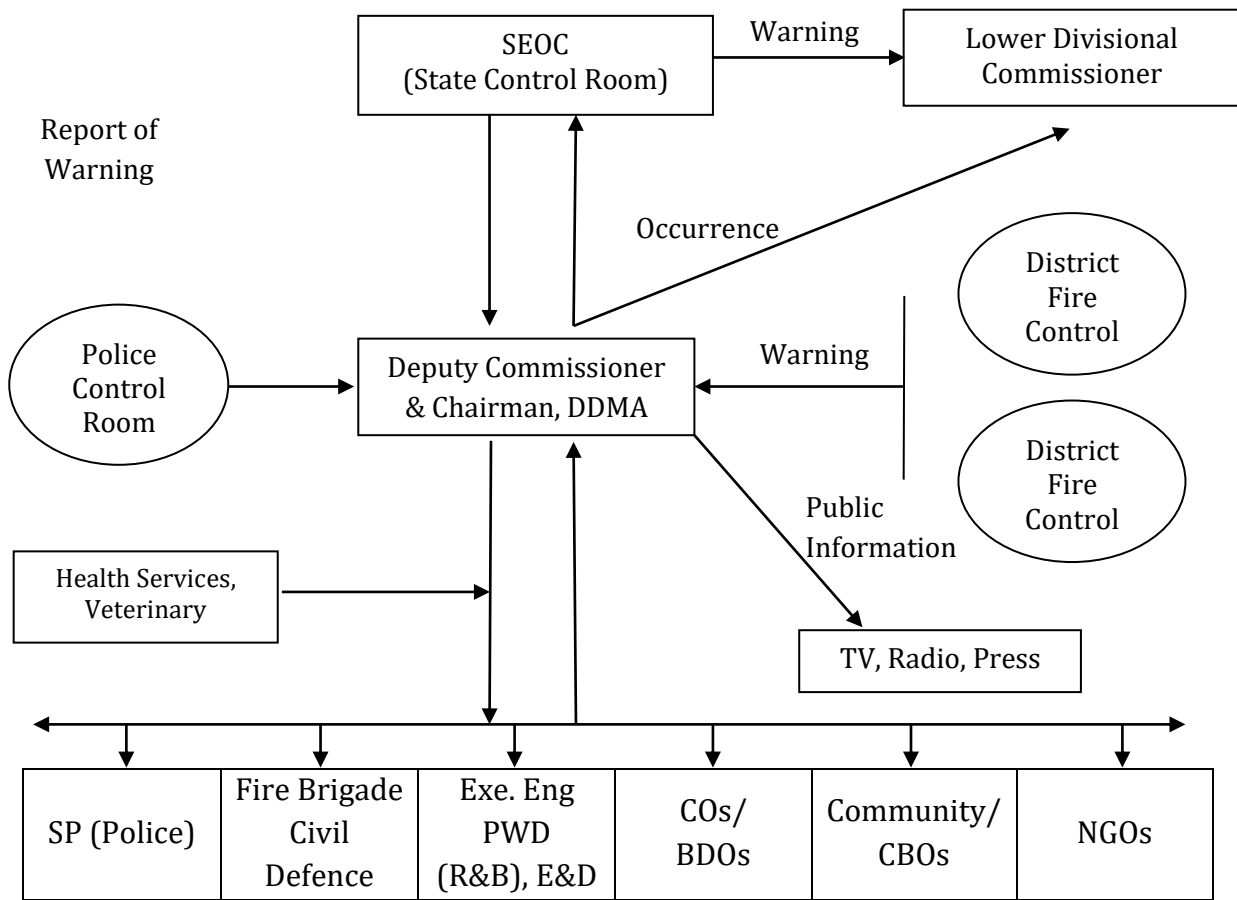
In the absence of the Deputy Commissioner, ADM / ADC & CEO DDMA will officiate and exercise all the powers and responsibilities of the Deputy Commissioner & Chairman.

On the receipt of warning, all community preparedness measures and counter-disaster measures would come into operation.

**3.4.2 Co-ordination Structure at District Level Control Room:**



**3.4.3 Early Warning Dissemination:**



**3.5 Forecasting and Warning Agencies:**

The main purpose of the initiative was to develop a location specific early warning system which could help the administration in taking advance precautionary measures and issue flood alerts to those specific areas so that necessary measures can be undertaken by the people.

1. Flood Early Warning System (FLEWS)
2. North Eastern Space Application System (NESAC)
3. Central Water Commission (CWC)

Providing early warning of flood in magnitude (severity), location (revenue circle/group or cluster of villages) and probable time (within 12-24 hours range), high rainfall warning with location and time, pre and post monsoon information about the revenue circles and the probable villages that may be affected due to flood. This information is of great help to the administrative machinery for preparedness and response activity. The flood alert is also disseminated to the community through Revenue Circle Officers and Gaon Burahs.

## CHAPTER-IV

# PREVENTION AND MITIGATION MEASURES

Prevention and mitigation are actions or activities taken before a disaster that helps to reduce the risk from any disaster whether man-made or natural. Recently, the approach of the Government for dealing with disasters has undergone a change from Relief-Centric Approach to Planning, Prevention, Preparedness and Mitigation. The focus on capacity building of all the stakeholders is being given due emphasis by the Government for better management of disasters.

The district can avail itself the four mechanisms to reduce risk and vulnerability:

- Long term planning for mitigation, preparedness and prevention investments in the district,
- Enforcement of regulations, particularly the building codes and land use,
- Review and evaluation of development plans and activities to identify ways to reduce risks and vulnerability, and
- Capacity building, including warning, the provision of relief and recovery assistance and community-level identification of risk and vulnerability.

The DC & Chairman, DDMA assisted by the ADC & CEO, DDMA is responsible for developing plans and activities to effect mitigation and prevention using the mechanism noted above.

### 4.1 Preventive Measures:

The principle of prevention and mitigation is to reduce both exposure and vulnerability. Environmental management, site selection, urban planning and sound construction are critical to the safety of communities, whereas socio-economic measures can be used to increase resilience, spread risk and responsibility, create redundancy and minimize the impact.

### 4.2 Mitigation Measures:

Mitigation refers to all measures undertaken in anticipation of a possible threat/hazard. These may include both structural and non-structural mitigation which aim at reducing the physical and socio-economical vulnerability, enhancing capacity and reduce damaging impacts of disasters

**4.2.1 Structural mitigation** may refer to both-engineered structures and non-engineered structures. Engineered structures involve architects and engineers during the planning, designing and construction of structures, including buildings, dams, embankments, roads, bridges etc. Many countries have rules and laws providing codes for engineered construction. These codes provide guidelines for appropriate design and construction techniques in disaster prone areas for specific disasters such as earthquakes and cyclones.

Non-engineered structures are generally constructed by people with the help of local artisans like masons, carpenters etc using locally available raw materials. These structures are normally of low-cost but have less strength/resistance for a disaster.

**4.2.2 Non-Structural mitigation** encompasses those measures that attempt to bring about coordination of efforts between all organizations and persons during all phases of Disaster

Management, training and public awareness, legislation, policy making, preparation of action plans etc.

**4.3 Multi-Hazards Mitigation Actions:** The following structural and non-structural measures may also be considered in addition to hazard specific actions.

#### 4.3.1 Structural Mitigation Measures:

- All public buildings like schools, hospitals, health centers should be multi-hazard resilient being built on raised grounds and platforms with retrofitting and having adequate exit gates and fire extinguishers in place.
- Construct multipurpose community shelters in all vulnerable areas
- Houses built in the area should have multi hazard resilient features keeping in tune with cultural housing practices
- Watershed management:
  - A study may be conducted by the District Administration to assess the existing structures and system in place for watershed management and recommend best options for effective watershed management.
  - Periodically cleaning, de-silting and deepening of natural water reservoir and drainage channels
  - Construction of irrigation channels. Sluice gates may be linked with ponds which could be used as a water resource for enhancing livelihood.

#### 4.3.2 Non- Structural Mitigation Measures:

Risk transfer mechanisms: Establishment and strengthening of insurance schemes and policies which would transfer losses the risk due to hazard to a third party. Insurance schemes for crop, cattle, small businesses and life should be strengthened and promoted to minimize economic losses.

- Formation of groups of architects, engineers and masons and trainings for them on building safe infrastructure.
- Alternate safe housing technology along with rainwater harvesting structures is constantly encouraged and mainstreamed for long-term vulnerability reduction. Policies and bye laws could be developed for the same.
- Continuous Awareness campaign & encouragement for disaster proof habitat planning at community level including shifting/relocating from low lying areas and villages within embankments to safe raised grounds. (With some incentives if feasible).
- Disaster management may include first-aid & rescue & evacuation as a part of school, college, educational institutions (both techno-tech) curriculum starting from primary level.
- The DDMA may suggest conducting Research on alternative cropping to reduce adverse affect due to flood, water logging or drought.

**4.4 Specific Hazard Mitigation Actions:** In addition to the multi-hazard mitigation actions, the following hazard specific mitigation actions should be taken depending on the vulnerability of the Village/Block:

Hazard Type	Structural Mitigation	Non-Structural Mitigation
<b>Earthquake</b>	<ul style="list-style-type: none"> <li>• All buildings especially public building must have</li> <li>• earthquake resilient features</li> <li>• Techno Legal Regime - Follow BIS Code, Safety Auditing, Enforcement of Byelaws, Land use control, heights of building etc</li> <li>• Retrofitting – Lifeline Buildings, Structures, Houses</li> <li>• Building bye laws applicable for Zone 5 region should be followed</li> </ul>	<ul style="list-style-type: none"> <li>• Awareness on Building byelaws applicable for Zone 5 should be followed</li> <li>• Training &amp; Awareness - Engineers, Architect, contractors, Masons, House Owners, Govt. Functionaries etc</li> <li>• DM Plans – DM Plans and Mock Drills at all level</li> <li>• Community Mobilization - Institution Building, Planning, Response Teams, Insurance</li> </ul>
<b>Landslide</b>	<ul style="list-style-type: none"> <li>• Land use Control-Resettlement of colonies, avoid major development works, reforestation, protection of vegetation, construction of buildings, roads, canals etc be carried out after proper study of the area following building codes, slope protection or stabilization. No construction beyond certain degree of slope</li> <li>• Retaining Wall</li> </ul>	<ul style="list-style-type: none"> <li>• Mapping (Hazard/Risk) - Historical records, areas at risk, locating areas prone to slope failures.</li> <li>• Community Awareness-DM Plans, Training and Mock Drills at all level, Community Mobilization- Institution Building, Response Teams, Insurance, Constant Monitoring and Early Warning.</li> </ul>
<b>Thunder-storm</b>	<ul style="list-style-type: none"> <li>• Land use Control- Resettlement of colonies, avoid major development works, enforcement of building codes, vulnerable areas be kept for parks, play ground, grazing ground etc</li> <li>• Construction of Engineered Structures- As per code, wind &amp; flood force resistant building in upland, building with high platform, weak houses to be anchored properly before cyclone season. Construction of Cyclone Shelter</li> <li>• Flood Diversion: levees, embankments, dams and channel improvement and lakes</li> </ul>	<ul style="list-style-type: none"> <li>• Hazard/Risk Mapping</li> <li>• Wind Control- Reforestation, mangrove plantation, protection of vegetation, clearing of debris, silts, conservation of ponds</li> <li>• Community Preparedness- Structural &amp; non- structural DM Plans, Training and Mock Drills at all level, Community Mobilization- Institution Building, Response Teams, Insurance, alternate cropping.</li> </ul>

<p><b>Flood</b></p>	<ul style="list-style-type: none"> <li>• Construction, maintenance and protection of flood control structures like embankments, ring bunds, etc.</li> <li>• Dams and levees can also be constructed which can be used as temporarily storing space which reduced the chances of lower plains getting flooded.</li> <li>• Critical buildings as well as private houses in flood prone areas should be constructed on an elevated area and if necessary on stilts and platform.</li> <li>• Land use Control-Resettlement of colonies, avoid major development works, building water holding areas in urban areas</li> <li>• Construction of Engineered Structures- As per code, flood force resistant building in upland, building with high platform</li> </ul>	<ul style="list-style-type: none"> <li>• Crops that can be harvested before the onset of monsoon/flood season and crops that are flood friendly should be grown in the region.</li> <li>• Awareness on flood proof habitat planning with long term goal of flood plain zoning and rehabilitating all to safer zones.</li> <li>• Flood Reduction: reforestation, protection of vegetation, clearing of debris, silts, conservation of ponds and lakes</li> <li>• Non-structural Disaster Management Plans and Mock Drills at all level, Community Mobilization- Institution Building, Response Teams, Insurance, alternate cropping.</li> </ul>
<p><b>Fire</b></p>	<ul style="list-style-type: none"> <li>• Establishment of fire stations as per Fire Safety norms</li> </ul>	<ul style="list-style-type: none"> <li>• Promotion of usage of fuel blocks during summers</li> <li>• to minimize cases of fire during summer</li> <li>• Awareness campaign on fire hazard and strategies to prevent fire incidents</li> </ul>
<p><b>Petro-Chemical, Industrial Hazards (Petrol Pumps)</b></p>	<ul style="list-style-type: none"> <li>• <b>Ensuring safety of chemical storage vessels</b></li> <li>• <b>Safe &amp; proper construction of Petrol pumps</b></li> </ul>	<ul style="list-style-type: none"> <li>• Enforcement of safety provisions for isolated storages</li> <li>• Ensure safe electrical conditions</li> <li>• Onsite Emergency Plan</li> <li>• Emergency response plans for transport of HAZCHEM</li> <li>• Mock Drill &amp; Training</li> </ul>
<p><b>Drought</b></p>	<ul style="list-style-type: none"> <li>• Dams/reservoirs and wetlands to store water</li> <li>• Construction of warehouses and cold storages for preservation/ storage of food grains</li> <li>• Water rationing</li> <li>• Proper selection of crop for drought-affected areas</li> <li>• Watershed management</li> <li>• Education and training to the people</li> <li>• Participatory community</li> </ul>	<ul style="list-style-type: none"> <li>• Ensuring prompt availability of food grains and fodder</li> <li>• Ensure availability of drinking water and water needed for basic needs</li> <li>• Mobilize district level plans in terms of releasing additional funds to improve irrigation</li> <li>• Ensuring prompt supply of inputs like seeds, fertilizers and credit</li> </ul>

	<p>programmes</p> <ul style="list-style-type: none"> <li>Reducing deforestation and re-wood cutting in the affected areas</li> </ul>	<ul style="list-style-type: none"> <li>Improvement in agriculture through modifying cropping patterns and introducing drought-resistant varieties of crops</li> <li>Animal husbandry activities can help in mitigation with use of improved and scientific methods</li> <li>Arrangements for distribution of gratuitous relief and cash doles</li> </ul>
<b>Lightening</b>	<ul style="list-style-type: none"> <li>Installation of an effective Early Warning System</li> <li>Mobilization of specialized equipment and machinery to affected areas</li> <li>Arrangements to be made for quick transportation of injured victims to the hospitals</li> </ul>	<ul style="list-style-type: none"> <li>Arrangements for distribution of gratuitous relief</li> </ul>

Summary of Mitigation Measures

Hazard	Revenue Circle	Activity	Authority for Implementation	Starting Date	Date of Completion	Cost	Funding Source
Earthquake, Urban Flood, Landslide, Storm	Guwahati	<ul style="list-style-type: none"> <li>Desiltation of drains/ Rivers</li> </ul>	GMC/GMDA/WRD/APDCL/Forest/PHE/PWD (R)/ PWD (B)/Health/ Agriculture/ Veterinary/ NHAI	October	March		As per fund allocated to the departments
Earthquake, Flood, Urban Flood, Landslide, Storm	Dispur						
Earthquake Flood, Landslide, Storm	Sonapur	<ul style="list-style-type: none"> <li>Restoration of embankment</li> <li>Restoration of damage roads</li> </ul>	WRD/APDCL/ Forest/PHE/ PWD (R)/PWD (B)/Health/ Agriculture/ Veterinary/ PNRD/NHAI				
Earthquake Flood, Landslide, Storm	Chandrapur						
Earthquake Flood, Landslide, Storm	Azara						

## CHAPTER-V

# PREPAREDNESS MEASURES

Preparedness is the state of readiness to deal with a threatening disaster situation or disaster and the effects thereof. The preparedness level at the District has to be checked by the DDMA. The following steps have been taken as a part of administrative preparedness to combat any eventualities during and immediately after the disaster:

- i. Control Rooms(DEOC) are functioning round the clock in DC's Office, Offices of the Jt. Director of Health Services, DA&VO, District Agriculture, PWD (R), PWD (B) All Executive Engineers of Irrigation, R&B (PWD), CWC, PHE,
- ii. Senior Level Officers from different departments will be assigned charges for all the flood/cyclone zones along with the BDOs of respective blocks.
- iii. Telephone Numbers have been made available to the Regional Meteorological Centre, Guwahati to intimate about the adverse weather
- iv. SDO Telegraphs/ Telephones have been requested to keep the lines in order at the time of calamity
- v. Daily report of rainfall is being obtained from the DEOC.
- vi. The Executive Engineers Water Resource Department have been intimated to report Gauge reading of the rivers, daily during flood and to keep drainage clean & repair all weak points/ breaches caused in the last flood and complete the left out work before the onset of monsoon, keep a close watch on the embankments passing through the habitations, remain alert with men and materials to face any
- vii. The Executive Engineer, Water Resource (Mech.) Division has to depute field official in the designated places where water pumps are placed for dewatering of logged water.
- viii. The Executive Engineer, PHE has been directed to repair/ replace the defunct tube wells on war footing basis before the rainy season
- ix. ADM (Relief) have been directed by the Deputy Commissioner and District Magistrate to store adequate foodstuff at interior, vulnerable strategic and key areas for immediate relief.
- x. NGOs have been identified block wise and task force been formed in collaboration with the district administration to carry out relief operation, rescue and evacuation, etc.
- xi. DAO has been intimated to supply HYV paddy seeds to the blocks as a part of agricultural measure.
- xii. Jt. Dir. of Health Services has to arrange Medical Relief Camps and doctors have been deployed for the purpose and the Jt. Dir. of Health Services has been directed to keep the mobile medical team ready for the purpose.
- xiii. DVO have to arrange indent of different vaccines to protect animals against contagious diseases, medicines supplied to the field functionaries for routine treatment as part of veterinary measures.
- xiv. PWD (R) Officer will look into the repairs major roads, bridges, concrete steel work and make other necessary arrangements as per requirement.
  - Earth moving and Road cleaning equipment's
  - Main accessible road to Revenue Circles

- xv. NGOs / CBOs have been organized by the respective BDOs as relief parties
- xvi. Review of pre-flood arrangements have been carried out and the contingency plan for flood and cyclone prepared by all the BDOs.

**5.1 Roles and Responsibilities of the Deputy Commissioner/District Magistrate:**

Phase	Activities	Other Officials To Be Involved	Resources/ Equipments To Be Procured From
Pre-Disaster	<p>🌟 Preparedness Before the Flood</p> <ol style="list-style-type: none"> <li>1. Reviewing and analyzing the calamity situation in the district over the next one-year through DDMA meeting at the District level involving all the departments of the district as well as block and Village levels and the locally active NGOs/CBOs</li> <li>Identifying disaster prone zones and strategies to stay prepared for the worst.</li> <li>2. Ensure IEC through Emergency section/C.O/ BDO's /NGO's: Movies/Street plays/</li> <li>3. Workshops / Walling/ Painting.</li> <li>4. Reviewing the DEOC and making it functional Making the DEOC well equipped and depute senior officers from time to time to review the receipt of information and dissemination.</li> <li>5. Calling a meeting for NGO/CBO co-ordination and discuss issues such as Capacity assessment of different NGOs/CBOs and ask them to adopt certain vulnerable areas to avoid overlapping and duplicity.</li> <li>Preparing a checklist (containing the dos and don'ts) and pass that on to the NGOs/CBOs</li> <li>6. Checking stock of the Public distribution system and arrangement of the temporary godowns.</li> <li>7. Checking the Resources with other department such as Police, Fire, and Civil Defence and of NSS/NCC/NYKS.</li> <li>8. Preparing a list of Power Boats already deployed and/or to be deployed on hire during crisis.</li> <li>9. Keeping stock of road cleaning equipments and vehicles for relief operation.</li> <li>10. Assigning specific duties to different officers/Sr. Officers at Headquarters.</li> </ol>	<p>All District level officials.</p> <p>ADM</p> <p>All BDOs</p> <p>DIPRO (District Information and Public Relation Officer.)</p> <p>Dist. Fisheries Officer.</p> <p>Health</p> <p>Veterinary</p> <p>Leading NGO/CBOs</p> <p>NSS/NCC/NYK, Police,</p> <p>Fire, Civil Defence.</p>	<p>ASDMA, Revenue Deptt.</p> <p>POLICE/FIRE</p> <p>R&amp;B/NH</p> <p>Fisheries</p> <p>RTO</p> <p>Civil Defence.</p> <p>Commandant/coordinator of NCC/NSS/NYKS/</p> <p>Zilla Sainik Board.</p>

Phase	Activities	Other Officials To Be Involved	Resources/ Equipments To Be Procured From
	<p>11. Staying in constant touch with other line departments.</p> <p>12. Ensuring proper functioning of warning systems &amp; communication systems.</p> <p>Ensuring Mock drill of the rescue and relief teams.</p> <p>13. Preparing a map showing the location of temporary shelter camps and cyclone shelters with accessibility.</p> <p>14. Identifying flood Shelter/Temporary shelter in high elevated places and arrangement of tents etc</p> <p>15. Identifying and mapping of Disaster (of all kinds) Prone areas</p> <p>16. Ensuring formation of village level Disaster Management Committee through BDOs</p> <p>🌟Dissemination of Warning:</p> <p>17. Receiving Warning from reliable sources and crosschecking them for authenticity.</p> <p>18. Disseminating warning to District level officials /Block /PRIs &amp; coordination with others</p> <p>19. Keeping the Control Room active round the clock.</p> <p>20. Distributing duties to the District level officials, Circle officers and Sr. BDOs/BDOs.</p> <p>21. Arranging vehicles and public address systems for information dissemination.</p> <p>22. Establishing coordination with the NGOs/CBOs and the village communities and assigning them duties.</p> <p>23. Issuing warning to fisherman through Circle officers/Fishery Department well in advance</p> <p>24. Asking the people in the vulnerable areas to move to the shelters and to move their domesticated animals to safer places and to cooperate with the volunteers and other officials engaged in similar activities</p>	<p>All District level officials.</p> <p>All Circle officers.</p> <p>All BDOs</p> <p>DIPRO.</p> <p>Dist. Fisheries Officer.</p> <p>Leading NGOs.</p> <p>Police and relevant department</p>	<p>VHF from the Police-</p> <p>Mike-set</p> <p>/Batteries/Generators available in the district office/ from the Private parties on requisition</p>
	<p>🌟 Search, Rescue and Evacuation:</p> <p>1. To co-ordinate with Civil Defence, NGOs/CBOs. Zilla Sainik Board/Police for support.</p> <p>2. Arrangement &amp; Deployment of boats/vehicles etc. for evacuation</p>	<p>Police</p> <p>Fire Brigade.</p> <p>Leading NGO.</p> <p>Circle officers.</p> <p>BDOs.</p> <p>Programme Co-</p>	<p>Power Boats</p> <p>/Country Boats/vehicle/rope/rescue kits and trained resource personnel from</p>

Phase	Activities	Other Officials To Be Involved	Resources/ Equipments To Be Procured From
During Disaster	<p>3. Evacuating people from marooned areas and administer emergent relief.</p> <p>4. Organizing trained task force members and deputing to be marooned &amp; Cut-off areas for evacuation.</p> <p>5. Deployment of police for maintaining discipline and peace keeping during evacuation</p> <p>6. Mobilizing people to move to flood shelters.</p> <p>7. Deployment of Power Boat/Country Boat (Govt./Private) for evacuation wherever necessary.</p> <p>Deployment of Police/Fire Brigade for search and rescue.</p> <p>8. Co-ordination with the NCC/NSS/Civil Defence/Zilla Sainik Board etc. for rescue operation</p> <p>Ensuring proper utilization of the rescue materials.</p> <p>Providing Rescue kits at the affected areas</p> <p>★ Distribution of Relief Materials:</p> <p>9. Keeping a record of the affected area and people so as to account for the relief materials needed.</p> <p>Procurement and transportation of relief materials to affected areas</p> <p>10. Arrangement of free kitchen in the shelter camps &amp; affected areas and assigning the responsibilities to officials for proper distribution coordinating with the NGOs/CBOs</p> <p>11. Encouraging other voluntary organizations from outside for rescue and relief operation.</p> <p>12. Distribution of basic medicines and disinfectants to prevent epidemic</p> <p>13. Ensuring Health care activities by the CDMO in the shelter camps &amp; through mobile Units/Temporary Health camps at regular intervals</p> <p>14. Ensuring Cattle health activities by the CDVO through Mobile units/Temporary Health camps in the affected areas</p> <p>15. Ensuring that there is enough storage of food and pure water in the shelters.</p> <p>16. Monitoring all the activities in the</p>	<p>coordinators of NSS/NCC/Defence units.</p> <p>Circle Officer</p> <p>DDO, BDOs, Medical Officers, Veterinary Officers, Paramilitary Forces, Police., PHE, RTO, Leading NGO and relevant departments.</p>	<p>SRC/Army / Air Force Unit/Civil Defence/ Hired from the private parties according to the requirement</p> <p>FCI, Private stockiest, SRC, Director Health services, Director Animal Husbandry, UNICEF/ UNDP/Other NGOs/INGOs</p>

Phase	Activities	Other Officials To Be Involved	Resources/ Equipments To Be Procured From
Post-Disaster	<p>affected areas.</p> <p>☀ Short-term Measures:</p> <ol style="list-style-type: none"> <li>1. Formation of special task force with required equipments assigning responsibilities for specific areas.</li> <li>2. Emergency cleaning of mud silt etc. to enable reconnaissance.</li> <li>3. Clearing fallen trees and branches from the roads to facilitate local relief work.</li> <li>4. Forming a work team carrying emergency tool kits.</li> <li>5. Deployment of towing vehicles, earth moving equipments, cranes,</li> <li>6. Construction of temporary roads.</li> <li>7. Assessment of damage.</li> <li>8. Temporary supply of food, drinking water and medicines to the shelters and affected areas</li> <li>9. Arrangement for safe shelter for animals.</li> <li>10. Providing the lighting facilities for shelter places.</li> <li>11. Deployment of home guards and constables to maintain law and order</li> <li>12. Providing temporary arrangements for income generation for the affected people</li> <li>13. Encouraging NGOs/INGOs from outside to carry out restoration and reconstruction works</li> </ol> <p>Ensuring crop insurance Supervising all the activities</p>	<p>All the district level officials /officers at district Headquarters/ Circle Officer /BDOs./ /POLICE/PARAMILITARY FORCES and relevant departments</p>	<p>Cranes, Road cleaning equipments, Water tankers, funds, vehicles, Gen sets, Earth moving equipments, seeds, fertilizers, pump sets,</p> <p>/Military cantonment / PED, District Agriculture Officer</p>
	<p>☀ Long Term Measures</p> <ol style="list-style-type: none"> <li>14. Immediate restoration of Road communication, Irrig. System, Educ. Inst, Govt. Inst, Electrical installation, Drinking water supply, Construction of IAY houses for the BPL families.</li> <li>15. Meeting with district level officials /Officials at Head quarter and chalk out emergency plan with vulnerable areas and resource list</li> <li>16. Pre-positioning of staff in the likely cut off areas</li> <li>17. Arrange food and other basic requirement for emergency response.</li> <li>18. Collect information from different areas and to act accordingly.</li> </ol>	<p>Public Works Department/Water Resources /Education and youth services/PRIs/Forest Department/Social Forestry etc.</p> <p>All District level</p>	<p>Funds from all possible Sources</p> <p>Materials for temporary shelter</p>

Phase	Activities	Other Officials To Be Involved	Resources/ Equipments To Be Procured From
	<p>19. Co-ordination meeting with officials at Headquarters by 12 hours intervals and 24 hours intervals with the field officials.</p> <p>20. Regular collection of situation report of the risk and vulnerable areas from the officers assign for the purpose.</p> <p>21. Provision for administering emergent relief and the other basic needs</p> <p>22. Contact with SRC for supply of Temporary shelter materials.</p> <p>23. Keeping in touch with ADC (Relief) for supply of food articles procuring from FCI/Whole sellers.</p>	officials/NGOs/CBOs/ Officials of the District office/SRC	<p>procured from DFO/SRC/ UNDP/NGO/ etc.</p> <p>Vehicles – RTO/Private agencies.</p> <p>Medical requirements from DMO</p> <p>Cattle feed from DVO, NYK for Volunteer</p>
	<p>25. Deputation of Volunteers to different probable affected areas.</p> <p>26. Helping the evacuees for returning to their houses.</p> <p>27. Immediate arrangement of free kitchen in the cut-off and inaccessible areas</p> <p>28. Relief distribution.</p> <p>29. Monitoring of Relief distribution.</p> <p>30. Provision of drinking water</p> <p>31. Provision of Medical facilities.</p> <p>32. Repair/Restoration of Roads.</p> <p>33. Transportation of Relief and Human Resources</p>		

## 5.2 Roles and Responsibilities of the Addl. District Magistrate (A.D.M)/CEO, DDMA:

Phase	Activities	Other Officials To Be Involved	Resources/ Equipments Required	Remarks
Pre Disaster	<p>☀ Preparedness:</p> <p>1. Playing a second in command to the Deputy Commissioner in all aspects</p> <p>☀ Warning Dissemination:</p> <p>2. Ensuring proper dissemination of warning both downward and upward level improper interval of timing.</p> <p>3. Ensuring proper functioning of Control room</p> <p>4. Deployment of Office in charges of D.C in control room round the clock basis.</p>	<p>PO, POLICE, Circle Officer, BDOs, PRIs</p> <p>Other officials of the dist office.</p> <p>Nodal officers of other Line depts.</p> <p>Involve Warning Group a Task Force at Block, GP &amp; Village level</p>	VHF, Telephone, HAM Internet Connection	Comprehensive planning and proper situational and hazard analysis
During Disaster	<p>☀ Rescue and Evacuation:</p> <p>1. Inform Specialized Search</p>	RTO, IWT, POLICE,	Vehicles, Police personnel,	Things to be done on war

Phase	Activities	Other Officials To Be Involved	Resources/ Equipments Required	Remarks
	<p>&amp; Rescue Team</p> <p>2. Arrangement of Vehicles</p> <p>3. Keeping the Police and Fire Personnel ready</p> <p>4. Keeping staffs at the DEOC ready</p> <p>5. Deployment of additional staff if necessary</p> <p>☀ Distribution of Relief:</p> <p>6. Proper allocation of relief materials to the affected areas</p> <p>Allocation of officials for proper distribution of relief materials.</p> <p>7. Supervision of relief distribution.</p>	<p>Circle Officers, BDOs, Telecommunication, Other officials of the dist office. Paramilitary forces, NCC/NSS/NYK NGOs/CBOs</p> <p>Involve Search &amp; Rescue Group a Task Force at Block, GP &amp; Village level formed under DRM programme</p> <p>Involve Relief &amp; Coordination Group a Task Force at Block, GP &amp; Village level formed under DRM programme</p>	<p>Other staffs VHF, Telephone, HAM Internet Connection</p>	<p>footing and with careful monitoring</p>
Post-Disaster	<p>☀ Restoration:</p> <p>1. Keeping liaison with all line departments.</p> <p>2. Restoration of roads, transport and communication systems</p> <p>3. Collection of progress report on restoration and reporting to the Govt.</p> <p>4. Periodical visits to the affected areas to supervise the restoration works</p> <p>☀ Distribution of Relief Materials:</p> <p>5. Procuring the list of the affected people and property from the C.Os &amp; BDOs</p> <p>Preparing a comprehensive damage report</p> <p>6. Allotment of relief materials/financial assistance</p> <p>Monitoring to make sure that everything is at its place</p> <p>☀ Coordination:</p> <p>7. Coordination with line departments and civil society organizations.</p> <p>8. Supervision of restoration</p>	<p>All Circle officers, BDOs, Officials of Revenue Department NGOs/CBOs &amp; Line department</p>	<p>Reports on repairs/ restoration</p>	<p>Careful listing of beneficiaries and proper distribution</p>

Phase	Activities	Other Officials To Be Involved	Resources/ Equipments Required	Remarks
	activities under taken by different voluntary agencies.			

**5.3 Roles and Responsibilities of the Circle Officers (C.O) and Sr. BDOs/BDOs:**

Phase	Activities	Other Officials To Be Involved	Resources/ Equipments To Be Procured From	Remarks
Pre Disaster	<p>☀ Preparedness:</p> <ol style="list-style-type: none"> <li>1. Providing authentic information required by the DEOC</li> <li>2. Preparing a record of previous disasters in the locality and analyzing the effects</li> <li>3. Preparing hazard maps of the Block &amp; the GPs in minute details</li> <li>4. Mapping the cut off areas with alternate route map.</li> <li>5. Identification of shelter places in the maps</li> <li>6. Keeping a List of storage Points &amp; facilities available, dealers of foodstuffs.</li> <li>7. Keeping a list of vulnerable people and area and weak points on embankments (if applicable)</li> <li>8. Creating a Control Room at the respective level and assignment of duties to the staff.</li> <li>9. Pre-positioning of staff for site operation centers.</li> <li>10. Uninterrupted communication with the DEOC</li> <li>11. Arrangement of alternative communication/generator sets, etc</li> <li>12. Formation of Block/ GP/ village level disaster committees and task forces</li> <li>13. Arrangement of boats on hire available locally.</li> <li>14. Deployment of Boat in the most vulnerable areas.</li> <li>15. Organizing awareness camps at GP/ village levels</li> </ol> <p>☀ Dissemination of Warning:</p> <ol style="list-style-type: none"> <li>16. Crosschecking with the DEOC for the authenticity of</li> </ol>	<p>All the C.Os and Sr. BDOs / BDOs functionaries. Police/Fire personnel/RTO/ Village/GP level task force/trained volunteers Local NGOs/CBOs</p> <p>Line departments</p>	<p>Vehicles, Police personnel, Other staffs VHF, Telephone, HAM Rescue kits Mobile Vans, Boats(country&amp; power)</p>	<p>If possible prepare Contingency plan for all the Vulnerable GPs and Villages</p>

Phase	Activities	Other Officials To Be Involved	Resources/ Equipments To Be Procured From	Remarks
	<p>the warnings Arrangement or requisition of Jeeps/Trekkers/ Auto Rickshaw to disseminate received warning information's to the population of vulnerable / weak places Dissemination of warning/ coordination with District control room. 17. Warning the people about probable affected areas Mobilizing the people to leave for identified shelters with their domestic animals and personnel belongings.</p>			
<p>During Disasters</p>	<p>☀️ Rescue and Evacuation: 1. Deployment of Police/Fire Brigade for search and rescue. 2. Alert the Specialized Search &amp; Rescue Team 3. Co-ordination with Civil Defence/NYK/NCC/NSS/Zilla Sainik Board for rescue operation. 4. Ensuring availability of rescue materials. 5. Guiding the evacuees in the identified shelter places and arranging all common needs for them. 6. Provision of rescue kits. 7. Clearance of roads and water logging for restoring communication to affected GPs/Villages. 8. Assisting the District Team in every possible ways 9. Coordinating with the NGOs/CBOs for rescue work 10. Mobilizing the local youth to help the rescue team 11. Assisting the NDRF, SDRF etc. ☀️ Distribution of Relief: 12. Keeping the record of everything at the shelters 13. Arrangement of free kitchen in the shelter camps/ worst affected areas. 14. Deploying staff for proper distribution of relief materials in coordination with GP &amp; Village level Disaster Mgmt Committee</p>	<p>-do-</p>	<p>-do-</p> <p>Food stocks and other indispensable items</p>	<p>Things have be done on war footing and effectively</p>

Phase	Activities	Other Officials To Be Involved	Resources/ Equipments To Be Procured From	Remarks
	15. Arrangement of communication system in the worst cut off areas. 16. Ensuring supply of safe drinking water & health facilities in the affected areas/shelter camps. 17. Coordination with NGOs/Other voluntary organizations			
Post-Disaster	✨ Restoration and Reconstruction: 1. Collection of damage statistics like ICDS/school buildings etc. 2. Ensuring just distribution of ex-gratia and other financial assistance 3. Provision of temporary income generation activities for the worst affected people 4. Supervision of Relief operation and restoration work in the affected areas. 5. Restoring the transportation and educational institutions on high priority 6. Helping the local economic activities to come back to normalcy 7. Keeping liaison with District administration and other line departments. 8. Ensuring coordination with the G.P and Village committee. 9. Co-ordination with NGOs/Civil society organization etc.	-do-	-do-	Careful assessment to be done for facilitating the reconstruction and restoration works

#### 5.4 Roles and Responsibilities of the Project Officer, ASDMA posted in the District:

Phase	Activities	Other Officials To Be Involved	Resources	Remarks
Pre-Disaster	1. Making sure that everything stays at place in the control room. Seeing to it that the DDMP and the contingency plan for flood reach all the line departments. 2. Receiving the Warning from SRC and crosschecking them with IMD and in websites for authenticity	C.Os, BDOs, NGOs/CBOs, DEOC Staff,	VHF from the Police/. HAM RADIO Mike-set /Batteries/Generators available at the district office/ from the Private	

	<p>Disseminating the warning to the Circle &amp; block offices and asking them to disseminate further to reach each and every household.</p> <p>3. Deploying the staff of the control room for round the clock alertness.</p> <p>4. Making sure that all the shelters receive enough water and food stocks in advance</p> <p>5. Establishing contact with all the line depts. Over phone, email, wireless, sat phone and VHF</p> <p>6. Procuring all the required resources from all the possible sources.</p> <p>7. Regularly updating the information received from the blocks</p>		parties on requisition	
During-Disaster	<p>8. Coordinating with all the line departments for rescue and evacuation.</p> <p>9. Checking the stocks with the DEOC and asking for more if needed.</p> <p>10. Distributing the relief materials to all the places.</p> <p>11. Checking every bit of receipt and dispatch of relief items</p> <p>12. Establishing round the clock contact with all the depts., C.Os and Sr.BDOs / BDOs and with the shelters.</p>	D.C, ADM/CEO-DDMA, SP, Jt DHS, DVO, C.Os and Sr.BDOs / BDOs, NGOs/CBOs, DEOC Staff, NGOs, Community level Volunteers	Relief Items, Food Stocks, Rescue and evacuation equipments, Vehicles,	
Post-Disaster	Receiving the list of beneficiaries from different BDMC and GPDMCCross checking the list of beneficiaries to avoid fabrication	C.Os Sr.BDOs / BDOs, Beneficiaries		

### 5.5 Roles and Responsibilities of the Joint Director Health Services:

Phase	Activities	Other Officials To Be Involved	Resources/ Equipments To Be Procured From	Remarks
Pre-Disaster	<p>☀ Preparedness and Warning Dissemination:</p> <p>1. Stock piling of Life saving drugs/ORS packets/Halogen tablets on receipt of warning from the D.C</p> <p>2. Transmission of messages to all PHCs to stock medicines and keep the medical staff ready for</p>	<p>Jt. DHS</p> <p>Medical Officers of PHCs/CHCs.</p> <p>ICDS</p> <p>NGOs/CBOs</p> <p>Private Practitioners in the locality/First Aid Trainers</p>	<p>Medicines,</p> <p>Required medical equipments,</p> <p>First Aid kits</p> <p>Ambulances,</p> <p>Public Address systems,</p> <p>Mobile vans,</p> <p>Tents</p>	

	<p>Disease surveillance and transmission of reports to the higher authorities on a daily basis.</p> <p>3. Vaccination.</p> <p>4. To obtain and transmit information on natural calamities from the DEOC</p> <p>5. Advance immunization programme in the flood/Cyclone prone areas.</p> <p>6. Ensuring distribution of areas of operation among the mobile team.</p> <p>7. Pre-distribution of basic medicines to the people who are likely to be affected</p> <p>8. Shifting the patients who are in critical situation to the District Hospital</p> <p>9. Awareness messages to stop the outbreak of epidemics</p> <p>10. Conducting mock drills</p>	<p>Involve First Aid Task Force at Block, GP &amp; Village level formed under DRM programme</p>		
During Disaster	<p>✳️ Rescue and Evacuation</p> <p>1. Coordination with Specialized Search &amp; Rescue Team</p> <p>2. Constitute mobile teams and visit the worst affected areas.</p> <p>Dis-infection of Drinking water sources.</p> <p>3. Opening of site operation camps</p> <p>4. Regular Health Check-up at Shelter camp/Cyclone shelter &amp; affected areas</p> <p>5. Assigning responsibilities to the CM&amp; HOs/ SDM&amp; HOs for close monitoring of Health camps.</p>	<p>-do-</p> <p>Rescue team, Volunteers at the Shelters, Police, Fire officers, Trained volunteers</p>	-do-	
Post-Disaster	<p>✳️ Restoration and Rehabilitation</p> <p>1. Organization of Health Camps,</p> <p>2. Deploying mobile fully equipped and manned Medical vans</p> <p>3. Close monitoring of Health camps.</p> <p>4. Ensuring adequate quantities of medicine/disinfectants</p> <p>5. Making sure that there is no outbreak of water borne diseases/Malnutrition</p> <p>6. Co-ordination with the District Rehabilitation</p>	-do-	-do-	

	Committees, other line departments, NGOs /ICDS projects, village committee, PHE, etc.			
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### 5.6 Roles and Responsibilities of the Commissioner of Police:

Phase	Activities	Other Officials To Be Involved	Resources/ Equipments To Be Procured From	Remarks
Pre-Disaster	<p>☀ Preparedness and Dissemination of Warning</p> <ol style="list-style-type: none"> <li>1. Reception of Warning from the DEOC or other Source</li> <li>2. Communication establishment with District and Block Control rooms and departmental offices within the division.</li> <li>3. Alerting the Police force for deployment at the time of calamity</li> <li>4. To issue directive to police field functionaries to co-operate with Revenue Personnel in management of Relief operation &amp; Patrolling.</li> </ol>	Home Guard/Para military force/ APR forces	VHF, Other improved telecommunication systems SP signal.	
During Disaster	<p>☀ Rescue and Evacuation:</p> <ol style="list-style-type: none"> <li>1. Involvement of Specialized Search &amp; Rescue Team.</li> <li>2. Clearance of roads and other means of transportation</li> <li>3. Traffic management and patrolling of all highways and other access roads to disaster sites</li> <li>4. Making sure that discipline is maintained</li> <li>5. Assistance to district authorities for taking necessary action against hoarders, black marketers and those found manipulating relief material</li> <li>6. Co-ordination with fire personnel.</li> </ol> <p>Provision of security in transit camps/feeding centers/relief camps/cattle camps/cooperative food stores and distribution centers</p> <p>Safe guarding of belongings of evacuees</p> <p>☀ Distribution of Relief:</p> <ol style="list-style-type: none"> <li>7. Maintaining laws and order at the Shelters and the relief camps</li> <li>8. Coordination with military service personnel in the area</li> <li>9. Deploying officers/ police</li> </ol>	-do-  NCC, NSS Trained Volunteers Local Youth NGOs/CBOs	-do-  Rescue kits, Vehicles Equipments for clearance of roads and water logging Boats and other related stuffs	No Scope for Complacency

Phase	Activities	Other Officials To Be Involved	Resources/ Equipments To Be Procured From	Remarks
	<p>personnel to record death cases</p> <p>10. Assisting the community in organizing emergency transport</p> <p>11. Assisting the District officials/NGOs in distribution of relief materials.</p> <p>12. Providing escorts in transit of relief materials to the relief camps/affected areas.</p> <p>☀️ Patrolling</p> <p>13. N.H, Bridges, Public Institutions, Godowns etc.</p>			
Post-Disaster	<p>☀️ Short term Measures:</p> <p>1. FIR of the disasters, the damages and the death cases.</p> <p>2. Assisting in collection of damage statistics of private properties.</p> <p>3. Maintaining law and order</p> <p>☀️ Long Term Measures:</p> <p>4. Close Coordination with district administration and local/external NGOs in reconstruction and rehabilitation process</p> <p>5. Assisting the District authority whenever the need arises</p> <p>Periodical visits to the affected areas to ensure law and order</p>		Vehicle communication systems.	

### 5.7 Roles and Responsibilities of the District Veterinary Officer:

Phase	Activities	Other Officials To Be Involved	Resources/ Equipments To Be Procured From	Remarks
Pre-Disaster	<p>1. Adequate skilled manpower</p> <p>2. First aid facility</p> <p>3. Identification of safer place (like open space/ high land)</p> <p>4. Network of communication with skilled personnel</p> <p>5. Immunization against any outbreak of prevalent diseases.</p> <p>6. Train Crass Disposal Team at grass root levels</p>	<p>C.Os and Sr.BDOs / BDOs, NGOs/CBOs, DEOC Staff, NGOs, Community level Volunteers, DRM Committee</p>	<p>Fodder, Vaccination, Medicine, Vehicles, Tents, Mobile Van</p>	
During Disasters	<p>Warning</p> <p>1. He should communicate the warning of flood received by him immediately to the sub-ordinate officers</p> <p>2. Deployment of skilled personnel in the affected areas and work with local Disaster Management Team.</p>	-do-	-do-	

Phase	Activities	Other Officials To Be Involved	Resources/ Equipments To Be Procured From	Remarks
	Rescue and rehabilitation of affected animals to safer places 3. Arrangement of feed and fodder. Rendering first aid where necessary			
Post-Disaster	1. To arrange Veterinary Health Care camps in the affected areas. 2. Collection of damage statistics and inform D.C 3. Crosschecking the list of beneficiaries to avoid fabrication (While assessment include GMC members)	-do-	-do-	

### 5.8 Responsibilities of other Line Departments:

NAME OF THE DEPARTMENT	DUTIES TO BE PERFORMED IN NORMAL TIME.	DUTIES TO BE PERFORMED AFTER RECEIVING 1 <sup>ST</sup> WARNING	DUTIES TO BE PERFORMED AFTER THE DISASTER.
Water Resources Department	<ul style="list-style-type: none"> <li>The branches to embankments, to be checked and repaired.</li> <li>The Embankments should be strengthened.</li> <li>Clearing, widening digging of the natural channels like Bharalu, Mora-bharalu, Bahini and Basistha.</li> <li>The obstruction in the natural channels, if any should be got removed immediately for enabling free flow of water.</li> <li>The sluice gates of the channels and water bodies are to be checked and satisfied that they are in good condition.</li> <li>The instruments and materials etc. required attending to immediate repairs breach of embankment etc. should be stacked at places where they may</li> </ul>	<ul style="list-style-type: none"> <li>1<sup>st</sup> warning should be communicated to all the subordinate staff and employees.</li> <li>They should be alerted to check whether the Channels and drains are in proper condition to allow free flow of water.</li> <li>Field staff should be placed in the field and be ready for response.</li> <li>As soon as the river is within one meter of the danger level start vigorous patrolling the reach of embankment /dykes and ensure any leakage, seepage etc. are promptly attended to.</li> <li>On occurrence of flood the department will examine the physical conditions of the embankments/dykes and ensure any leakage, seepage etc</li> </ul>	<ul style="list-style-type: none"> <li>Damages due to Flood to embankments roads etc. should be assessed and reported to C.Os &amp; SR. BDOs/ BDOs, EO concerned immediately.</li> <li>Digging of link drains and other drains to drain outstanding flood water.</li> <li>Construction and repairs to ring and other abide protection bunds</li> <li>Repair to and deepening of existing drain to eliminate possibility of future floods.</li> </ul>

NAME OF THE DEPARTMENT	DUTIES TO BE PERFORMED IN NORMAL TIME.	DUTIES TO BE PERFORMED AFTER RECEIVING 1 <sup>ST</sup> WARNING	DUTIES TO BE PERFORMED AFTER THE DISASTER.
	<p>be required locating such places early.</p> <ul style="list-style-type: none"> <li>The Channels and drains should be free from obstruction and they should be made available for free discharge of drain water.</li> <li>Installation of pump sets in strategic location and deployment of staff for operation of the pumps for dewatering of logged water.</li> </ul>	<p>are promptly attended to.</p> <ul style="list-style-type: none"> <li>Assist DC in flood operation by sparing personnel equipment, vehicle, pump sets etc available.</li> </ul>	
<p>Guwahati Municipal Corporation</p>	<ul style="list-style-type: none"> <li>Ensure clearing and Desiltation of secondary and tertiary drains</li> <li>Checking and repairing of pump sets, and other equipments and keep them ready for use during flood.</li> <li>Keep the manpower, officers ready to tackle any eventuality</li> <li>Keep stock of disinfectants etc. for spraying in affected areas.</li> <li>Assess and prepare list of staffs of different categories for duties and make necessary arrangement.</li> </ul>	<ul style="list-style-type: none"> <li>During flood installation of pump sets in the affected areas for dewatering.</li> <li>Arrangement for alternative transportation for affected people.</li> <li>Help administration in relief operation.</li> <li>Supply of drinking water to the affected people.</li> </ul>	<ul style="list-style-type: none"> <li>Assessment of damage of roads drains due to flood.</li> <li>Clearing of secondary and tertiary drains.</li> <li>Clearing of garbage silt etc form drains and roads.</li> <li>Spraying of disinfectants in the affected areas.</li> <li>Providing purified drinking water etc.</li> <li>Restoration and repair of roads and drains damaged due to flood.</li> </ul>
<p>CEO of A.S.E.B</p>	<ul style="list-style-type: none"> <li>He should see that the field staff checks the electrical line and replace old materials used in the power supply.</li> <li>He should see that all had wiring in service connections are rectified.</li> <li>He should see that the report regarding flood</li> </ul>	<ul style="list-style-type: none"> <li>On receipt of the 1<sup>st</sup> warning it should be communicated to all the subordinate staff.</li> <li>It should see that all the vehicles under his control be kept in perfect order.</li> <li>Alert the entire staff to return their Hqtrs. And get in touch with immediate</li> </ul>	<ul style="list-style-type: none"> <li>Restoration of power lines on priority to: - 1.Hospital, Water supply 2.Control Room 3.Railway station and 4.To other office on priority as per list appended.</li> <li>Live wires on ground should be removed</li> </ul>

NAME OF THE DEPARTMENT	DUTIES TO BE PERFORMED IN NORMAL TIME.	DUTIES TO BE PERFORMED AFTER RECEIVING 1 <sup>ST</sup> WARNING	DUTIES TO BE PERFORMED AFTER THE DISASTER.
	<p>warning should be reported to other subordinate offices.</p> <ul style="list-style-type: none"> <li>• He should see that trees, branches etc. fall on electrical lines are out and removed.</li> <li>• The field staff should see that electrical supply in the places where flood may occur should be cut off.</li> <li>• The field staff should be in touch with DDMA and inform the situation at frequent intervals.</li> <li>• To open 24X7 Control Room.</li> <li>• Inform to Control Room D.C office in case of failure of powers.</li> </ul>	<p>requirement.</p> <ul style="list-style-type: none"> <li>• They should give wide publicity that houses consumers should arrange lanterns and battery light for use in case of power is out off.</li> </ul>	<p>promptly.</p> <ul style="list-style-type: none"> <li>• Damaged or felled electrical poles should be immediately replaced and obstructions on roads should be got removed.</li> </ul>
SDRF/F&ES	<ul style="list-style-type: none"> <li>• The SDRF personnel should be kept in readiness along with equipments, boats, for rescue operations.</li> <li>• Should be in close coordination with DDMA.</li> <li>• Keep in touch with each of the other fire stations in the district.</li> </ul>	<ul style="list-style-type: none"> <li>• The 1<sup>st</sup> warning should be immediately communicated to fire stations.</li> <li>• The staff should be called on for duty.</li> <li>• Full complement of the staff should be available for the vehicles should be obtained and kept in reserve.</li> <li>• Move to the affected areas for assisting in rescue operations and evacuation of transfer of affected people to relief camps or safer places.</li> <li>• Deployments of rescue teams with required equipments and boats etc. for rescue operation.</li> </ul>	<ul style="list-style-type: none"> <li>• Removal of collapsed houses, walls etc. should be attended</li> <li>• Persons involved in house collapsed should be promptly reserved.</li> <li>• Report on the relief activities, under taken should be promptly reported.</li> </ul>
PWD (R)	<ul style="list-style-type: none"> <li>• Ensure that the road</li> </ul>	<ul style="list-style-type: none"> <li>• On receipt of flood</li> </ul>	<ul style="list-style-type: none"> <li>• Restore tools and</li> </ul>

NAME OF THE DEPARTMENT	DUTIES TO BE PERFORMED IN NORMAL TIME.	DUTIES TO BE PERFORMED AFTER RECEIVING 1 <sup>ST</sup> WARNING	DUTIES TO BE PERFORMED AFTER THE DISASTER.
Department	<p>side materials are stacked in proper places so that they are not washed away.</p> <ul style="list-style-type: none"> <li>• The passage of all cross drains (bridges and culverts) is clear, free from obstruction to allow easy flow of flood water.</li> <li>• Repairing of damaged culverts and bridges wherever necessary.</li> <li>• Desiltation and cleaning of the PWD Drains</li> <li>• Ensure that equipments, vehicles like bull dozer, trucks road rollers and keep ready for use.</li> <li>• Arrange reserve stock of tools and plants and other stores at scales prescribed by the Chief Engineer,</li> <li>• Material for constructing temporary bridges and camps for PWD workers are available</li> <li>• Assess and prepare list of staffs of different categories for duties and make necessary arrangement</li> </ul>	<p>warning the Executive Engineer will</p> <ul style="list-style-type: none"> <li>• Keep constant and continuous contacts with the Deputy Commissioner/circle officers.</li> <li>• On occurrence of flood, immediately visit the flood affected areas.</li> <li>• Assess requirement and deploy staff for keeping round the clock vigil of the roads, bridges etc.</li> <li>• Report of the road submergence to the Deputy Commissioner, immediately after the occurrence indicating concisely the location and extent of submergence.</li> <li>• Render technical assistance as may be required by the D.C. in constructing temporary huts in relief camps and in other test relief works.</li> </ul>	<p>plants.</p> <ul style="list-style-type: none"> <li>• Repair/replace damage tools and plants.</li> <li>• Take steps for repairs to damaged roads, culverts, bridges and buildings and other structures borne in the books of PWD.</li> <li>• Prepare plan and estimates for immediate restoration of damaged infrastructures and place it before DDMA for forwarding it to government.</li> </ul>
Executive Engineer, PHE	<ul style="list-style-type: none"> <li>• Assess measures likely to be required for safe water supply in these areas.</li> <li>• Prepare a list of personnel of different categories available in nearest PHE division required in each area during heavy flood.</li> <li>• Ensure adequate stock of equipments and materials for sinking</li> </ul>	<ul style="list-style-type: none"> <li>• On receipt of flood warning, he will alert subordinate officers and staffs for flood.</li> <li>• Check vehicles equipment, stores etc. and draw up tentative programme of action.</li> <li>• On occurrence of flood: keep close touch with DC.</li> <li>• Visit flood affected areas immediately and</li> </ul>	<ul style="list-style-type: none"> <li>• Restore tools and equipments etc.</li> <li>• Repair/restore damaged tools and equipments.</li> <li>• Prepare plan and estimates for immediate restoration of water supply pipelines and infrastructure.</li> </ul>

NAME OF THE DEPARTMENT	DUTIES TO BE PERFORMED IN NORMAL TIME.	DUTIES TO BE PERFORMED AFTER RECEIVING 1 <sup>ST</sup> WARNING	DUTIES TO BE PERFORMED AFTER THE DISASTER.
	<p>tube wells, ring wells, pits/sanitary latrines etc. in the relief camps and other places in the flood affected areas.</p> <ul style="list-style-type: none"> <li>• Prepositioning of the water purifier mounted vehicles used for providing packaged drinking water in vulnerable locations in the state.</li> </ul>	<p>start measures for water supply and pit/sanitary latrines.</p> <ul style="list-style-type: none"> <li>• Assess extent of water supply measures required and deploy necessary staff.</li> <li>• Constantly visit the flood affected areas and ensure adequate safe water supply measures &amp; sanitation in the relief camps.</li> </ul>	
Deputy Director, F& ES	<ul style="list-style-type: none"> <li>• Arrange for procurement of controlled commodities like rice and maintain a reserve stock of the required quantities of these items in specified places with the govt. agencies to be released during flood on a requisition from DC.</li> <li>• Hold discussion with representatives of Chambers of Commerce, local traders and cooperatives and ensure adequate stock of non controlled essential commodities like edible oil, salt etc. so that these can be made available at reasonable prices to DC for relief works.</li> <li>• Intimate DC the names of the agencies and the quantity of reserve stock available with each agency.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure adequate supply position of essential commodities, particularly the controlled commodities not only for affected areas but also in the other areas in the district.</li> <li>• Take steps on priority basis for arranging additional supply from within or outside the district.</li> <li>• Deploy staff for relief in the affected areas.</li> </ul>	<ul style="list-style-type: none"> <li>• Obtain the particulars from govt. agencies regarding the quantity of each of the commodities released from the reserved or other stock for relief and submit a complete return within one month from the date of expiry of the emergency to the DC and to the director of supply.</li> </ul>

### 5.9 Response and evacuation of disabled

Persons with Disability are most vulnerable to a disaster. They required immediate response after a disaster. The District Administration shall ensure that persons with disabilities

shall have equal protection and safety in situations of risk, armed conflict, humanitarian emergencies and natural disaster. Immediately after a disaster the following actions are to be taken for disability-related responses-

- Evacuate PWDs to safe shelters with care.
- Identify/list persons with existing disabilities in temporary shelters and camps.
- Respond to the specific health care needs of persons with existing disabilities, such as insulin for diabetics, soft mattresses for people with spinal cord injuries and spectacles for people with low vision.
- Identify people with injuries and providing appropriate trauma care to save lives and minimize future functional impairment and disability.
- Implement other curative and therapeutic interventions that can prevent disability such as prevention of pressure sores and possible deformities.
- Transfer people with severe injuries and/or newly acquired disabilities to referral centers for medical rehabilitations. In settings where such centers do not exist, efforts should be made to ensure that such persons are treated by specialists in existing facilities.
- Establish a multi-disciplinary task force to prepare a long-term rehabilitation program, taking into consideration the resources available and economic conditions of the district/state.

#### **5.10 Mechanism for checking and certification of Logistics, Equipments and Stores:**

The Logistic Section Chief (LSC) is responsible for checking and certification of logistics, equipments and stores for all logistic arrangements.

#### **5.11 Operational check-up of Warning Systems & DEOC:**

DEOC becomes a nodal point for overall coordination of planning and response. Its main duty is to ensure that the EOC facility has required communication (connecting all stakeholders vertically and horizontally), Decision Support System, Alert and Warning System in working conditions.

Operational check-up of DEOC is done twice a year. Equipments especially communication equipments are checked and tested regularly.

#### **5.12 Community Preparedness:**

Taking into account the negative impact of the natural disasters in the district and as Community is the first responder to any disaster and the first to be affected. Defining community is the first step towards community preparedness and stressed that any strategy must focus on the community and its problems for effective implementation of the programme. Community is one of the most important stakeholders in DM. Therefore, effective participation of the community which includes all sections of a society is emphasized to capacitate the community and increase their preparedness level so that loss of life & property can be reduced. Community is one of the most important stakeholders and also the first responders to any disaster, hence, community preparedness plays a very important role in –

**5.12.1 Community Warning System:** IMD is responsible for warning of thunderstorm, cyclone and earthquake and the DDMA/ DEOC will warn the public through the Information & Public

Relations Department to the BDOs for further information to all the Village Early Warning Teams. After receipt of warning, the teams shall communicate the message to the concerning people of the areas by sound system or any locally available resources. The DDMA/DEOC shall ensure fail safe mechanism for timely dissemination of forecasting and warning of impending disaster to the community

**5.12.2 Community Awareness, Education:** Awareness and education programmes on DM are conducted regularly under the supervision of DDMA & BDOs by involving the community at the village levels.

**5.12.3 Community's responsibility:** The Community should not only support the DDMA but owned the responsibility for effective DMat their level. Their responsibilities are –

- To promote community education and awareness
- Training and capacity building in Search & Rescue, First Aid and conducting Mock Drills
- Preparation of Community/VDMP through participatory approach along with formation of DM team
- Provide necessary resources and support for disaster risk reduction at community level
- Disseminate information to community to deal with any disaster situation and take appropriate actions to enhance community preparedness
- Take additional care for the most vulnerable sections like children, disabled, aged etc

### **5.13 Media Management/information dissemination**

Media plays a very important to check rumor and panic, hence, Media Management System and proper coordination with the DDMA is necessary. The main roles of Media are informative, suggestive and analytical. The DIPRO is responsible for Media Management.

## CHAPTER-VI

### CAPACITY BUILDING AND TRAINING MEASURES

The DDMA is implementing DRR, Capacity Building for Disaster Response to capacitate all the stake holders like Officials, Policy Makers, Engineers, Architects, Masons, Doctors, Nurses, Teachers, Police, Fire Personnel, Drivers, NGOs and volunteers.

Search & Rescue/First Aid training and Mock Drills are the priority of the DDMA which is imparting by Civil Defence.

Training conducted at the District, Circle, Block, GP and village levels to ensure that the awareness for disaster mitigation is built up among the communities. Mock drills are conducted in anticipation of disasters to enhance the skills of the task force.

#### 6.1 Training & Awareness

Task	Activity	Responsibility
Training & Awareness	<ul style="list-style-type: none"> <li>Sensitization to Representatives &amp; law/ policy makers</li> <li>Sensitization &amp; training to government officials of different departments</li> </ul>	Revenue & DM Department, SDMA, DDMA
	<ul style="list-style-type: none"> <li>Training to CD&amp;HGs personnel in various aspect of DM including Search and Rescue &amp; First Aid</li> </ul>	Revenue & DM Department, SDMA, DDMA, CD
	<ul style="list-style-type: none"> <li>Training to engineers, architects, structural engineers, builders and masons in various aspect of DM</li> </ul>	DDMA, PWD and all relevant departments
	<ul style="list-style-type: none"> <li>Training of doctors &amp; paramedics on Medical preparedness &amp; Mass Casualty Management</li> </ul>	DDMA, Health Department
	<ul style="list-style-type: none"> <li>Training to educational institutions, teachers etc on College/School Safety, Search &amp; Rescue, First Aid</li> </ul>	DDMA, Education Department, CD
	<ul style="list-style-type: none"> <li>Training to Police and Traffic personnel in various aspect of DM</li> </ul>	DDMA, Commissioner of Police
	<ul style="list-style-type: none"> <li>Training to Fire &amp; Emergency personnel in various aspect of DM</li> </ul>	DDMA, Commissioner of Police
	<ul style="list-style-type: none"> <li>Training to NCC, NSS, NYK &amp; volunteers in various aspect of DM</li> </ul>	DDMA
	<ul style="list-style-type: none"> <li>Training to NGOs/CBOs in various aspect of disaster management</li> </ul>	DDMA
	<ul style="list-style-type: none"> <li>Training to Media in various aspect of disaster management</li> </ul>	DDMA, DIPRO
	<ul style="list-style-type: none"> <li>Training to Teachers of PWDs</li> </ul>	DDMA & Social Welfare Department
<ul style="list-style-type: none"> <li>Training on Gender &amp; Disaster to all stakeholders</li> </ul>	DDMA	
IEC	<ul style="list-style-type: none"> <li>Advertisement, hoarding, booklets, leaflets, banners, demonstration, street play, rally, exhibition, audio-visual and documentary etc</li> </ul>	DDMA & all line departments

**6.2 Capacity Development Plan:**

Sl No.	Broad Area of Training	Training of which Hazard?	Training purpose	Who will be trained?	No. of stakeholder involving in the training	Fund source	Time of the year when the training will be provided (Month)
1	Institutional Capacity Building	Earthquake Flood, Landslide, Storm	Training & Awareness	Department Officials, Engineers, Architects, Masons, Doctors, Nurses, MRWs, CBRWs, Ashas, Aganwadi workers, NGOs and volunteers (NYK, NCC, NSS), Teachers, Schools and Colleges Students	One representative of all the line departments	As per fund allocated	October to February
2	Community Capacity Building						
3	Knowledge Management, Networking and Sharing						
4	Training of Trainers						
5	Skill up gradation and follow up training programmers						
6	Inventory of trained professionals						

## CHAPTER-VII

### RESPONSE AND RELIEF MEASURES

Response is the set of activities implemented after the impact of a disaster in order to assess the needs, reduce the suffering, limit the spread and the consequences of the disaster and open the way to rehabilitation. Response planning provides rapid and disciplined incident assessment to ensure a quickly scalable, adaptable and flexible response. It also defines the roles and responsibilities for incident response across all levels of the government and private sectors.

#### 7.1 Incident Response Team (IRT):

Deputy Commissioner is designated as Incident Commander in the district IRT. In the absence of the Deputy Commissioner, ADM / ADC will officiate and exercise all the powers and responsibilities of the District Disaster Manager. On the receipt of warning, all community preparedness measures and counter-disaster measures would come into operation.

Sl. No	Notified Profile in IRS	Designation
1	<b>Responsible Officer:</b>	Deputy Commissioner & Chairman DDMA, Kamrup (M)
2.	<b>Incident Commander:</b>	Addl. Deputy Commissioner & CEO, DDMA Kamrup(M)
3.	<b>Safety Officer</b>	Addl. Deputy Commissioner, Magistracy, Kamrup (M)
4.	<b>Liaison Officer</b>	Project Officer, DDMA, Kamrup (M)
5.	<b>Information &amp; media Officer</b>	DIPRO, Kamrup (M)
6.	<b>Operation Section Chief</b>	Commissioner of Police, Guwahati City.
a.	<b>Staging area Manager</b>	District Transport Officer (Enfo.) Kamrup (M)
b.	<b>Rescue &amp; response Branch:</b>	
i.	<b>Natural Disaster</b>	Dy. Director, F&ES, Kamrup (M)
ii.	<b>Epidemic &amp; Health Hazard</b>	Jt. Director, Health Services, Kamrup (M)
iii.	<b>Manmade Disaster</b>	Commissioner of Police, Guwahati City.
7.	<b>Planning Section Chief</b>	District Development Commissioner, Kamrup (M)
a.	<b>Situation Unit:</b>	Project Officer, DDMA, Kamrup (M)
b.	<b>Resource Unit:</b>	
c.	<b>Documentation Unit</b>	All Field Officers, DDMA, Kamrup (M) 1. Guwahati Revenue Circle 2. Dispur Revenue Circle 3. Sonapur Revenue Circle
d.	<b>Demobilization unit</b>	

		4. Chandrapur Revenue Circle 5. Azara Revenue Circle
<b>8.</b>	<b>Logistic Section Unit:</b>	Addl. Deputy Commissioner, Nazarat, Kamrup (M)
a.	<b>Service Branch</b>	Assistant Commissioner, Kamrup (M)
i.	<b>Communication Unit</b>	SP Communication
ii.	<b>Medical Unit</b>	Addl. Deputy Commissioner, Health, Kamrup (M)
		J. Director, Health Services, Kamrup (M)
iii.	<b>Food Unit</b>	Addl. Deputy Commissioner, Nazarat, Kamrup (M)
		Deputy Director, Food & Civil Supplies,
b.	<b>Support Branch</b>	Assistant Commissioner, Kamrup (M).
i.	<b>Resource provisioning Unit</b>	Executive Engineer, East TR Division
		Executive Engineer, Dispur TR Division
		Executive Engineer, West TR Division
ii.	<b>Facilities Unit</b>	Executive Engineer, PWD (B) Div.-I
		Executive Engineer, PWD (B) Div-II
		Executive Engineer, PWD (B) PCC Div
iii.	<b>Ground Support</b>	Executive Engineer, PHE Div-I
		Executive Engineer, PHE Div-II
c.	<b>Finance Branch</b>	Addl. Deputy Commissioner, Nazarat, Kamrup (M)
i.	<b>Time unit</b>	Nazir, Nazarat Branch, Kamrup (M)
ii.	<b>Compensation &amp; Claim unit</b>	Addl. Deputy Commissioner & CEO, DDMA, Kamrup (M)
iii.	<b>Procurement Unit</b>	Finance & Accounts Officer (FAO), o/o Deputy Commissioner, Kamrup (M).
iv.	<b>Cost Unit</b>	Treasury Officer, Kamrup (M) Treasury

## 7.2 Incident Response System (IRS) and its activation:

Response at District Level	
On receipt of flood warning, DDMA will pass the information for taking necessary measures to:	
<b>1.</b> <ul style="list-style-type: none"> <li>• Concerned Circle Officers</li> <li>• Superintendent of Police</li> <li>• Executive Engineer, WR department</li> <li>• Executive Engineer, PWD (R)</li> <li>• Station Officer, F&amp;ES &amp; IC of SDRF/NDRF</li> </ul>	Deputy Commissioner will direct ADC & CEO DDMA, Kamrup(M)

	<p>stationed in the district.</p> <ul style="list-style-type: none"> <li>• Commissioner GMC, for immediate necessary response</li> <li>• Deputy Director, F&amp;C supplies</li> <li>• Jt. Director, Health Services</li> <li>• DVO to take necessary measures so that if necessary assistance can be provided in short notice to the affected areas.</li> <li>• DIPRO, if requires to give public announcement for evacuating people from vulnerable areas.</li> </ul>	
2.	<ul style="list-style-type: none"> <li>• SP will instruct Senior Station officer, F&amp;ES /SDRF to assist the Circle Officer in Rescue, Evacuation &amp; relocation process.</li> </ul>	Superintendent of Police (SP)
3.	<ul style="list-style-type: none"> <li>• Sr. Station Officer, F&amp;ES will mobilize teams of SDRF &amp; Boats available in their custody and coordinate with DDMA/ Circle officer for response.</li> </ul>	Sr. Station Officer, F&ES.
4.	<ul style="list-style-type: none"> <li>• Executive Engineer will mobilize men and materials to strengthen embankments.</li> <li>• For urban flood in Guwahati the executive engineer will mobilize officials and men to the pumping stations for immediate operation for dewatering of water.</li> <li>• The designated officials will strat the pumping operation immediately.</li> <li>• Keep constant vigil on water levels in Brahmaputra, Bharalu, Mora Bharalu, Bahini, Basistha river &amp; take necessary measures like installing more pump sets wherever necessary, clearing of blockage if any etc. to keep the water level down so that water do not overtop and inundates the locality.</li> <li>• Take immediate necessary measures to avert any breaches in embankments.</li> </ul>	Executive Engineer, WR Department (Civil & Mechanical division)
5.	<ul style="list-style-type: none"> <li>• Take adequate measures to ensure that the road communication is not disrupted; repair any breaches of roads for evacuation and supply of relief to the affected people.</li> </ul>	Executive Engineer, PWD (Roads)
6.	<ul style="list-style-type: none"> <li>• On receipt of warning Commissioner, GMC will arrange men and material to be deputed in the affected areas.</li> <li>• Installation of pump sets and operators wherever required.</li> <li>• Keep constant vigil on the flood affected areas &amp; take temporary necessary measures to clear</li> </ul>	Commissioner, GMC

	blocked secondary and tertiary drains in those areas.	
7.	<ul style="list-style-type: none"> <li>Supply of drinking water to the affected people, arrangement of alternative communication for transportation and evacuation.</li> </ul>	Executive Engineer, PHED
8.	<ul style="list-style-type: none"> <li>Jt. Director, Health services on receipt of information will initiate to mobilize medical response team, ambulances &amp; alert all govt. hospitals in the area likely to be affected.</li> <li>He will also direct SDMO or I/C of the PHC of the concerned area to form a team of doctors equipped with necessary medical equipments and move to the affected places or relief camp/centre as required by the Circle Officer.</li> </ul>	Jt. Director, Health Services.
9.	<ul style="list-style-type: none"> <li>Take periodic report of the situation &amp; instruct Circle Officers, Jt. Director, Health Services, Executive Engineer PWD (R), PHE, WR, GMC, Irrigation, Police, F&amp;ES to take necessary measures as required for dealing with the situation.</li> </ul>	Deputy Commissioner, Kamrup(M)
10.	<ul style="list-style-type: none"> <li>Deputy Commissioner will also inform state HQ about the prevailing situation &amp; action taken.</li> </ul>	Deputy Commissioner
11.	<ul style="list-style-type: none"> <li>On receipt of warning, mobilize the Lot Mondals, Gaon Burha, SDRF and other agencies &amp; resources available under Circle Officer's jurisdiction.</li> </ul>	Circle Officers of the concerned Rev. Circle
12.	<ul style="list-style-type: none"> <li>Go to the immediate location immediately &amp; inform the villagers on the probability of any flood event and ask them to take necessary precautionary measures.</li> </ul>	Lot Mondal & Gaon Burha
13.	<ul style="list-style-type: none"> <li>In case of probability of high intensity flood, evacuation of people from vulnerable areas to pre identified safe locations &amp; preposition of quick response team/SDRF/NDRF/Police force</li> </ul>	Circle Officers of the concerned Rev. Circle
14.	<ul style="list-style-type: none"> <li>Keep DC informed on hourly basis about the situation on the ground level and may request for additional resources of man material &amp; machines if required from DC.</li> </ul>	Circle Officers of the concerned Rev. Circle
15.	<ul style="list-style-type: none"> <li>Inform-Concerned BDOs, so that BDOs can</li> </ul>	Circle Officers of the

	inform PRI representatives for appropriate action. <ul style="list-style-type: none"> <li>Ward councilors and ward members for appropriate action.</li> </ul>	concerned Rev. Circle
16.	<ul style="list-style-type: none"> <li>Open relief camps, if required and give requisition for GR to DC</li> </ul>	Revenue Circle Officer
17.	<ul style="list-style-type: none"> <li>Arrangement for distribution of relief</li> </ul>	Revenue Circle Officer

As per the IRS guideline, the Incident Response team will be activated and the Response Plan for the first 72 hours is given below.

**(FIRST 72 HOURS)**

Sl. No.	TASK	RESPONSIBILITY
<b>Time Frame: 0-24 Hours</b>		
1.	Report the occurrence of earthquake with details regarding magnitude, epicenter and related details from agencies like IMD, NEIST and other sources. If large scale damages are likely to occur, SEOC to inform all concerned officers of IRT.	SEOC
2.	If it is a L2/L3 disaster, the State level Incident Response team (IRT) shall be activated immediately without any formal notice and the team to assemble at the ASDMA Office which will function as the SEOC. Simultaneously in the districts the District level IRT will be activated and shall meet at the Conference Room of the DC's office which will now function as the DEOC.	State level IRT/District level IRT
3.	IRT to be activated by a responsible officer. Scale of activation of IRT shall be decided by the RO/IC in SEOC.	Responsible Officer
4.	All Nodal Officers of the line departments will man the desks both at the SEOC and DEOC levels with their departmental response plans and resource inventories	All line departments
5.	Information from the affected sites shall be collected for briefing the IRT and chalking out strategy for response	Incident Commander/ Planning Section Chief
6.	In case of communication link failures, alternate communication linkages with the districts shall be established through satellite phones, HF/VHF sets, HAM Radios and VSATs.	Communication unit, ASDMA and Police communication
7.	Activate Operations Section of IRS for Emergency Response Operation	Incident Commander and Operation Section Chief
8.	Responding agencies shall mobilize their	All Responding Departments

	resources for responding to the event. They are to send their resources to the Staging Area which will be activated by the Staging Manager. Record of entry of the resources and their deployment shall be maintained.	and Staging Area Manager
9.	Mobilize SAR Teams and search & rescue equipment and machinery to affected areas	Operations Section Chief both at State and District level in consultation with Director F&ES(State) and Senior Station Fire Officer ( District), NDRF (if stationed nearby)
10.	Mobilize Medical First Response Teams to affected areas	State: Director, Health & Family Welfare, Superintendent Medical College District: Superintendent Medical College/ Civil Hospitals/Joint Director Health Services
11.	Set up field hospitals near the affected areas and arrange to shift injured persons to field Hospitals	Director, Health & family Welfare (State)/ Superintendent Medical College or Civil Hospitals/Joint Director Health Services (District)
12.	Health Institutions (Government and Private Hospitals) to be activated for receiving patients.	Director, Health & family Welfare (State)/ Superintendent Medical College or Civil Hospitals/Joint Director Health Services (District)
13.	Make suitable transportation arrangements for the mobilization of quick response teams to the affected areas	Transport Branch under Operation Section
14.	Provide security in the affected areas and maintain the law and order situation	Police
15.	Request for the services of NDRF and Armed forces, if required through designated representative	Incident Commander
16.	Assess the conditions of road, rail and air communication link for quick mobilization of Emergency Teams and resources to affected areas and take follow up actions	Planning Section Chief
17.	Information and Publicity to establish media management / information cell for public information, guidance and rumor control	Information Officer
18.	Mobilize relief materials i.e., tents, food materials, water, essential medicines, blankets and other items to the affected districts and	All concerned departments

	Revenue Circles	
19.	Arrange to shift evacuated persons to temporary shelters and ensure provision of food, water facilities, blankets and storage of relief materials	Revenue Circle Officer
20.	Arrange road, rail and air transport at State / District headquarters for dispatch of relief materials to the affected areas	Transport branch under Operations Section
21.	Establish relief coordination centers at the airport, railway station and other important places for the arrival of Search & Rescue and Medical Teams coming for humanitarian aid	Logistics Section
<b>Time Frame: 0-48 Hours</b>		
22.	Arrange information centre at shelter site for maintaining records of victims and to provide guidance to relatives, NGOs and others	Information Officer
23.	Arrange for complaints regarding missing persons and initiate search in shelters, hospitals and police records	Team under Information Officer
24.	Arrange for quick assessments of safe buildings for residents to enter	Assessment teams from PWD (B)/Engineering Colleges and others
25.	Arrange for receiving humanitarian aid teams	Logistics Section
26.	Arrange for disposal of dead bodies	Municipalities
<b>Time Frame: 0-72 Hours</b>		
27.	Arrange for disposal of unidentified and unclaimed dead bodies	Police/ Magistrates/ Municipalities
28.	Activate short and interim relief measures	Relief Branch

### 7.3 Triggering Mechanism for Deployment of IRT:

Some of the natural hazards have a well established early warning system. The District should have a functional 24x7 EOC. On receipt of information regarding the impending disaster, the EOC will inform the RO, who in turn will activate the required IRT and mobilize resources. The scale of their deployment will depend on the magnitude of the incident. At times the information about an incident may be received only on its occurrence without any warning. In such cases the local IRT (District, Sub-Division, Block) as the case may be, will respond and inform the higher authority and if required seek reinforcement and guidance. The measures decided to be taken for response will be jotted down by the Command Staff and later handed over to Planning Section.

#### 7.3.1 Incident Commander (IC):

The IC/Deputy Commissioner & Chairman, DDMA is the overall in-charge for the management of onsite response to any incident. He is appointed by the RO. He may have a deputy with him depending upon the magnitude and nature of the incident. For his assistance and management of the incident there are two sets of staff: a) Command Staff and b) General Staff. The command staff comprises IC, Information & Media Officer (IMO), Safety Officer (SO), and the

Liaison Officer (LO). The General Staff consists of the OS, PS and LS, each having a specific function in the overall response.

### **Roles and Responsibilities of IRS: Incident Commander**

Obtain information on:

- Situation status like number of people and the area affected etc.
- Availability and procurement of resources;
- Requirement of facilities like Incident Command Post, Staging Area, Incident Base, Camp, Relief Camp etc.,
- Availability and requirements of Communication system;
- Future weather behavior from IMD; and
- Any other information required for response from all available sources and analyzes the situation.
- Determine incident objectives and strategies based on the available information and resources;
- Establish immediate priorities, including search & rescue and relief distribution strategies,
- Assess requirements for maintenance of law and order, traffic etc. if any at the incident site, and make arrangements with help of the local police;
- Brief higher authorities about the situation as per IRS incident briefing and request for additional resources, if required;
- Extend support for implementation of AC and UC if considered necessary by the RO;
- Establish appropriate IRS organization with Sections, Branches, Divisions and/or Units based on the span of control and scale of the incident;
- Establish ICP at a suitable place. There will be one ICP even if the incident is multi-jurisdictional. Even a mobile van with complete communication equipment and appropriate personnel may be used as ICP. In case of total destruction of buildings, tents, or temporary shelters may be used. If appropriate or enough space is not available, other Sections can function from a different convenient location. But there should be proper and fail safe contact with the ICP in order to provide quick assistance;
- Ensure that the IAP is prepared;
- Ensure that team members are briefed on performance of various activities as per IAP;
- Approve and authorize the implementation of an IAP and ensure that IAP is regularly developed and updated as per debriefing of IRT members. It will be reviewed every 24 hours and circulated to all concerned;
- Ensure that planning meetings are held at regular intervals. The meetings will draw out an implementation strategy and IAP for effective incident response. The decision to hold this meeting is solely the responsibility of the IC. Apart from other members, ensure that PSC attend all briefing and debriefing meetings;
- Ensure that all Sections or Units are working as per IAP;
- Ensure that adequate safety measures for responders and affected communities are in place;
- Ensure proper coordination between all Sections of the IRT, agencies working in the response activities and make sure that all conflicts are resolved;
- Ensure that computerized and web based IT solutions are used for planning, resource mobilization and deployment of trained IRT members;
- Consider requirement of resources, equipment which are not available in the functional jurisdiction, discuss with PSC and LSC and inform RO regarding their procurement;
- Approve and ensure that the required additional resources are procured and issued to the concerned Sections, Branches and Units etc. and are properly utilized. On completion of assigned work, the resources will be returned immediately for utilization elsewhere or to

the department concerned;

- If required, establish contact with PRIs, ULBs, CBOs, NGOs etc. and seek their cooperation in achieving the objectives of IAP and enlist their support to act as local guides in assisting the external rescue and relief teams;
- Approve the deployment of volunteers and such other personnel and ensure that they follow the chain of command;
- Authorize release of information to the media;
- Ensure that the record of resources mobilized from outside is maintained so that prompt payment can be made for hired resource;
- Ensure that Incident Status Summary (ISS) is completed and forwarded to the RO;
- Recommend demobilization of the IRT, when appropriate;
- Review public complaints and recommend suitable grievance redressed measure to the RO;
- Ensure that the NGOs and other social organizations deployed in the affected sites are working properly and in an equitable manner;
- Ensure preparation of After Action Report (AAR) prior to the demobilization of the IRT on completion of the incident response.
- Perform any other duties that may be required for the management of the incident;
- Ensure that the record of various activities performed by members of Branches, Divisions, Units/Groups are collected and maintained in the Unit Log and
- Perform such other duties as assigned by RO.

### **7.3.2 Roles and Responsibilities of Safety Officer (SO):**

The SO's function is to develop and recommend measures for ensuring safety of personnel, and to assess and/or anticipate hazardous and unsafe situations. The SO is authorized to stop or prevent unsafe acts. SO may also give general advice on safety of affected communities.

The SO will:

- recommend measures for assuring safety of responders and to assess or anticipate hazardous and unsafe situations and review it regularly;
- ask for assistants and assign responsibilities as required;
- participate in planning meetings for preparation of IAP;
- review the IAP for safety implications;
- obtain details of accidents that have occurred within the incident area if required or as directed
- by IC and inform the appropriate authorities;
- review and approve the Site Safety Plan, as and when required;
- maintain record of various activities performed as per IRS Form-004; and
- perform such other duties as assigned by IC.

### **7.3.3 Roles and Responsibilities of Liaison Officer (LO):**

The LO is the focal point of contact for various line departments, representatives of NGOs and ULBs etc. participating in the response. The LO is the point of contact to assist the first responders, cooperating agencies and line departments. LO may be designated depending on the number of agencies involved and the spread of affected area.

The LO will:

- maintain a list of concerned line departments, agencies (CBOs, NGOs, etc.) and their representatives at various locations;

- carry out liaison with all concerned agencies including NDRF and Armed Forces and line departments of Government;
- monitor Operations to identify current or potential inter-agency problems;
- participate in planning meetings and provide information on response by participating agencies;
- ask for personnel support if required;
- keep the IC informed about arrivals of all the Government and Non Government agencies and their resources;
- help in organizing briefing sessions of all Governmental and Non Governmental agencies with the IC;
- maintain record of various activities performed as per IRS;
- and perform such other duties as assigned by IC.

#### **7.3.4 Roles and Responsibilities of Information and Media Officer (IMO):**

- Prepare and release information about the incident to the media agencies and others with the approval of IC;
- Jot down decisions taken and directions issued in case of sudden disasters when the IRT has not been fully activated and hand it over to the PS on its activation for incorporation in the IAP;
- Ask for additional personnel support depending on the scale of incident and workload;
- Monitor and review various media reports regarding the incident that may be useful for incident planning;
- Organize IAP meetings as directed by the IC or when required;
- Coordinate with IMD to collect weather information and disseminate it to all concerned;
- Maintain record of various activities performed as per IRS Form-004; and
- Perform such other duties as assigned by IC.

#### **7.3.5 Operations Section (OS):**

The OS deals with all types of field level tactical operations directly applicable to the management of an incident. This section is headed by an Operation Section Chief (OSC). In addition, a deputy may be appointed to assist the OSC for discharging his functions depending on the magnitude of the work load. OS is further sub-divided into Branches, Divisions and Groups which assist the OSC/IC in the execution of the field operations.

##### **7.3.5.1 Operations Section Chief (OSC):**

On activation of the OS, the OSC will assume command of all the field operations and will be fully responsible for directing all tactical actions to meet the incident objectives. The OSC will report to the IC. He will be responsible for activation, deployment and expansion of his Section as per IAP. As the operational activities increase and because of geographical reasons, the OSC will introduce or activate and expand the Branch into Divisions for proper span of control and effective supervision.

##### **Roles and Responsibilities of OSC:**

- coordinate with the activated Section Chiefs;
- manage all field operations for the accomplishment of the incident objectives;

- ensure the overall safety of personnel involved in the OS and the affected communities;
- deploy, activate, expand and supervise organizational elements (Branch, Division, Group, etc.) in his Section in consultation with IC and in accordance with the IAP;
- assign appropriate personnel, keeping their capabilities for the task in mind and maintain On Duty Officers list (IRS Form-007) for the day;
- request IC for providing a Deputy OSC for assistance, if required;
- brief the personnel in OS at the beginning of each operational period;
- ensure resolution of all conflicts, information sharing, coordination and cooperation between the various Branches of his Section;
- prepare Section Operational Plan in accordance with the IAP; if required;
- suggest expedient changes in the IAP to the IC;
- consult the IC from time-to-time and keep him fully briefed;
- determine the need for additional resources and place demands accordingly and ensure their arrival;
- ensure record of various activities performed (IRS Form-004) by members of Branches, Divisions, Units/Groups are collected and maintained in the Unit Log IRS Form-003;
- and perform such other duties as assigned by RO/IC.

#### **7.3.5.2 Roles and Responsibilities of Response Branch (RB):**

Response Branch is the main responder in the field dealing with the situation and performing various functions. Depending on the scale of disaster, the RBD may have to expand the number of Groups which in turn may require creation of Division. This structure is meant for close supervision by the OSC in the management of a large incident.

The RBD will:

- work under the supervision of the OSC and is responsible for the implementation of IAP as per the assigned role;
- attend planning meetings as required by the OSC;
- review Assignment Lists IRS Form-005 for Divisions or Groups under his Branch;
- assign specific tasks to Division and Groups-in-Charge;
- supervise Branch functions;
- resolve conflicts reported by subordinates;
- report to OSC regarding modifications required if any in the IAP, need for additional resources, availability of surplus resources and when hazardous situations or significant events occur, etc.
- provide Single Resource, Strike Team and Task Force support to various operational areas;
- ensure that all team leaders maintain record of various activities performed as per IRS Form-
- 004 relating to their field Operations and send to OSC; and
- perform any other duties assigned by the OSC;

#### **7.3.5.3 Roles and Responsibilities of Transportation Branch Director (TBD):**

The TB in the OS supports the response effort by transporting different resources, relief materials, personnel to the affected site and also transportation of victims if necessary. All functional Groups (Road and Air) of the TB are managed by the TBD. Since the air

transportation is to be coordinated at the State and District levels, the TBD also needs to function in close coordination with RO, IC and NO for Air Operations. He will collect the details of all related flights from the concerned NO and organize the ground support requirement. The TBD will also be responsible for the activation and expansion of various functional Groups as per the IAP.

The TBD will:

- activate and manage different Operations Groups like Road and Air;
- coordinate with the LS for required resources, and activate Groups of his Branch;
- coordinate with railways, road transport, waterways and airport authorities for support as required;
- ensure that Organizational Assignment List (Divisional / Group) IRS Form-005 is circulated among the Group-in-charge(s) and other responders of his Branch;
- provide ground support to the air operations and ensure appropriate security arrangements;
- provide Road transport support to the Rail and Water Operations Group as required;
- ensure safety of all personnel of his Branch involved in the Incident Response activities;
- ensure that all units moving in the area are familiarized with route with the help of roadmaps or local guides;
- report to the OSC and IC about progress of the TB;
- prepare transportation plan as per the IAP, if required;
- determine the need for additional resources, their proper and full use and place demand accordingly in advance;
- resolve problems and conflicts, if any;
- ensure the maintenance of the status of hired resources, their full utilisation and timely release;
- ensure that the record of various activities performed (IRS Form-004) by different operational groups (Road and Air) are collected and sent to the Section concerned; and
- perform any other duties assigned by the IC or OSC;

#### **7.3.6 Planning Section (PS):**

The PS deals with all matters relating to the planning of the incident response. It is headed by the Planning Section Chief (PSC). This section helps the IC in determining the objectives and strategies for the response. It works out the requirements for resources, their allocation and subsequent utilization. It maintains up-to-date information about the ongoing response and prepares IAP. For the closing phase of the Operations, this Section also prepares the Incident Demobilization Plan (IDP).

#### **Planning Section Chief (PSC):**

The PSC is responsible for collection, evaluation, dissemination and use of information. It keeps track of the developing scenario and status of the resources. In case of need, the PS may also have Technical Specialist for addressing the technical planning matters in the management of an incident. A list of such specialists will be kept available in the PS. The PSC reports to the IC and will be responsible for the activation of Units and deployment of personnel in his Section as per requirement.

### Roles and Responsibilities of PSC:

- coordinate with the activated Section Chiefs for planning and preparation of IAP in consultation with IC;
- ensure that decisions taken and directions issued in case of sudden disasters when the PS had not been activated are obtained from the IMO (Command Staff) and incorporated in the IAP;
- ensure collection, evaluation, and dissemination of information about the incidents including weather, environment toxicity, availability of resources etc. from concerned departments and other sources. The PS must have a databank of available resources with their locations from where it can be mobilized;
- coordinate by assessing the current situation, predicting probable course of the incident and preparing alternative strategies for the Operations by preparing the IAP. The IAP contains objectives reflecting the overall incident strategy and specific tactical actions and supporting information for the next operational period (24 hours is considered as one operational period). The plan may be oral or written. Written plan may have a number of attachments, including incident objectives, organization assignment list IRS Form-005), incident communication plan IRS Form-009, demobilization plan IRS Form-010, traffic plan, safety plan, and incident map etc.
- The major steps for preparing IAP are as follows;
  - Initial information and assessment of the damage and threat;
  - Assessment of resources required;
  - Formation of incident objectives and conducting strategy meetings;
  - Operations briefing;
  - Implementation of IAP;
  - Review of the IAP and Formulation of incident objectives for the next operational period, if required;
  - ensure that Incident Status Summary (IRS Form-002) is filled and incorporated in the IAP;
  - ensure that Organizational Assignment List (Divisional / Group) IRS Form-005 is circulated among the Unit leaders and other responders of his Section;
  - plan to activate and deactivate IRS organizational positions as appropriate, in consultation with the IC and OSC;
  - determine the need for any specialized resources for the incident management;
  - utilize IT solutions for pro-active planning, GIS for decision support and modeling capabilities for assessing and estimating casualties and for comprehensive response management plan;
  - provide periodic projections on incident potential;
  - report to the IC of any significant changes that take place in the incident status;
  - compile and display incident status summary at the ICP;
  - oversee preparation and implementation of Incident Demobilization Plan (IRS Form-010);
  - assign appropriate personnel, keeping their capabilities for the tasks in mind and maintain On
  - Duty Officers List (IRS Form-007) for the day;
  - ensure that record of various activities performed (IRS Form-004) by members of

- Units are collected and maintained in the Unit Log (IRS Form-003); and
- perform any other duties assigned by IC.

#### **7.3.6.1 Roles and Responsibilities of Resource Unit Leader (RUL):**

- maintain and display the status of all assigned resources (Primary and Support) at the incident site by overseeing the check-in of all resources, and maintaining a resource status-keeping system. Primary resources are meant for responders and support resources are meant for affected communities;
- compile a complete inventory of all resources available. He will also access information about availability of all required resources at other locations and prepare a plan for their mobilization, if required. IDRN facilities will also be used for this purpose;
- ensure and establish Check-in function at various incident locations;
- update the PSC and IC about the status of resources received and dispatched from time to time;
- coordinate with the various activated Branches, Divisions and Groups of OS for checking status and utilization of allotted resources;
- ensure quick and proper utilization of perishable resources;
- maintain record of various activities performed as per IRS Form-004 and send to Section concerned; and
- perform any other duties assigned by PSC.

#### **7.3.6.2 Roles and Responsibilities of Situation Unit Leader (SUL):**

- collect, process and organize all incident information as soon as possible for analysis. For such purposes, he can take the help of members of the Single Resource, Task Forces, Strike Teams, field level Government officers and members of Local Institutions, CBOs, NGOs etc;
- prepare periodic future projections of the development of the incident (along with maps if required) and keep the PSC and IC informed;
- prepare situation and resource status reports and disseminate as required;
- provide authorized maps, photographic services to responders, if required;
- attend IAP Meeting with required information, data, documents and Survey of India maps etc;
- maintain record of various activities performed as per IRS Form-004 and send to Section concerned; and perform such other duties assigned by SUL or PSC.

#### **7.3.6.3 Roles and Responsibilities of Documentation Unit Leader (DUL):**

- ensure that all the required forms and stationery are procured and issued to all the activated Sections, Branches, Divisions, Groups and Units;
- compile all information and reports related to the incident;
- review and scrutinize the records and various IRS forms for accuracy and completeness;
- inform appropriate Units of errors or omissions in their documentation, if any, and ensure that errors and omissions are rectified;
- store files properly for post-incident analysis;
- maintain record of various activities performed as per IRS Form-004 and send to Sections concerned; and
- perform any other duties as assigned by the PSC.

#### 7.3.6.4 Roles and Responsibilities of Demobilization Unit Leader (Demob. UL):

In the management of a large incident, demobilization can be quite a complex activity and requires proper and separate planning. When the disaster response is nearing completion, the resources mobilized for response need to be returned. This should be done in a planned and phased manner. Demobilization requires organizing transportation of both equipment and personnel to a large number of different places both near and far away. The Demob. Unit will prepare the demobilization plan in consultation with RO, IC and PSC. The plan should include the details of the responders to be demobilized, the date, mode of transport, location from where they will be demobilized, the destination where they have to finally reach etc. There will be a similar plan for out of service equipment and sick personnel also.

The Demob. UL will:

- prepare Incident Demobilization Plan (IDP) as per IRS Form-010;
- identify surplus resources and prepare a tentative IDP in consultation with the PSC and give priority to demobilization of surplus resources;
- develop incident check-out functions for Sections, Branches, Divisions and units in consultation with all Sections and send to the PS; plan for logistics and transportation support for Incident Demobilization in consultation with LS; disseminate IDP at an appropriate time to various stakeholders involved;
- ensure that all Sections, Units, Teams and Resources understand their specific Incident Demobilization responsibilities and avail demobilization facilities;
- arrange for proper supervision and execution of the IDP;
- brief the PSC on the progress of Demobilization;
- request the PSC for additional human resources, if required;
- maintain record of various activities performed as per IRS Form-004 and send to Sections concerned; and perform any other duties assigned by the PSC.

#### 7.3.7 Logistics Section (LS):

LS provide all logistic support for effective response management. The Units under different Branches of the LS are responsible not only for the supply of various 'kinds' and 'types' of resources, but also for the setting up of different facilities like the Incident Base, Camp, ICP and Relief Camp etc. This would entail the involvement of several line departments of Government and other agencies. It would require a proper and smooth coordination at the highest level of the administration. The LS will work closely with the RO, EOC and the IC. The DM plan will have comprehensive details like where the required resources can be procured from and manpower mobilized, etc. IDRN may also be useful for the mobilization of equipment and manpower.

#### Logistics Section Chief (LSC):

The LS comprises Service, Support and Finance Branches. The Section is headed by a chief known as the LSC. The activation of various Branches of the LS is context specific and would depend on the enormity and requirements of the incident. The Finance Branch (FB) constitutes an important component of the LS to specially facilitate speedy procurement, and proper accounting following financial procedures and rules.

**Roles and Responsibilities of LSC:**

- coordinate with the activated Section Chiefs;
- provide logistic support to all incident response effort including the establishment of SA, Incident Base, Camp, Relief Camp, Helipad etc.;
- participate in the development and implementation of the IAP;
- keep RO and IC informed on related financial issues;
- ensure that Organizational Assignment List (Divisional/Group) IRS Form-005 is circulated among the Branch Directors and other responders of his Section;
- request for sanction of Imprest Fund, if required;
- supervise the activated Units of his Section;
- ensure the safety of the personnel of his Section;
- assign work locations and preliminary work tasks to Section personnel;
- ensure that a plan is developed to meet the logistic requirements of the IAP with the help of Comprehensive Resource Management System;
- brief Branch Directors and Unit Leaders;
- anticipate over all logistic requirements for relief Operations and prepare accordingly;
- constantly review the Communication Plan, Medical Plan and Traffic Plan to meet the changing requirements of the situation;
- assess the requirement of additional resources and take steps for their procurement in consultation with the RO and IC;
- provide logistic support for the IDP as approved by the RO and IC;
- ensure release of resources in conformity with the IDP;
- ensure that the hiring of the requisitioned resources is properly documented and paid by the FB;
- assign appropriate personnel, keeping their capabilities for the tasks to be carried out and maintain On Duty Officers List (IRS Form-007) for the day;
- ensure that cost analysis of the total response activities is prepared;
- ensure that record of various activities performed (IRS Form-004) by members of Branches and Units are collected and maintained in the Unit Log IRS Form 003; and
- Perform any other duties as assigned by RO or IC.

**7.3.7.1 Roles and Responsibilities of Service Branch (SB):**

- work under the supervision of LSC, and manage all required service support for the incident management;
- manage and supervise various Units of the Branch like Communication Unit, Medical Unit, Food Unit and any other activated Unit;
- discuss with activated Unit leaders for the materials and resources required and procure the same through LS;
- ensure proper dispatch of personnel, teams, resources etc as per the IAP;
- prepare an assignment list, if required;
- keep the LSC informed about the progress of Service Branch, from time-to-time;
- resolve Service Branch problems, if any;
- maintain record of various activities performed as per IRS Form-004 and send to sections concerned; and

- perform any other duties assigned by the IC and LSC.

#### **7.3.7.2 Roles and Responsibilities of Support Branch (Sup. B):**

- work under the supervision of LSC, and supervise the function of Resource Provisioning Unit, Facility Unit and Ground Support Unit;
- procure and dispatch required tactical materials and resources for Operations with the concurrence of the Section Chief;
- participate in the planning meeting of the LS;
- ensure that organization assignment list concerning the Branch is circulated to all Units under him;
- coordinate various activities of the Support Branch;
- keep the LSC informed about the progress of work;
- resolve problems within his unit, if any;
- maintain record of various activities performed as per IRS Form-004 and send to Section concerned; and
- perform any other duties assigned by the LSC.

#### **7.3.7.3 Roles and Responsibilities of Finance Branch Director (FBD):**

The FB is responsible for managing all financial aspects of response management. The FB has been kept under the LS for quick and effective procurement. Due diligence is very important in all financial transactions and proper procedure needs to be followed. Special precautions will be taken in selecting knowledgeable and experienced personnel conversant with the financial rules for functioning in this Branch.

The FBD will:

- work under the LSC;
- attend planning meetings;
- prepare a list of resources to be mobilized, procured or hired in accordance with the IAP. Obtain orders of the competent authority as per financial rules and take steps for their procurement without delay;
- ensure that time records of hired equipment, personnel and their services are accurately maintained as per Government norms for payment;
- examine and scrutinize cost involved in the entire response activity including the demobilization, analysis the cost effectiveness and keep the LSC informed;
- ensure that all obligation documents initiated at the incident are properly prepared,
- completed, verified and signed by the appropriate Section Chief and BD;
- brief the LSC or IC on all incident related financial issues needing attention or follow-up;
- maintain record of various activities performed as per IRS Form-004 and send to Sections concerned; and perform any other duties as assigned by the LSC or IC.

## 7.4 Hazard Specific Responsibility Matrix for emergency response:

## EARTHQUAKE

Time	Activity	Department/ Agency
<b>D+15 Min</b>	<ul style="list-style-type: none"> <li>Report the occurrence of earthquake to DDMA, Heads of all line departments, ESF</li> </ul>	<b>Officer-in-charge of DEOC</b>
<b>D+30 Min</b>	1. Establish communication links by activating alternate communication equipments i.e. Satellite phone, HF/ VHF set, HAM radio, VSAT etc.	<b>DEOC, APRO, NIC</b>
	2. Deploy mobile emergency communication units to affected areas for establishing communication link	<b>BSNL</b>
	3. Activate the DMTs, QRT, ESFs, IRTs.	<b>DDMA</b>
	4. Ask all Nodal Officers/team leaders and IRT members to immediately report to the EOC.	<b>DEOC</b>
	5. Verify the authentic of the incident from agencies like IMD, block level officers, police and fire department etc.	<b>DEOC</b>
	6. DDMA and EOC together analyze the information and take decision on the level of the disaster (viz. Village level, block level, sub-division level, district level etc.).	<b>DDMA, DEOC</b>
	7. Organize first coordination meeting with the ESF team leaders, District IRTs, and the officials from the affected areas. Representative from the affected areas should also be invited to share updates and ground level information. This meeting can be organized in the affected areas (such as Block office) if required and feasible.	<b>DEOC, DDMA</b>
<b>D+1 Hr</b>	1. Establish onsite Emergency Operations Center	<b>DEOC</b>
	2. Activate the emergency response as per the level of the disaster. <ul style="list-style-type: none"> <li>In case of disaster up to block level, the BDO takes charge of the emergency response coordination along with the DMTs, QRTs and IRTs.</li> <li>The BDO shall stay in regular communication with the DDMA and EOC for information updates and response actions.</li> <li>In case of disaster up to district level, a senior officer of ADC rank shall be given responsibility of emergency response coordination. He/she shall coordinate with the EOC, DMTs, QRT, ESFs etc.</li> </ul>	<b>DDMA, DEOC</b>
	3. Activate the search and rescue teams in the affected areas with immediate effect.	<b>DEOC, SDRF, NDRF, POLICE</b>
	4. If required, ask for external support from armed forces, other technical institutions for search, rescue and evacuation operations.	<b>DDMA, ARMY, Air force</b>
	5. Collate and analyze the available initial information on damage and needs.	<b>DEOC</b>
	6. Ask all line departments to share their assessment information with EOC.	<b>DEOC</b>
<b>D+3</b>	1. Senior ADC level officer to be deputed to the affected	<b>DDMA</b>

<b>Hr</b>	areas	
	2. Assess the condition of roads for quick mobilization of emergency teams and resources to the affected areas and take follow up actions	<b>Transport Dept., DEOC</b>
	3. Establish media management/information cell for public information, guidance to volunteers and aid agencies and for rumour control	<b>DEOC, DIPRO</b>
	4. Contact public and private sector agencies etc. to assist in emergency rescue and relief operations	<b>DDMA</b>
	5. If required, seek assistance from neighboring districts and state level.	<b>DDMA</b>
	6. Provide security in affected areas and maintain law and order situation	<b>Police Dept</b>
	7. Mobilize medical response teams with orthopedic experts, first aid, cuts, wounds etc. to the affected areas.	<b>Health Dept</b>
	8. Mobilize SAR teams and equipments etc. to the affected areas.	<b>DDMA, SDRF, NDRF</b>
	9. Maintain constant communication with onsite EOC	<b>DEOC</b>
	10. Alert all major hospitals to make necessary arrangements for treatment of injured	<b>DDMA, DEOC, JDH</b>
<b>D+12 Hr</b>	1. Open access routes and manage traffic for mobilization of equipment, machinery and volunteers to the affected areas	<b>Transport Dept, Police</b>
	2. Establish information centers at strategic places	<b>DDMA</b>
	3. Mobilize relief materials i.e. tents, food materials, water, essential medicines, blankets etc. to the affected areas	<b>DDMA, Supply Dept</b>
	4. Arrange to shift evacuated persons to temporary shelters and ensure provision of food, water & sanitation facilities, blankets, storage of relief materials etc	<b>DDMA, Circle Officers</b>
	5. Set up field hospitals near the affected areas.	<b>Health Dept</b>
	6. Arrange to shift injured people to field hospitals.	<b>Health Dept, 108</b>
<b>D+24 Hr</b>	1. Develop situation report of the affected areas and share with all stakeholders. This should also be updated on the District website promptly to ensure its availability to other stakeholders.	<b>DEOC, NIC</b>
	2. Prepare press note twice a day with details of situation and response being made.	<b>DDMA, DIPRO</b>
	3. Depute additional officers and supporting staff to affected areas from non affected areas	<b>DDMA</b>
	4. Restore essential services i.e. power, water supply, telecommunication facilities of the EOC, HQ, AIR, Doordarshan, offices of key line departments, SP, Hospitals etc. on priority basis.	<b>APDCL, PHE, BSNL</b>
<b>D+48 Hr</b>	1. Plan for a multi sectoral damage and needs assessment of the affected areas. The assessment team may comprise of various ESFs and members from NGOs to have a multi-agency, multisectoral assessment.	<b>DDMA</b>
	2. Publish the assessment reports and other relevant	<b>DEOC</b>

	information on the District website	
	3. Arrange for identification, photograph, post mortem, and record maintenance for disposal of dead bodies (Refer NDMA guideline on disposal of dead)	<b>Health Dept., Police Dept, GMC.</b>
	4. Set-up an information center near the relief shelters for community, relatives, NGOs etc.	<b>DEOC, DIPRO</b>
	5. Arrange system to receive reports and complaints regarding missing people and other such losses and damages, and initiate search in hospitals, shelters and police records	<b>DEOC</b>
<b>D+72 Hr</b>	1. Arrange for disposal of unidentified and unclaimed dead bodies	<b>Police Dept., Health Dept, GMC</b>
	2. Arrange for transportation of injured people from local hospitals to district hospitals or to other specialized hospitals (if required)	<b>Transport, 108, Health Dept</b>
	3. Initiate relief distribution and recovery actions	<b>DDMA</b>

### THUNDERSTORM

Time	Activity	Department/ Agency
<b>D-72 Hr</b>	1. On receipt of warning, report to DC/DDMA	<b>IMD, DEOC</b>
	2. Alert all IRTs, line departments, BDOs	<b>DEOC</b>
	3. Prepare for additional manpower, resources & Relief material to the blocks/villages likely to be affected	<b>DEOC</b>
	4. Activate alternative communication equipments i.e. satellite phones, HF/VHF sets, Ham radio, VSAT in Block control rooms	<b>DEOC</b>
	5. Establish communication links with Search & Rescue Teams and alert them to be instage of readiness.	<b>DEOC</b>
	6. Establish communication links with villages likely to be affected	<b>DEOC</b>
<b>D-48 Hr</b>	1. Establish contact with IMD & CWC & get the latest weather report from IMD to know the exact location of Storm and the likely area where landfall will take place.	<b>DEOC/DDMA</b>
	2. After reviewing the weather report and satellite images, issue instructions and orders for emergency response to areas likely to be affected.	<b>DEOC/DDMA</b>
	3. Instruct line departments to depute representatives at the DEOC	<b>DEOC/DDMA</b>
	4. Hold a meeting with leaders of task forces and entrust them their tasks.	<b>DEOC/DDMA</b>
	5. Ensure that Storm information is disseminated to all who are at danger	<b>DEOC/DDMA</b>
	6. Arrange emergency meeting with DDMA, IRTs to devise a plan of action.	<b>DEOC/DDMA</b>
<b>D-48 Hr</b>	1. Arrange dissemination of information through various means of communication such as Radio, TV, Cable Network, SMS about Storm Warning to Blocks/Villages which are likely to be hit by Storm.	<b>DEOC, DIPRO</b>
	2. Impose restriction on all transport activities heading towards areas that are likely to be affected by Storm.	<b>Transport, Police</b>

	3. Alert following teams to remain in readiness: Evacuation, Emergency Medical Services, Search and Rescue	<b>DEOC/DDMA</b>
	4. Alert following emergency response forces to remain in readiness: Fire & Emergency Services, VDMTs, Police, CD&HGs, SDRF, NDRF, Army (if required) Air Force (if required)	<b>DEOC/DDMA</b>
	5. Start the procedure for identifying safe places/shelters for evacuation in those villages.	<b>DEOC, BDO</b>
	6. Village wise data of safe sheltering for evacuation should be referred and the BDOs/Village level officers should be contacted to know the status of the shelters with the capacity of the shelter and other available facilities at the site.	<b>DEOC, CO, BDO</b>
	7. Make transport arrangement for mobilization of all emergency response teams.	<b>DEOC, Transport,CO, BDO</b>
	8. Ensure safety of tourists visiting the district	<b>Tourism Dept.</b>
	9. Ensure law and order is maintained in areas likely to be affected.	<b>Police</b>
	10. Ensure that the schools and colleges are closed in areas likely to be affected by Storm and associated hazards.	<b>Education Dept.</b>
	11. Ensure dissemination of information to remote areas by local means.	<b>DEOC, DIPRO</b>
	12. Ensure that local help lines are opened and effectively managed for public information, guidance and rumor control.	<b>DEOC, DIPRO</b>
	13. Ensure that the information to public and media about the progress of Storm at periodic intervals is released.	<b>DEOC, DIPRO</b>
	14. Make arrangements for logistic support to all emergency response teams.	<b>DEOC</b>
	15. Activate the Departmental Disaster Management Plan and Departmental SOPs for Management of casualties	<b>Line Departments</b>
<b>D-24 Hr</b>	1. Establish contact with IMD, CWC for latest report	<b>DEOC/DDMA</b>
	2. After reviewing the weather report and satellite images issue instructions and orders for emergency response to areas likely to be affected areas.	<b>DEOC/DDMA</b>
	3. Review and monitor following activities: <ul style="list-style-type: none"> <li>• Evacuation of people from areas likely to be affected</li> <li>• Position of Search and Rescue Teams</li> <li>• Positioning of mobile communication units</li> <li>• Positioning of quick medical response teams</li> <li>• Mobilization of restoration teams of respective departments</li> <li>• Requirement of armed forces in rescue and relief operations</li> <li>• Dissemination of information to the vulnerable areas</li> </ul>	<b>DEOC/DDMA</b>

	<ul style="list-style-type: none"> <li>All preparedness measures to be taken by various authorities</li> </ul>	
<b>D-24 Hr</b>	1. Keep in touch with National, State & Block Control Rooms	<b>DEOC/DDMA</b>
	2. Release information at appropriate time to media and public regarding response measures organized by the Government	<b>DEOC, IPR</b>
	3. If reports regarding striking of Storm are confirmed by IMD and other sources, start the emergency response and relief operations	<b>DEOC/DDMA</b>
	4. Divert the emergency services to areas likely to be affected as per the warning issued by IMD.	<b>DEOC/DDMA</b>
	5. Inform the public residing in areas likely to be affected to evacuate through various means such as SMS, AIR, FM Radio, Doordarshan, etc.	<b>DEOC/IPR</b>
	6. Start evacuation from the likely affected areas through Police support, if necessary	<b>DEOC, DDMA, CO, BDO</b>
	7. Ensure that the Relief Management work planned in the areas likely to be affected by the Storm are well organized.	<b>DEOC, Supply Dept</b>
	8. Ensure that the arrangement for basic amenities (shown below) at evacuation/relief centers are made by the respective departments: <ul style="list-style-type: none"> <li>a. Drinking water</li> <li>b. Food</li> <li>c. Clothing</li> <li>d. Sanitation and hygiene,</li> <li>e. Lighting</li> <li>f. Medicines and other Health Care</li> </ul>	<b>PHE, SMB, Supply, Health Dept,</b>
	9. Inform following agencies to be in a state of readiness for assisting in the Storm response measures (if required): <ul style="list-style-type: none"> <li>a. Public sector agencies</li> <li>b. Private sector agencies</li> <li>c. NGOs</li> <li>d. CBOs</li> <li>e. Volunteer Organizations</li> </ul>	<b>DEOC, DDMA</b>
	10. Request for help (if needed) to SDMA	<b>DEOC, DDMA</b>
	11. Make necessary arrangements for public information/guidance, public opinion and rumor control.	<b>DEOC, DIPRO</b>
	12. Restriction may be imposed for transportation in threatened areas.	<b>DEOC, CO, BDO, Police Dept, Transport Dept</b>
<b>D0 Hr</b>	1. When Storm makes a landfall, Storm affected blocks should send a communication to the DEOC, then SEOC to declare the area as disaster affected, if necessary, (depending upon the nature and intensity of impact)	<b>DEOC, DDMA</b>
	2. DC should send teams to the affected areas to take stalk of the effects of Storm and associated rain.	<b>DEOC, DDMA</b>
	3. DC should send sector wise situation reports to SEOC, SDMA	<b>DEOC</b>

	<p>4. Deployment of following teams to Storm affected areas:</p> <ul style="list-style-type: none"> <li>• Emergency Communication Teams</li> <li>• Emergency Medical Services Teams</li> <li>• Search and Rescue Teams (With Equipments)</li> <li>• Preliminary Damage Assessment Teams</li> <li>• Need Assessment Teams</li> </ul>	<b>DEOC, DDMA</b>
	<p>5. Establish communication link with affected blocks by activating alternate communication equipments such as Satellite Phones, HF/VHF Sets, Ham Radio etc., in DEOC and BlockControl Rooms</p>	<b>DEOC, DIPRO</b>
	<p>6. Arrange dissemination of information about occurrence of Storm and areas that are affected by it to Media &amp; Public.</p>	<b>DEOC, DIPRO</b>
<b>D+24 Hr</b>	<p>Remain in constant touch with IMD for updates on weather forecast for the coming hours and plan accordingly.</p> <ul style="list-style-type: none"> <li>• Immediate mobilization of following units/teams to areas affected by Cyclone and associated rains.</li> <li>• SAR Teams of Fire and Emergency Services</li> <li>• Quick Medical Response Teams</li> <li>• Quick Damage &amp; Loss Assessment Teams</li> <li>• Quick Need Assessment Teams</li> <li>• Road Clearance Teams</li> <li>• Teams for disposal of dead bodies</li> <li>• Teams for disposal of carcasses</li> <li>• Teams for debris clearance (if any)</li> <li>• Teams for maintaining Law &amp; Order in the affected areas</li> <li>• Arrange for SAR teams of Air Force (If required).</li> </ul>	<b>DEOC/DDMA, Line Departments</b>
<b>D+24 Hr</b>	<p>1. DEOC/BDO of the affected blocks should ensure that the following response activities are carried out immediately:</p> <ul style="list-style-type: none"> <li>• To survey the access roads/routes leading to the affected areas and manage traffic for mobilization of equipments, machinery and volunteers.</li> <li>• Identify alternate roads/routes for evacuation.</li> <li>• Undertake repairing/restoration of damaged roads leading to the affected areas.</li> <li>• Identify and declare unsafe buildings/structures in Cyclone affected areas.</li> <li>• Evacuate people from unsafe buildings/structures and shift them to relief camps/sites.</li> <li>• Divert/stop transport activities heading towards Cyclone affected areas.</li> </ul>	<b>PWD Dept, Transport Dept., Police Dept, DDMA, CO, BDO</b>
	<p>2. To ensure that necessary arrangements at evacuation/relief centers is made with sufficient availability of: Food, Water, Blankets/Clothing, Medicines, Lighting, Sanitation and hygiene etc.</p> <ul style="list-style-type: none"> <li>• To ensure necessary security arrangements for</li> </ul>	<b>DDMA, Supply Dept., PHE Dept., Health Dept., Local</b>

	<p>the personals (Emergency responders/ relief teams) who are working at Relief Centers and involved in distribution of Relief Materials.</p> <ul style="list-style-type: none"> <li>To ensure that law and order is maintained at evacuation/relief centers and in the affected areas as well.</li> </ul>	<b>Authorities, Police Dept.</b>
	<p>3. To establish camp hospitals near the affected areas</p> <ul style="list-style-type: none"> <li>To make transportation arrangements to shift seriously injured persons to nearest- Camp Hospitals, District Hospitals etc</li> <li>Ensure that the Hospitals are well prepared to deal with seriously injured persons.</li> <li>To ensure that the required medical assistance/aid and medicines are provided to the affected people at site as well as at evacuation/relief centers in the affected area and necessary records are maintained.</li> <li>Take sanitation and epidemic control measures for preventing any water borne disease.</li> <li>Keep adequate stock of essential medicines, first-aid etc. at all hospitals</li> <li>Take steps to purify drinking water sources</li> <li>If required, take the help of doctors/paramedics from the list of doctors/paramedics available at the district level for immediate medical assistance.</li> </ul>	<b>Health Dept, Transport Dept, PHE Dept.</b>
	<p>4. Assess need for fodder if required. Keep ready teams for carcass disposal (if required).</p>	<b>AH &amp; Veterinary Dept.</b>
	<p>5. Establish Media/Press Centre for media management and information dissemination</p> <ul style="list-style-type: none"> <li>Ensure that the information to media/general public about the response of the Government is released in an organized manner.</li> <li>Organize media briefing twice a day at pre-determined intervals.</li> </ul>	<b>DDMA, DIPRO</b>
	<p>6. Prepare quick need assessment report for planning of relief operation. Additional assistance may be asked for emergency response/relief from SDMA/GOI-NDMA(If needed).</p>	<b>DEOC/DDMA</b>
<b>D+24 Hr</b>	<p>1. Prepare situation report and circulate it twice a day in the morning and evening to key Government functionaries.</p> <ul style="list-style-type: none"> <li>Maintain constant touch with National, SEOC and block control rooms</li> <li>Remain in constant touch with IMD for updates on weather forecast for the coming days and plan accordingly</li> <li>Conduct Aerial survey of affected areas for taking a stalk of the situation.</li> </ul>	<b>DEOC/DDMA</b>
	<p>2. Activate evacuation &amp; relief centers according to needs/situation. Maintain record of persons admitted at evacuation/relief centers.</p>	<b>DEOC/DDMA</b>

<b>D + 24 to 48Hr</b>	1. Establish contact with IMD, CWC, and Defense Ministry of GOI for Aerial/ Satellites imageries about further weather condition and plan accordingly.	<b>DEOC/DDMA</b>
	2. Ensure that the essential services/critical infrastructure of the affected areas have been restored or alternative arrangement is made for ensuring safety of people and smooth management of emergency response.	<b>DEOC/DDMA, Line Departments</b>
	3. Ensure that key administrative and lifeline buildings are brought back to operation quickly.	
	4. Designate and deploy senior officers (as per the need) to worst affected area/s to oversee rescue/relief operation.	
	5. Ensure following primary necessities are restored – Power, Water, Telecommunication, Roads & Bridges	
	6. Ensure following procedure is followed before disposal/handing over of dead bodies: <ul style="list-style-type: none"> <li>• Photographs of the dead bodies are taken,</li> <li>• Identification of the dead bodies is done,</li> <li>• Post Mortem where ever necessary and possible is carried out,</li> <li>• Handing over dead bodies of persons known/identified to their relatives,</li> <li>• Disposal of unclaimed and unidentified dead bodies.</li> </ul>	<b>DEOC/DDMA, SMB Police Dept., Health Dept., Local Authorities, CO, BDO</b>
	7. AH & Veterinary Dept. to ensure medical aid to cattle that are injured. Disposal of animal carcasses with the help of local bodies/health dept.	<b>AH &amp; Veterinary Dept., Local Authorities, Health Dept</b>
	8. Ensure that the information about progress of rescue and relief is provided to media/public in an organized manner at least twice a day.	<b>DEOC/DDMA, DIPRO</b>
	9. Establish help lines for facilitating communication between the victims and their relatives residing outside the affected area/s.	
	10. Establish Information Centers at strategic locations for providing information about persons evacuated to the relief centers/hospitals.	
11. Assess the situation and take appropriate action to accelerate the Search & Rescue Operations.	<b>DEOC/DDMA</b>	
12. Depute additional officers and supporting staff to Cyclone affected areas from non- affected areas (if required) to accelerate the rescue and relief operations.		
13. Ensure that the relief assistance received from outside is centrally received, stored and sent for distribution to Cyclone affected areas according to their need and proper accounts are maintained about both receipt and distribution.	<b>DEOC/DDMA, Supply Dept, CO, BDO</b>	
14. Oversee the functioning of relief centers and ensure adequate supply of relief materials.	<b>DEOC/DDMA, Supply Dept</b>	
<b>D + 48 to 96Hr</b>	1. Remain in constant touch with IMD for updates on weather forecast for the coming days and plan	<b>DEOC/DDMA,</b>

	<p>accordingly.</p> <ol style="list-style-type: none"> <li>2. Arrange for procurement of additional relief material required for relief operations (on the basis of need assessment).</li> <li>3. Mobilize additional relief material required for relief operations.</li> <li>4. Maintain constant touch with SEOC &amp; Block Control Rooms</li> </ol>	<b>Supply Dept</b>
	<ol style="list-style-type: none"> <li>5. Arrangement for transportation of injured from field hospital to base hospital</li> <li>6. Arrangement for transport of dead bodies to their native places.</li> </ol>	<b>DEOC/DDMA, Health Dept, Transport Dept</b>
	<ol style="list-style-type: none"> <li>7. Ensure maintenance of record, timely reporting and information management.</li> <li>8. Ensure maintenance of record and information database.</li> </ol>	<b>DEOC/DDMA, Line Departments, BDO</b>
<b>D+96 to 168Hr</b>	<ol style="list-style-type: none"> <li>1. Remain in constant touch with IMD for updates on weather forecast for the coming days and plan accordingly.</li> <li>2. Review the restoration of all the public and essential in Cyclone affected areas.</li> <li>3. Review and follow-up all necessary arrangements for emergency response &amp; relief in the affected area/s.</li> </ol>	<b>DEOC/DDMA, BDO</b>
	<ol style="list-style-type: none"> <li>4. On receiving the message from IMD about degradation of Cyclone, inform the concern</li> </ol>	<b>DEOC/DDMA, DIPRO</b>
	<ol style="list-style-type: none"> <li>5. Organize a quick rapid visual survey of the affected areas (through a technical team of engineers) to ascertain the safety of the structures decide on giving the go-ahead to people to move back to their respective houses.</li> </ol>	<b>DEOC/DDMA, PWD, BDO</b>
	<ol style="list-style-type: none"> <li>6. After receiving the message of de-warning, ensure that people are moved back safely to their houses.</li> </ol>	<b>DEOC/DDMA, BDO, DIPRO</b>
	<ol style="list-style-type: none"> <li>7. Ensure relief disbursement, allotment of funds for organizing emergency response, relief and evacuation arrangements.</li> </ol>	<b>DEOC/DDMA, BDO</b>

**FLOOD**

<b>Response at District level</b>		
<b>1.</b>	<p>On receipt of flood warning, DDMA will pass the information for taking necessary measures to:</p> <ul style="list-style-type: none"> <li>• Concerned Circle Officers</li> <li>• Supdt. of Police</li> <li>• Executive Engineer, WR department</li> <li>• Executive Engineer, PWD (R)</li> <li>• Station Officer, F&amp;ES &amp; IC of SDRF/NDRF stationed in the district.</li> <li>• Commissioner GMC, for immediate necessary response</li> <li>• Deputy Director, F&amp;C supplies</li> <li>• Jt. Director, Health Services</li> <li>• DVO to take necessary measures so that if necessary assistance can be provided in short notice to the</li> </ul>	<b>Deputy Commissioner will direct ADC &amp; CEO DDMA, Kamrup(M)</b>

	<p>affected areas.</p> <ul style="list-style-type: none"> <li>DIPRO, if requires to give public announcement for evacuating people from vulnerable areas.</li> </ul>	
2.	SP will instruct Senior Station officer, F&ES /SDRF to assist the Circle Officer in Rescue, Evacuation & relocation process.	<b>Superintendent of Police(SP)</b>
<b>Response at District level</b>		
3.	Sr. Station Officer, F&ES will mobilize teams of SDRF & Boats available in their custody and coordinate with DDMA/ Circle officer for response.	<b>Sr. Station Officer, F&amp;ES.</b>
4.	<ul style="list-style-type: none"> <li>Executive Engineer will mobilize men and materials to strengthen embankments.</li> <li>For urban flood in Guwahati the executive engineer will mobilize officials and men to the pumping stations for immediate operation for dewatering of water.</li> <li>The designated officials will start the pumping operation immediately.</li> <li>Keep constant vigil on water levels in Brahmaputra, Bharalu, Mora Bharalu, Bahini, Basistha river &amp; take necessary measures like installing more pump sets wherever necessary, clearing of blockage if any etc. to keep the water level down so that water do not overtop and inundates the locality.</li> <li>Take immediate necessary measures to avert any breaches in embankments.</li> </ul>	<b>Executive Engineer, WR Department (Civil &amp; Mechanical division)</b>
5.	Take adequate measures to ensure that the road communication is not disrupted; repair any breaches of roads for evacuation and supply of relief to the affected people.	<b>Executive Engineer, PWD (Roads)</b>
6.	<ul style="list-style-type: none"> <li>On receipt of warning Commissioner, GMC will arrange men and material to be deputed in the affected areas.</li> <li>Installation of pump sets and operators wherever required.</li> <li>Keep constant vigil on the flood affected areas &amp; take temporary necessary measures to clear blocked secondary and tertiary drains in those areas.</li> </ul>	<b>Commissioner, GMC</b>
<b>Response at District level</b>		
7.	Supply of drinking water to the affected people, arrangement of alternative communication for transportation and evacuation.	
8.	<ul style="list-style-type: none"> <li>Jt. Director, Health services on receipt of information will initiate to mobilize medical response team, ambulances &amp; alert all govt. hospitals in the area likely to be affected.</li> <li>He will also direct SDMO or I/C of the PHC of the concerned area to form a team of doctors equipped with necessary medical equipments and move to the affected places or relief camp/centre as required by the Circle Officer.</li> </ul>	<b>Jt. Director, health Services.</b>
9.	Take periodic report of the situation 7 instruct Circle	<b>Deputy</b>

	Officers, Jt Director, Health Services, Executive Engineer PWD (R), PHE, WR, GMC, Irrigation, Police, F&ES to take necessary measures as required for dealing with the situation.	<b>Commissioner, Kamrup(M)</b>
<b>10.</b>	Deputy Commissioner will also inform state HQ about the prevailing situation & action taken.	<b>Deputy Commissioner</b>
<b>Response at Revenue Circle</b>		
<b>11.</b>	On receipt of warning, mobilize the Lot Mondals, Gaon Burha, SDRF and other agencies & resources available under Circle Officer's jurisdiction.	<b>Circle Officers of the concerned Rev. Circle</b>
<b>12.</b>	Go to the immediate location immediately & inform the villagers on the probability of any flood event and ask them to take necessary precautionary measures.	<b>Lot Mondal &amp; Gaon Burha</b>
<b>13.</b>	In case of probability of high intensity flood, evacuation of people from vulnerable areas to pre identified safe locations & preposition of quick response team/SDRF/NDRF/Police force	<b>Circle Officers of the concerned Rev. Circle</b>
<b>Response at Revenue Circle</b>		
<b>14.</b>	Keep DC informed on hourly basis about the situation on the ground level and may request for additional resources of man material & machines if required from DC.	<b>Circle Officers of the concerned Rev. Circle</b>
<b>15.</b>	<ul style="list-style-type: none"> <li>• Inform-Concerned BDOs, so that BDOs can inform PRI representatives for appropriate action.</li> <li>• Ward councilors and ward members for appropriate action.</li> </ul>	
<b>16.</b>	Open relief camps, if required and give requisition for GR to DC	
<b>17.</b>	Arrangement for distribution of relief	

## CHAPTER-VIII

# RECONSTRUCTION, REHABILITATION AND RECOVERY MEASURES

**Reconstruction, Rehabilitation and Recovery** process demands co-ordinate focus on multi disciplinary aspects of reconstruction and rehabilitation for recovery and is essential to understand disaster reconstruction, rehabilitation under the holistic framework of post disaster recovery. It will be in the form of recommendation rather than the rule. Rehabilitation and reconstruction are primarily carried out by the local bodies (Gram Panchayats, District, Circle level, Municipal Corporations, Municipalities, etc.) and different Government departments and boards. The reconstruction and rehabilitation plan is designed specifically for worst case scenario. Post disaster reconstruction and rehabilitation should pay attention to the following activities for speedy recovery in disaster affected areas. The contribution of both government as well as affected people is significant to deal with all the issues properly. The following are the activities during this phase-

### **8.1 Detailed Damage and Loss Assessment:**

Damage Assessment is a precondition for effective DM. There are two stages for Damage Assessment –

1. Preliminary Damage Assessment which is conducted immediately after a disaster and
2. Detailed Damage Assessment which is conducted before reconstruction and rehabilitation by all relevant departments.

### **8.2 Recovery:**

Recovery encompasses both short-term and long-term efforts for rebuilding and revitalization of affected communities. Recovery planning must provide for a near-seamless transition from response activities to short-term recovery operations—including restoration of interrupted utility services, reestablishment of transportation routes and the provision of food and shelter to displaced persons. Planners should design long-term recovery plans to maximize results through the efficient use of resources and incorporate national recovery doctrine. Recovery processes should incorporate the local needs of the affected people.

The nodal departments are to be assigned the responsibilities of reconstruction and restoration activities and perform these activities and restore the minimum basic infrastructure in the area which is vital for sustaining human life in the area.

### **8.3 Economic and Social Rehabilitation:**

Rehabilitation aims at making the entire system work once again by allowing it to function normally. Economic Rehabilitation would mean restoring economic attributes of a system, namely creation of livelihood opportunities, reconstruction of infrastructure and resources in a disaster affected area. All essentials such as seed, manure, livestock etc have to be distributed as initial capital to restart their livelihood activities. In this way, employment can also be generated for rehabilitation work.

Social Welfare department will ensure the following in the aftermath of flood within their departmental schemes & services for rehabilitation of the affected people:-

- a) **Kishori Shakti Yojana** : Earlier known as National Programme for Adolescent Girl (NPAG), is a scheme for improve the nutritional, health and development status of adolescent girls, promote awareness of health, hygiene, nutrition and family care, link them to opportunities for learning life skills, going back to schools, help them gain a better understanding of their Social Environment and take initiatives to become productive members of the society.
- b) **Supplementary Nutrition Programme:** The ICDS Programme aims at enhancing nutritional and health status of children under 6 years of age, pregnant women, Lactating mothers and of late adolescent girls.
- c) **Immunization:** Immunization programme is for immunize all the children to prevent any epidemic disease.
- d) **Nutrition and Health Education:** The main object of this scheme is to form capacity building of women especially in the age group of 15 to 45 years. So that they can look after their own health, nutrition and development needs as well as that of their children and families.
- e) **Non Formal Preschool Education:** Since in India 48% of the population live below the poverty line, 63.83% are illiterate and one fifth of the population is the age group 0-6 yrs hardly needs any emphasis .So that this scheme is especially for the children in the age group of 0-6 yrs for their all-round development.
- f) **Mukhya Mantri Jiban Jyoti Bima Asoni:** This asoni covers all residence of Assam of the age group 03-80 years. The eligible person shall be able to claim financial assistance both for medical treatment and in case of injury caused due to accidents as per the prescribe norms under this scheme.
- g) **Mukhya Mantri Mahila Samridhi Yojana:** This scheme is for economically help the women weavers of the state of Assam.
- h) **Implementation of persons with Disability:** This Scheme provide special education facilities to the Deaf and Dum children, to the Blind children and also to the mentally retarded children. The Blind schools are run by NGO's such as Sreemanta Sankar Mission Blind School, Nagaon. This scheme also provide scholarship/stipend facilities to the physically challenge students.
- i) **Implementation of Juvenile Justice Act:** The Juvenile Justice Act, 2000 is implemented, along with rest of the country, with the objective of prevention, control and reformation of children coming in conflict with law and to take custodial care for protection of children who are neglected.
- j) **Health Care for the Aged:** The objective of the scheme is to take care of the people who have attained above 70 years of age and need care. Financial assistance is provided to aged people to enable them to purchase medicine. For the current year the amount of rupees 600.00 lacs have been provided for constitution of the scheme.
- k) **Sawayamsidha:** The Sawayamsidha is an integrated scheme for Women's empowerment. The programme is based on the formation of women Self-help groups (SHG) and enables the SHG's take up schemes and programmes social and economic empowerment of women.
- l) **Welfare Homes:** At this type of homes the destitute women and helpless widows of the age group 18 to 45 years are maintained and trained in useful craft for their ultimate rehabilitation in the society. Minor children of age group 0 to 6 years are also take care at this type of homes. The state home also educates the orphan and destitute children for their rehabilitation in the society.

- m) **Vocational Training:** The aim and objective of this scheme is to empower the women, to make women job eligible and to develop the skill of women through various training programme.

**8.4 Housing units & basic infrastructure Rehabilitation:**

For housing rehabilitation, the existing inhabited settlements may be completely reconstructed at a new site for which land acquisition may have to be done. Housing rehabilitation may also be carried out by way of up gradation of existing damaged houses through repairing and retrofitting. Restoration of basic infrastructure including roads, bridges, drinking water supply, electricity, communication network, school, health centers etc may be required to be built in the existing sites or in the new relocated site depending upon the nature and extent of the rehabilitation programme.

**SUMMARY OF RECONSTRUCTION, REHABILITATION AND RECOVERY**

Sl No.	Hazard Type	Task	Department / Agency	Activity	Time Period	Cost	Source of Fund
1	Earthquake, Flood, Storm, Landslide, Erosion	General Policy Guideline	Circle Level, DDMA	(i) Detailed damage and loss assessment (ii) Relief (iii) Recovery (iv) Restoration of basic infrastructure; Essential services as per relief code; livelihood (v) Reconstruction/ repair of lifeline buildings/ social infrastructure; damage buildings; promoting owner driven approaches in recovery phase (vi) Recovery program-short term and long term	Throughout the plan period		As per availability of the fund of State Govt.
2		Damage and Loss assessment	Circle Level Task Force Committee, DDMA	A systematic assessment of damages and losses along with remedial measures needed	Within 3 hours of the event or as early as possible		
3		Relief distribution	Circle Officer, DDMA	Relief to affected people	Once people evacuated the affected area and sheltered		
4		Restoration	Concerned departments, as assigned in DDMP	Restoration of basic infrastructure; Essential services as per relief code; livelihood	Just after the immediate response activities, damage assessment report, restoration phase will start		

5		Reconstruction/ repair	Concerned departments, as assigned in DDMP	Reconstruction/ repair of lifeline buildings/ social infrastructure; damage buildings; promoting owner driven approaches in recovery phase	Though it is a long term activity, based on the type of damage and available resources, this phase may take long or short duration. Emphasis to be given to conclude the Reconstruction/ repair task as fast as possible	
6		Skill development training to affected population	SDMA, DDMA, Resource Persons	Training	Round the year	Existing departmental plan
7		Loans/ Grants/ assistance	DWO/SDWO/ DRDA	Aid	Round the year	As per availability of the fund of State Govt.

## CHAPTER-IX

### FINANCIAL RESOURCES FOR IMPLEMENTATION OF DDMP

As mandated by Section 48 of the DM Act the State Disaster Response Fund (SDRF) and State Disaster Mitigation Fund (SDMF), District Disaster Response Fund (DDRF) and District Disaster Mitigation Fund (DDMF) are to be created at the State & District Levels. The disaster response funds at the district level is used by the DDMA towards meeting expenses for emergency response, relief, rehabilitation in accordance with the guidelines and norms laid down by the Government of India and the State Government.

#### 9.1 Fund Allocation:

Every year the Revenue & Disaster Management Department, Government of Assam prepares the Budget for Disaster Management in the State and releases the fund through the Assam State Disaster Management Authority (ASDMA).

- **District Disaster Response Fund (DDRF):**

As per Section 48 1(b) of the Disaster Management Act, 2005, SDRF fund is made available to DDMA for post-disaster activities & relief as per norms of NDRF/ SDRF.

- **District Disaster Mitigation Fund (DDMF):**

As per Section 48 1(d) of the Disaster Management Act, 2005, SDMF is to be created for pre-disaster activities and to be made available to the SDMA.

- **Department Fund:**

As per Section 39 of the Disaster Management Act, 2005 each department of the State Government shall allocate 3% of the department's annual budget in DM activities for measures for prevention of disaster, mitigation, capacity building and preparedness.

#### 9.2 Recommendation of the 15<sup>th</sup> Finance Commission for FY 2020-21:

The 15<sup>th</sup> Finance Commission for FY 2020-21 had recommended two funds with the nomenclature of State Disaster Risk Management Fund (SDRMF) and National Disaster Risk Management Fund (NDRMF). SDRMF will consist of two components viz. State Disaster Response Fund (SDRF) and State Disaster Mitigation Fund (SDMF) with the allocation in the proportion of 80% and 20% respectively. Similarly, NDRMF will also have two components namely National Disaster Response Fund (NDRF) and National Disaster Mitigation Fund (NDMF) with allocation in the same proportion. The Commission had also recommended that, within the SDRF/NDRF allocations of 80%, there would be three sub-allocations namely, Response and Relief (40%), Recovery and Reconstruction (30%) and Preparedness and Capacity Building (10%). As such, SDRMF and NDRMF will cover the entire cycle of disaster management – prevention, preparedness, response, mitigation, recovery and reconstruction.

## CHAPTER-X

# PROCEDURE AND METHODOLOGY FOR MONITORING, EVALUATION, UPDATION AND MAINTENANCE OF DDMP

Evaluating the effectiveness of plan & maintenance involves a combination of training events, exercises etc. to determine whether the goals, objectives, decisions, actions and timing outlined in the plan will result in an effective response.

### **10.1 Authority for maintaining and reviewing the DDMP:**

As per Sub Section 4 & 7 of Section 31 of the Disaster Management Act, 2005, mentions that the District Plan shall be reviewed and updated annually and the District Authority shall, review from time to time, the implementation of the Plan and issue such instructions to different departments of the Government in the district as it may deem necessary for the implementation thereof.

### **10.2 Monitoring & Evaluation of DDMP:**

The half-yearly meeting will be organized by the DDMA under the chairmanship of the Chairman, DDMA Kamrup Metro to review disaster management activities in the state and updating the DDMP accordingly. All concerned departments and agencies have to participate and give recommendations on specific issues on Disaster Management and submit their updated reports per and post disaster evaluation.

This post-disaster evaluation mechanism shall be set up with qualified professions, experts and researchers and the collected data shall be thoroughly cross-checked and documented in the EOC for further reference. The DDMA will evaluate the DDMP by conducting meetings and consultation with all stakeholders.

### **10.3 Schedule for updation of DDMP:**

The updated data of DDMP will also be maintained at the DEOC, ready for use in any situation under the supervision of DDMA. The Chairman, DDMA will ensure regular updation of the DDMP by consulting the nodal officers of the frontline departments will update it on a yearly basis taking into consideration:-

- Inventory of equipment in the district (DDMRI),
- Human Resources, their addresses and contact details (DDMRI),
- Valuable inputs from actual disasters and updating Matrix of past disasters and HVCRA within the District
- Major change in the operational activities and location through SOPs & Checklists
- Lessons learnt from training, near-missed incidents.
- Inputs from mock drills/ simulation exercises
- Changes in disaster profile
- Technological developments/ innovations in identifying potential hazards.
- Updation of databases using new technologies like GIS
- Change in demography of surrounding population
- Changes in geo-political environment

#### **10.4 Monitoring & Evaluation- Mock Drill:**

As per Sub Section 2 (x) of Section 30 of the Disaster Management Act, 2005 states that “District Authority shall review the state of capabilities for responding to any disaster or threatening disaster situation in the district & give directions to the relevant departments or authorities at the district level for their up gradation as may be necessary”.

Sub Section 2 (xi) of Section 30 of the Disaster Management Act, 2005, states that “District Authority shall review the preparedness measures & give directions to the concerned departments at the district level or other concerned authorities for bringing the preparedness measures to the levels required for responding effectively to any disaster or threatening disaster situation”.

Sub Section 2 (xxviii) of Section 30 of the Disaster Management Act, 2005, states that “District Authority shall ensure communication systems are in order, and disaster management drills are carried out periodically.”

Mock-drills help in evaluating disaster preparedness measures, identify gaps and improving coordination within different government departments, non-government agencies and communities. After the simulation exercises, the DDMA will encourage interactions with all the stakeholders to evaluate the gaps, lessons learnt with proper documentation for further improving the capability to deal with future disasters.

## CHAPTER-XI

# COORDINATION MECHANISM FOR IMPLEMENTATION OF DDMP

The Coordination between District and Local governments is vital for the proper disaster management. It requires both inter-departmental and intra-departmental coordination with all the stakeholder line departments and local bodies and other local authorities. These partnerships recognize that each level of the disaster management arrangements must work collaboratively to ensure the effective coordination of planning, services, information and resources necessary for comprehensive disaster management.

The DDMP of the district is a three tier disaster management coordination based on the bottom to top approach i.e. District level, Circle level and Village Level. This system enables a progressive escalation of support and assistance.

The arrangements comprise of several key management and coordination structures. The principal structures that make up the arrangements are:

1. Disaster Management Committees are operational at district level. The committees are responsible for planning, organizing, coordinating and implementing all measures required to mitigate, prevent, prepare, respond and recover from disasters the affected area under their jurisdiction.
2. Emergency Operation Centers at district level supports disaster management groups while coordinating information, resources, and services necessary for disaster operations.
3. Functional agencies of district administration, DDMA are responsible for coordinating and managing specific threats and provide support to other agencies on and as require.

### **11.1 Inter-Departmental Coordination:**

The District Magistrate/DC is the head of the District administrative set up and chairperson of the DDMA as per the DM Act, 2005. He has been designated as the responsible officer in the District. The heads of different departments in the District will have separate roles to play depending on the nature and kind of disaster. The roles and responsibilities of the members of the DDMA will be decided in advance in consultation with the concerned members

### **11.2 Intra-Departmental Coordination:**

Each stake holder department will constitute departmental level disaster management committee pertaining to that department. The committees will organize quarterly meetings of the committee members to analyses the preparedness level of the department in regard to disaster management. The committee will also decide the measures to be taken for reducing the gaps in their capacities and keep the proper record of the same.

### **11.3 Circle/Block Level Coordination:**

As per the institutional mechanism, Circle Officer will call for the quarterly meeting the sub division level disaster management committee to review the preparedness level and plan to reduce the gaps identified. The chairperson will further report the situation to the DDMA and send the requisition of resources if required.

**11.4 Village Level Coordination:**

It is the village/ward level that manages disasters within their own communities. Circle level and district levels are to provide additional resources, support, assistance and expertise as required. Local coordination is the key management agency for disaster events at village/ward level. Locals coordinated disaster management approach through Village Land Management & Conservation Committee (VLMCC).

**11.5 Coordination with private sectors and NGOs:**

The strong linkages which private sectors and NGOs have with grassroots communities can be effectively harnessed for creating greater public awareness on disaster risk and vulnerability, initiating appropriate strategies for strengthening the capacity of stakeholder groups to improve disaster preparedness, mitigation and improving the emergency response capacities of the stakeholders. NGOs can bring in the financial resources from bi-lateral and multilateral donors for implementing pragmatic and innovative approaches to deal with disaster risk and vulnerability, by effectively integrating and converging the various government programs, schemes and projects to create the required synergy in transforming the lives of at-risk communities.

The DDMA will maintain a proper record of the private sectors and NGOs working in the district and also map the available resources for them. The DDMA will appoint a Nodal officer for coordination with private sectors and NGOs. The DDMA will call an annual meeting for mapping their resources. The meeting will be coordinated by the designated Nodal officer.

**11.6 State Level Coordination:**

The DDMA will call annual meeting with neighboring district authorities pertaining to Disaster risk reduction and capacity building by reducing the existing gaps through regular coordination. The DDMA will participate in the meetings called by SDMA or other State level authorities to promote coordination with other districts and state authorities.

**Coordination Matrix**

Hazard	Coordination	Subject of Coordination	Specification of the entity (which department /agency etc.)	Nature of Coordination during different DM Phase			
				Preparedness Phase	Response Phase	Mitigation Phase	Recovery and Reconstruction Phase
Earthquake, Flood, Storm, Landslide, Erosion	Inter-Dept. Coordination	Response, Recovery, Rehabilitation	GMC, GMDA, PWD, WRD, Forest, Agriculture, DTO, AH & Veterinary, PHE, Health & FW, APDCL,	Awareness generation and capacity building of the departmental officials.	Effective response as and when required.	Effective and rapid damage assessment and report	Approval of DDMA and execution of plan and estimates by the concerned departments
	Intra-Dept. Coordination	Relief, Restoration	DC, ADC, CO/BDOs, DPO, FO	Conduct of meeting of DDMA, CDMC,	Coordination with concerned	Damage assessment, listing of	Damage reports are verified and

				and identification of volunteers groups.	agencies through DEOC	resource inventories etc.	forwarded to DDMA for necessary approval.
Inter Block Coordination		BDO- (Dimoria, Chandrapur , Rani)		Training of block level functionaries through CDMC	Activate task forces for effective response	Capacity building of blocks level functionaries.	Damage reports to be forwarded to CDMC
Inter Village Coordination	Response, Relief, Restoration	GP/GB		Awareness generation of GBs	Distribution and arrangements for supply and storage of food and other items of basic necessities	Training of GBs/GP on relief camp management, basic response etc.	Updating information on civic amenities population Government and panchayat properties Housing and cattle/ livestock population.
Intermediate Level (Zila Parisad, ULBs, etc.)	Response, Recovery, Rehabilitation	Kamrup Zila Parishad		Awareness generation and capacity building of the departmental officials along with the Members of the ZP	Check the inventories of items required at a short notice for rescue and relief operations during the impact of disasters	Based on hazard and vulnerability prepare mitigation plan and consolidate	Planning implementation of rehabilitation of affected people, repair and reconstruction of damaged house, physical infrastructure, etc and return to normal economic
State Level Agencies	Search and Rescue	NDRF, SDRF, Armed and Para-military forces, Civil Defence, F&ES		Conduct of meeting of DDMA, Procure and keep rescue materials including boats ready and identification of Civil Defence volunteers	Coordinate search and rescue logistics during field operations	Training of trained personnel and volunteers who could be contacted at any time	Provide status reports of SAR updates throughout the affected areas.
NGOs, CBOs, VOAs, SHGs etc	Response, Relief, Rescue	Social Welfare,		Annual meeting of NGO's, CBO's & SHG's for mapping their resources	Coordination with the DDMA, GB, CD for response, relief and rescue operation	Training for identifying their strengths and allocation of responsibilities in area/ sector/ duty/ activities	Provide psycho-social support and mental health services to the survivors of the disasters.

## CHAPTER–XII

# STANDARD OPERATING PROCEDURES (SOPs) AND CHECKLIST

### 12.1 Standard Operating procedures (SOPs)

Standard Operating Procedures (SOPs) are a common method of implementing instructions. SOPs provide response protocols for carrying out specific responsibilities. They describe who, what, when and how SOPs are appropriate for complex tasks requiring step-by-step instructions for performing a task. The District is having the SOP based from the Guidelines of the Government of India.

### 12.2 Standard Operating Procedure of Emergency Support Functions (ESFs):

Emergency Support Functions (ESFs) are the essentials of Emergency Management comprising of various coordinating agencies, which manage and coordinate specific kinds of assistance common to all disasters types. Emergency Support Functions (ESFs) consisting of activities like Communication, Search and Rescue, evacuation, law and order, medical response and Trauma Counseling, water supply, electricity, warning and transport, relief etc. All of these emergency functions consist of emergency plans that would be activated at the time of emergency. The designated primary agency would be assisted by one or more supporting agencies (secondary agencies) and will be responsible to manage activities of the Emergency Support Functions and ensuring the mission accomplished. The primary and secondary agencies have the authority to execute response operations to directly support the district needs.

The ESF outlines the objective, scope, organization setup and SOPs for each ESF that is to be followed by the respective ESF agencies when the Responsible Officer will activate the response plan. SOPs provide a basic concept of the operations and responsibilities of Nodal and Secondary agencies.

At the district level, the Nodal Agency will lead the ESF with direct link to the RO of the District and the DEOC. The Nodal Agency will also be a member of the Incident Team lead by an officer of the Revenue/Police or other department as decided upon by the district IC, and as required by the IC who may draw upon some or all of the ESFs for onsite response. The Nodal Agency must hence nominate a Team Leader (TL).

The Nodal and Support Agencies must together or separately (as decided according to need of the specialized function) constitute QRTs with members, and appropriate (at least two) backstopping arrangements. TL of EOC would be on the basis of its authorities, resources, and capabilities in the functional area. He would be the member of Disaster Management Team that represents all of the key functions of the district in a single location under the direction of the RO.

### 12.3 Standard Operations Procedure (SOP) for Relief Camps/Shelter:

**Relief Camps:** The following draft standard operating protocol has been prepared by DDMA, Kamrup (M) for relief and management of relief camps in the aftermath of disaster:-

The District Level Relief Committee will review the relief measures. When a disaster is apprehended, the entire machineries of the district, including the officers of technical and other

departments, swing into action and maintains almost continuous contact with each location in the disaster threatened area.

Situation Assumptions:

1. The assemblage of affected people and their well-being within the camp.
2. There might be conflicts/riots, space issues.
3. Non-availability of life line resources.

Nodal Agency: Department of Revenue

**A. At Receipt of Warning:**

1. Call out the Officers and ensure that they remain in Headquarters.
2. Prepare a log book for recording chronological sequence of events.
3. Food & Kerosene:
  - i. Check out Availability of food (Rice, Chira, M.Dal,) and kerosene at block headquarters, with storage agents and other inaccessible pockets. BDO's shall contact all Storage Agents. They shall personally visit the godowns and verify the stocks. The Agents shall remain present at the store round the clock. BDO's shall immediately depute one officer to the place where the storage godowns are located.
  - ii. Supply department and one ADM shall remain in-charge of Godowns. Owners of the godowns shall be actively involved.
  - iii. Direct the godowns and FCI to remain open on all days, including Sundays and holidays, till situation gets to normal.
  - iv. Start movement of food stock and kerosene oil from block headquarters to areas that are likely to be cut off.
  - v. Start movement of food stock and kerosene oil from district headquarters to block headquarters.
4. Check availability of sand bags. Get sand bags from the nearest location.
5. Health sector: Make a rapid assessment of the following
  - i. Check up the stock of medicines, Bleaching powder, and halogen tablets. If necessary, send immediate requisition.
  - ii. Start movement of medicines, bleaching powder, etc to PHC's/CHC's
  - iii. Ensure that medical officers are in place at the PHCs and CHCs through police Stations, Circle Officer & Sr. BDOs/BDOs.
6. Vehicles: Requisition 15 small and 15 big vehicles immediately. Further requisition will be made as per need.
7. Empower Field Officials to requisition vehicles. Send 10 requisition forms to each Circle Officer, BDO and Police Station.
8. Boats: Requisition boats from other districts.
9. Ask Deputy Commissioner of other district, to remain ready for supply of stocks of rice and chira, if required.

**B. During Disaster:****Emergency Feeding Service**

1. Establish Mobilization center at the different points like railway station, airport and bus station for movement of relief supplies.
2. Inform all suppliers of relief material within 2-3 hours of the occurrence of the disaster to keep ready the required supply.
3. Arranging for transportation of relief suppliers
4. Provide assistance in establishing local officers, relief camps, etc. by providing beddings, furniture etc.
5. arrangement of suitable building for the storage of food, clothing and other emergency supplies
6. Arrangement of other safe areas for storage of non- perishable emergency supplies
7. Arrangement of staff to package and distribute emergency supplies
8. Arrangement security with areas where emergency supplies are stored
9. To co-ordinate with NGOs in supplies from arrival to distribution.
10. Arrangement for transportation of emergency supplies to storage at all pre-determined points
11. Get in touch with civil society organization. Allot those areas and function. Get them introduced to field functionaries. Ask them to prepare a list of volunteers. Make a quick inventory of their resources. Contact UNICEF, UNDP, OXFEM, Action Aid, CASA and other international agencies. Make a quick assessment of district needs and expectation from different agencies.

**Shelter:**

1. The shelter should be such that people have sufficient space for protection from adverse effects of the climate.
2. Ensure sufficient warmth, fresh air, security and privacy for their health and well being.
3. The covered area available per person should be on an average 3.5 to 4.5 square meter.
4. Each family should be provided separate tent, if possible.
5. In warm & humid climates, proper ventilation & protection from direct sunlight must be ensured.
6. If plastic tents or sheeting are available, provision of an insulating layer or a double skinned roof may be considered.
7. Tents should not be constructed too closely together and reasonable distance should be kept between the camps to provide some form of privacy.
8. Priority should be given to widows and women headed households, disabled and elderly people in tent/room distribution.
9. Temporary shelter should neatly be planned and made.
10. Tents with slanting sides should be avoided as they leave no space for mobility.
11. Tents with ventilation facilities may be provided to the people.

**12.4 Standard Operations Procedure (SOP) for Recovery and Rehabilitation:****12.4.1. Post Damage Assessment:**

- i. All Circle Officers will carry out damage assessment in their respective areas with the help of Lot Mondols/ Gaonburhas and other staffs.

- ii. Representatives from line department's viz. Agriculture, PWD, PHE, Water Resource, Animal Husbandry, Education, Health, Irrigation, Fishery, and Social Welfare will accompany Circle Officer & his staff during damage assessment.
- iii. All damage assessment reports to be submitted to DDMA on daily basis.

#### **12.4.2. Disposal of debris/ Carcasses/ Death Bodies:**

- i. DVO/GMC will ensure documentation and proper disposal of carcasses to prevent spread of epidemic and submit report to respective Circle Offices & DDMA, Kamrup (M).
- ii. Superintendent of Police & Joint Director of Health Services will ensure proper disposal of dead bodies and handing over to the families. Record of the same to be sent to Circle Offices & DDMA.
- iii. DAO will ensure clearance of debris/ De-siltation etc. from the farm land. He will prepare a proposal for the same at an early date and submit to DDMA for sanction of fund etc.
- iv. Circle Officers will direct respective Panchayat for clearance of debris from the affected villages by integrating schemes under MNREGA and other ongoing projects.
- v. GMC will identify dumping area for disposal of debris, garbage, silts etc.

#### **12.4.3. Assistance to House damage/ School-College/ Infrastructure damage:**

- i. Circle Officers will prepare and submit proposal for assistance against house damage under SDRF within 15 days of receding of flood water.
- ii. Inspector of Schools, DEEO will approach respective Circle Offices for assistance under SDRF against the damages caused to the school buildings.
- iii. The Task Force in coordination with the concerned line departments shall prepare and submit proposals for Rehabilitation Grant against Storm/ Flood/ Cyclone/ Fire/ Lighting/ Erosion/ Landslide as per the SDRF norms expeditiously. Further, the Task Force shall also prepare list of beneficiaries for admissible assistance under SDRF norms for Agriculture/ Animal Husbandry/ Handicraft/ Handloom/ Housing/ Fishery/ Sericulture and proposals for immediate restoration of damaged minor infrastructures like Primary School, Primary Health Centre, Electric Poles wires, Panchayat Ghar, Anganwadi Centre etc. and submit the same to the District Disaster Management Authority (DDMA), Kamrup Metro through the office Circle Officer.
- iv. All departments will integrate their ongoing departmental development projects/ schemes where possible for restoration of the damages caused due to flood. All departments will incorporate flood mitigation measures in their developmental plans and schemes under SDRF by involving local community.
- v. DDMA will approach Govt. for any assistance required for recovery & restoration of infrastructure within one month

#### **12.4.4. Assistance to Farmers, Fish Farmers, Sericulture, Horticulture, Weavers, Dairy farmers etc.:**

- i. DAO, Fishery Dev. Officer, Dy. Director of Sericulture, Dy. Director of Handloom & textile, Dist. Dairy Officer will submit proposal for assistants to the farmers & weavers under SDRF as per norms within 15 days of receding of flood for approval by DDMA. They will ensure insurance of the crops & live stokes.

- ii. All departments will integrate their departmental plans to assist the affected farmers and will submit report he same to DDMA for onward submission to Govt.

#### 12.4.5. Administrative Relief:

The office of Deputy Commissioner is responsible for providing relief to the victims of natural & manmade disasters like flood, landslide, storm lighting, earthquakes, fire, accidents etc. The onsite distribution will be done by Circle Incident Response Team. The updated needs will be communicated to the DDMA and the DDMA will ensure the regular supply of the required items. The relief distribution will include essential items which serves the basic needs of the affected community. Food items (as per notified Government Norms) will be provided by District Administration/ Circle Officer Assistant Commissioner directly to the affected families.

Each and every civilian, who is affected in man-made violence and natural calamities that may occur in the State, is entitled to receive GR (Gratuitous Relief). The guidelines/ instruction regarding payment of GR are clearly mentioned in the Assam Disaster Management Manual, 2015. The Deputy Commissioners of the Districts are the competent authority to accord sanction of GR.

The details of GR admissible as per existing norms are as follows:

Sl. No.	Name Of Item	Scale of GR (per head per day)		Remarks
1	a) Food-grains etc. (cooked or otherwise)	Adult	600 gms.	12 yrs. & below
		Minor	400 gms.	
	b) Pulses		100 gms.	
	c) Salt		30 gms.	
	d) Mustard Oil		30 gms	
	e) Chira	Adult	600 gms.	12 yrs. & below
	Minor	400 gms.		
	f) Gur		100 gms.	
2	Cash doles	Adult	Rs. 60.00	Only those families, who have no food reserves or whose food reserves have been wiped out in a calamity and who have no other immediate means of support and are not housed in Relief Camps and cannot be provided with food-grains etc. as mentioned under Sl.1 above due to unavoidable circumstances are only entitled. * Items No.1(e) of Revised SDRF Guidelines may be referred to.
	Minor	Rs. 45.00		
3	Assistance for loss of clothes & utensils (per family)	Clothing	Rs. 1,800.00	Families, whose houses have been washed away/ fully damaged/ severely inundated for more than a week and who have suffered loss of clothing/ utensils/ household goods, are only entitled. * Items No.1(d) of Revised SDRF Guidelines may be referred to.
	Utensils/ house-hold goods	Rs. 2,000.00		
4	Supply of fodder for livestock	a) Buffalo	05 kg.	
		b) Cow	04 kg.	
		c) Sheep	01 kg.	

		d) Goat	01 kg.	
		e) Horse	05 kg.	
5	Provision of fodder/ feed concentrate in Cattle Camps per day	Large animals	Rs. 70.00	* Items No.6(ii) of Revised SDRF Guidelines may be referred to.
		Small animals	Rs. 35.00	

**Revised list of items & norms of assistance from State Disaster Response Fund (SDRF)/ National Disaster Response Fund (NDRF) (Period 2015-20, MHA Letter No. 32-7/2014-NDM-I Dated 8th April 2015):**

Sl. No.	Items	Norms of Assistance
1	2	3
<b>1.</b>	<b>GRATUITOUS RELIEF</b>	
	a) Ex-Gratia payment to families of deceased persons.	<b>Rs. 4.00 lakh</b> per deceased person including those involved in relief operations or associated in preparedness activities, subject to certification regarding cause of death from appropriate authority.
	b) Ex-Gratia payment for loss of a limb or eye(s).	<b>Rs. 59,100/-</b> per person, when the disability is between 40% and 60%. <b>Rs. 2.00 lakh</b> per person, when the disability is more than 60%. Subject to certification by a doctor from a hospital or dispensary of Government, regarding extent and cause of disability.
	c) Grievous injury requiring hospitalization	<b>Rs.12,700/-</b> per person requiring hospitalization for more than a week. <b>Rs.4,300/-</b> per person requiring hospitalization for less than a week.
	d) Clothing and utensils/ house-hold goods for families whose houses have been washed away/ fully damaged/severely inundated for more than two days due to a natural calamity.	<b>Rs. 1, 800/-</b> per family, for loss of clothing. <b>Rs.2,000/-</b> per family, for loss of utensils/ household goods.
	e) Gratuitous relief for families whose livelihood is seriously affected.	<b>Rs. 60/- per adult and Rs. 45/- per child</b> , not housed in relief camps. State Govt. will certify that identified beneficiaries are not housed in relief camps. Further State Government will provide the basis and process for arriving at such beneficiaries district-wise. Period for providing gratuitous relief will be as per assessment of the State Executive Committee (SEC) and the Central Team (in case of NDRF). The default period of assistance will upto to 30 days, which may be extended upto 60 days in the first instance, if required, and subsequently upto 90 days in case of drought/ pest attack. Depending on the ground situation, the State Executive Committee can extend the time period beyond the prescribed limit subject to that expenditure on this account should not exceed 25% of SDRF allocation for the year.

<b>2.</b>	<b>SEARCH &amp; RESCUE OPERATIONS</b>	
	a) Cost of search and rescue measures/ evacuation of people affected/ likely to be affected	As per actual cost incurred, assessed by SEC and recommended by the Central Team (in case of NDRF). - By the time the Central Team visits the affected area, these activities are already over. Therefore, the State Level Committee and the Central Team can recommend actual / near-actual costs.
	b) Hiring of boats for carrying immediate relief and saving lives.	As per actual cost incurred, assessed by SEC and recommended by the Central Team (in case of NDRF). The quantum of assistance will be limited to the actual expenditure incurred on hiring boats and essential equipment required for rescuing stranded people and thereby saving human lives during a notified natural calamity.
<b>3</b>	<b>RELIEF MEASURES</b>	
	a) Provision for temporary accommodation, food, clothing, medical care, etc. for people affected/ evacuated and sheltered in relief camps.	As per assessment of need by SEC and recommendation of the Central Team (in case of NDRF), for a period up to 30 days. The SEC would need to specify the number of camps, their duration and the number of persons in camps. In case of continuation of a calamity like drought, or widespread devastation caused by earthquake or flood etc., this period may be extended to 60 days, and upto 90 days in cases of severe drought. Depending on the ground situation, the State Executive Committee can extend the time period beyond the prescribed limit subject to that expenditure on this account should not exceed 25% of SDRF allocation for the year. Medical care may be provided from National Rural Health Mission (NRHM).
	b) Air dropping of essential supplies	As per actual, based on assessment of need by SEC and recommendation of the Central Team (in case of NDRF). - The quantum of assistance will be limited to actual amount raised in the bills by the Ministry of Defence for airdropping of essential supplies and rescue operations only.
	c) Provision of emergency supply of drinking water in rural areas and urban areas	As per actual cost, based on assessment of need by SEC and recommended by the Central Team (in case of NDRF), up to 30 days and may be extended upto 90 days in case of drought. Depending on the ground situation, the State Executive Committee can extend the time period beyond the prescribed limit subject to that expenditure on this account should not exceed 25% of SDRF allocation for the year.
<b>4.</b>	<b>CLEARANCE OF AFFECTED AREAS</b>	
	a) Clearance of debris in public areas.	As per actual cost within 30 days from the date of start of the work based on assessment

		of need by SEC for the assistance to be provided under SDRF and as per assessment of the Central team for assistance to be provided under NDRF.
	b) Draining off flood water in affected areas	As per actual cost within 30 days from the date of start of the work based on assessment of need by SEC for the assistance to be provided under SDRF and as per assessment of the Centralteam(in case of NDRF).
	c) Disposal of dead bodies/ Carcasses	As per actual, based on assessment of need by SEC and recommendation of the Central Team (in case of NDRF).
<b>5</b>	<b>AGRICULTURE</b>	
<b>(i)</b>	<b>Assistance farmers having landholding upto 2 Ha</b>	
<b>A</b>	<b>Assistance for land and other loss</b>	
	a) De-silting of agricultural land (where thickness of sand/ silt deposit is more than 3", to be certified by the competent authority of the State Government.)	<b>Rs. 12,200/-</b> per hectare for each item. (Subject to the condition that no other assistance/ subsidy has been availed of by/ is eligible to the beneficiary under any other Government Scheme)
	b) Removal of debris on agricultural land in hilly areas	
	c) De-silting/ Restoration/ Repair of fishfarms	
	d) Loss of substantial portion of land caused by landslide, avalanche, change of course of rivers.	<b>Rs. 37,500/-</b> per hectare to only those small and marginal farmers whose ownership of the land is legitimate as per the revenue records.
<b>B.</b>	<b>Input subsidy (where crop loss is 33% and above)</b>	
	a) For agriculture crops, horticulture crops and annual plantation crops	<b>Rs. 6,800/-</b> per ha. in rain fed areas and restricted to sown areas. <b>Rs. 13,500/-</b> per ha. in assured irrigated areas, subject to minimum assistance not less than Rs.1000 and restricted to sown areas.
	b) Perennial crops	<b>Rs. 18,000/-</b> ha. for all types of perennial crops subject to minimum assistance not less than <b>Rs. 2000/-</b> and restricted to sown areas.
	c) Sericulture	<b>Rs. 4,800/-</b> per ha. for Eri, Mulberry, Tussar <b>Rs. 6,000/-</b> per ha. for Muga.
<b>(ii)</b>	<b>Input subsidy to farmers having more than 2 Ha of landholding</b>	<b>Rs. 6,800/-</b> per hectare in rain fed areas and restricted to sown areas. <b>Rs.13,500/-</b> per hectare for areas under assured irrigation and restricted to sown areas. <b>Rs. 18,000/-</b> per hectare for all types of perennial crops and restricted to sown areas. Assistance may be provided where crop loss is 33% and above, subject to a ceiling of 2 ha. per farmer.
<b>6.</b>	<b>ANIMAL HUSBANDRY - ASSISTANCE TO SMALL AND MARGINAL FARMERS</b>	
	i) Replacement of milch animals, draught animals or animals used for haulage.	<b>Milch animals -</b> <b>Rs. 30,000/-</b> Buffalo/ cow/ camel/ yak/ Mithun etc. <b>Rs. 3,000/-</b> Sheep/ Goat/ Pig  <b>Draught animals -</b>

		<p><b>Rs. 25000/-</b> Camel/ horse/ bullock, etc.  <b>Rs. 16,000/-</b> Calf/ Donkey/ Pony/ Mule</p> <p>- The assistance may be restricted for the actual loss of economically productive animals and will be subject to a ceiling of 3 large milch animals or 30 small milch animals or 3 large draught animals or 6 small draught animals per household irrespective of whether a household has lost a larger number of animals. (The loss is to be certified by the Competent Authority designated by the State Government).</p> <p><b>Poultry:-</b>  Poultry @ 50/- per bird subject to a ceiling of assistance of <b>Rs 5000/-</b> per beneficiary household. The death of the poultry birds should be on account of a natural calamity.</p> <p><i>Note:</i> - Relief under these norms is not eligible if the assistance is available from any other Government Scheme, e.g. loss of birds due to Avian Influenza or any other diseases for which the Department of Animal Husbandry has a separate scheme for compensating the poultry owners.</p>
	<p>ii) Provision of fodder/ feed concentrates including water supply and medicines in cattle camps.</p>	<p>Large animals- <b>Rs. 70/-</b> per day.  Small animals- <b>Rs. 35/-</b> per day.  Period for providing relief will be as per assessment of the State Executive Committee (SEC) and the Central Team (in case of NDRF). The default period for assistance will be upto 30 days, which may be extended upto 60 days in the first instance and in case of severe drought up to 90 days. Depending on the ground situation, the State Executive Committee can extend the time period beyond the prescribed limit, subject to the stipulation that expenditure on this account should not exceed 25% of SDRF allocation for the year.</p> <p>Based on assessment of need by SEC and recommendation of the Central Team, (in case of NDRF) consistent with estimates of cattle as per Livestock Census and subject to the certificate by the competent authority about the requirement of medicine and vaccine being calamity related.</p>
	<p>iii) Transport of fodder to cattle outside cattle camps</p>	<p>As per actual cost of transport, based on assessment of need by SEC and recommendation of the Central Team (in case of NDRF) consistent with estimates of cattle as per Livestock Census.</p>
<b>7</b>	<b>FISHERY</b>	
	<p>i) Assistance to Fisherman for repair/ replacement of boats, nets – damaged or lost</p> <ul style="list-style-type: none"> <li>-- Boat</li> <li>-- Dugout-Canoe</li> </ul>	<p><b>Rs. 4,100/-</b> for repair of partially damaged boats only  <b>Rs. 2,100/-</b> for repair of partially damaged net</p>

	-- Catamaran -- net (This assistance will not be provided if the beneficiary is eligible or has availed of any subsidy/ assistance, for the instant calamity, under any other Government Scheme.)	<b>Rs. 9,600/-</b> for replacement of fully damaged boats <b>Rs. 2,600/-</b> for replacement of fully damaged net
	ii) Input subsidy for fish seed farm	<b>Rs. 8,200</b> per hectare. (This assistance will not be provided if the beneficiary is eligible or has availed of any subsidy/ assistance, for the instant calamity, under any other Government Scheme, except the one time subsidy provided under the Scheme of Department of Animal; Husbandry, Dairying and Fisheries, Ministry of Agriculture.)
<b>8</b>	<b>HANDICRAFTS/ HANDLOOM –ASSISTANCE TO ARTISANS</b>	
	i) For replacement of damaged tools/ equipment	<b>Rs. 4,100</b> per artisan for equipments. - Subject to certification by the competent authority designated by the Government about damage and its replacement.
	ii) For loss of raw material/ goods in process/ finished goods	<b>Rs. 4,100</b> per artisan for raw material. - Subject to certification by Competent Authority designated by the State Government about loss and its replacement.
<b>9</b>	<b>HOUSING</b>	
	<b>a) Fully damaged/ destroyed houses</b>	
	i) Pucca house	<b>Rs. 95,100/-</b> per house, in plain areas.
	ii) Kutcha House	
	<b>b) Severely damaged houses</b>	<b>Rs. 1,01,900/-</b> per house, in hilly areas including Integrated Action Plan (IAP) districts.
	i) Pucca House	
	ii) Kutcha House	
	<b>(c) Partially Damaged Houses -</b>	
	(i) Pucca (other than huts) where the damage is at least 15 %	<b>Rs. 5,200/-</b> per house
	(ii) Kutcha (other than huts) where the damage is at least 15 %	<b>Rs. 3,200/-</b> per house
	<b>d) Damaged / destroyed huts:</b>	<b>Rs. 4,100/-</b> per hut, (Hut means temporary, make shift unit, inferior to Kutcha house, made of thatch, mud, plastic sheets etc. traditionally recognized as hut by the State/ District authorities.)  Note: -The damaged house should be an authorized construction duly certified by the Competent Authority of the State Government.
	e) Cattle shed attached with house	<b>Rs. 2,100/-</b> per shed.
<b>10</b>	<b>INFRASTRUCTURE</b>	
	<i>Repair/restoration (of immediate nature) of damaged infrastructure:</i>  <i>(1) Roads &amp; bridges (2) Drinking Water Supply Works, (3) Irrigation, (4) Power (only limited to immediate restoration of electricity supply in the affected areas), (5) Schools, (6) Primary Health</i>	<b>Activities of immediate nature :</b> Illustrative lists of activities which may be considered as works of an immediate nature are given in the enclosed Appendix.  <b>Assessment of requirements :</b> Based on assessment of need, as per States'

<p><i>Centres, (7) Community assets owned by Panchayat.</i></p> <p>Sectors such as Telecommunication and Power (except immediate restoration of power supply), which generate their own revenues, and also undertake immediate repair/ restoration works from their own funds/ resources, are excluded.</p>	<p>costs/ rates/ schedules for repair, by SEC and recommendation of the Central Team (in case of NDRF).</p> <ul style="list-style-type: none"> <li>- As regards repair of roads, due consideration shall be given to Norms for Maintenance of Roads in India, 2001, as amended from time to time, for repairs of roads affected by heavy rains/floods, cyclone, landslide, sand dunes, etc. to restore traffic. For reference these norms are</li> <li>• Normal and Urban areas: upto 15% of the total of Ordinary Repair (OR) and Periodical Repair (PR).</li> </ul> <p>Hills: upto 20% of total of OR and PR.</p> <ul style="list-style-type: none"> <li>- In case of repair of roads, assistance will be given based on the notified Ordinary Repair (OR) and Periodical Renewal (PR) of the State. In case OR &amp; PR rate is not available, then assistance will be provided @ Rs 1 lakh/km for State Highway and Major District Road and @ Rs. 0.60 lakh/km for rural roads. The condition of “State shall first use its provision under the budget for regular maintenance and repair” will no longer be required, in view of the difficulties in monitoring such stipulation, though it is a desirable goal for all the States.</li> <li>- In case of repairs of Bridges and Irrigation works, assistance will be given as per the schedule of rates notified by the concerned States. Assistance for micro irrigation scheme will be provided @ <b>Rs. 1.5 lakh</b> per damaged scheme. Assistance for restoration of damaged medium and large irrigation projects will also be given for the embankment portions, on par with the case of similar rural roads, subject to the stipulation that no duplication would be done with any ongoing schemes.</li> <li>- Regarding repairs of damaged drinking water schemes, the eligible damaged drinking water structures will be eligible for assistance @ <b>Rs. 1.5 lakh</b>/ damaged structure.</li> <li>- Regarding repair of damaged primary and secondary schools, primary health centres, Anganwadi and community assets owned by the Panchayats, assistance will be given @ <b>Rs 2 lakh</b>/damaged structure.</li> <li>- Regarding repair of damaged power sector, assistance will be given to damaged conductors, poles and transformers upto the level of 11 kV. The rate of assistance will be @ <b>Rs. 4000/poles, Rs 0.50 lakh</b></li> </ul>
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		<b>per km of damaged conductor and Rs. 1.00 lakh per damaged distribution transformer.</b>
11	Procurement of essential search, rescue and evacuation equipments including communication equipments, etc. for response to disaster.	<ul style="list-style-type: none"> <li>- Expenditure is to be incurred from SDRF only (and not from NDRF), as assessed by the State Executive Committee (SEC).</li> <li>- The total expenditure on this item should not exceed 10 % of the annual allocation of the SDRF.</li> </ul>
12	Capacity Building	<ul style="list-style-type: none"> <li>- Expenditure is to be incurred from SDRF only (and not from NDRF), as assessed by the State Executive Committee (SEC).</li> <li>- The total expenditure on this item should not exceed 5% of the annual allocation of the SDRF.</li> </ul>
13	State specific disasters within the local context in the State, which are not included in the notified list of disasters eligible for assistance from SDRF/ NDRF, can be met from SDRF within the limit of 10% of the annual funds allocation of the SDRF.	<ul style="list-style-type: none"> <li>- Expenditure is to be incurred from SDRF only (and not from NDRF), as assessed by the State Executive Committee (SEC).</li> <li>- The norm for various items will be the same as applicable to other notified natural disasters, as listed above. or</li> <li>- In these cases, the scale of relief assistance against each item for 'local disaster' should not exceed the norms of SDRF.</li> <li>- The flexibility is to be applicable only after the State has formally listed the disasters for inclusion and notified transparent norms and guidelines with a clear procedure for identification of the beneficiaries for disaster relief for such local disasters', with the approval of SEC.</li> </ul>

**12.4.6. Reconstruction of Houses/Roads Damaged / Destroyed:**

**PWD (Roads) and PWD (Buildings) division:**

1. Pre & Post Disaster: As PWD (Roads) Divn and PWD (Buildings) Divn is an executive authority wherein all construction/ improvement works are executed through an agency or contractor, the restoration/ re-construction works during Pre & Post disaster period will be carried out as per existing APWD norms / specification and procedures as current in the state.
2. During Disaster (Emergency Work)-
  - A. Execution through other agency/ contractor:
    - a. EE/AEE/AE/JE will issue order at site to carry out any restoration work to any person/ group capable to execute the work and the same will be intimated to nodal officer of the department and DDMA forthwith.
    - b. As far as possible, work will be negotiated as per current SOR of APWD/ Local market rate else the same will be allotted at the rate agreed upon at the site itself.
    - c. Measurement recorded in the field book will be accepted for payment. Payment will be made from the budget allocation of disaster management or any other source mobilized/ arranged by the DDMA.
  - B. Departmental execution:
    - a. Labourers available with the department will be engaged.

- b. Casual labours at the local rate will be engaged if necessity arises.
  - c. Locally available construction materials will be utilised for the work.
  - d. P.O.L. will be procured from the nearest petrol depot.
  - e. Measurement for casual labours engaged/ materials procured and utilised will be recorded in the field book.
  - f. Cash payment for casual labours and materials purchased will be arranged as per the norms.
- C. Other Methods and Norms of Reconstruction:
- a. Owner Driven Reconstruction
  - b. Public Private Partnership Program (PPPP). Under the PPPP the houses are reconstructed by the NGOs for the beneficiaries
  - c. All the houses should be insured.
  - d. Financial, technical and material assistance provided by the government.
  - e. Incorporation of flood resistant measures in the new constructions / Houses.
  - f. The material assistance provided through material banks at subsidized rates.

#### **7. Assistance from NDRF / SDRF / Paramilitary forces:**

If the district administration feels that the situation is beyond its control then immediate assistance could be sought from NDRF / SDRF/ Paramilitary for carrying out the relief and rehabilitation operations including construction works for road clearance, construction of emergency bridges, shelter places, camps, distribution of relief materials etc.

#### **8. Outside Assistance:**

Outside assistance may be sought from: Indian Red Cross Society, Local & International NGOs working in the district, Urban Local Bodies, Self Help Groups, Nehru Yuva Kendra, NCC, NSS, and Scout Guide whenever it is necessary. Outside assistance will be allowed under the supervision of district administration. Standard Operating procedures for the Nodal Agency

#### **12.5 Standard Operations Procedure (SOP) for QRT on Help Lines, Warning Dissemination:**

The QRT members will reach to the Nodal office as soon as they will get instructions. Once the QRTs receive any intimation from the Nodal Officer to reach at the site they would reach to the site at the earliest, without wasting any time.

- At the emergency site QRT members will take stock of the situation from the site communication manager
- QRTs would assess the ground situation and would send sectoral report to the District ESF agency

A sectoral report would contain following:

An assessment of overall damage, listing specifically:

- Overhead route damage (in miles/ kilometers)
- Cable damage (in yards/meters)
- Specific equipment damaged
- Establish a temporary communication facility for use by the public
- Identify requirements of manpower, vehicles and other materials and equipments

Give priority and concentrate on repairs and normalization of communication system at disaster affected areas

- Begin restoration by removing and salvaging wires and poles from the roadways with the help of casual labourers
- Carry out temporary building repairs to establish a secured storage area for the equipments and salvaged materials
- Report all activities to head quarter
- Begin restoration by removing damaged wires and poles through recruited casual labourers
- Establish a secure storage area for incoming equipments and materials

### **12.6 Standard Operations Procedure (SOP) for Emergency Medical Response:**

All disasters affect human life and health. Health is both a main objective and a yardstick in disaster management. This EMP will be responsible for the emergency medical treatment and mental trauma support in the aftermath of any hazardous event.

The Emergency Medical Services and Public Health counseling will look after emergency treatment for the injured people immediately after the disaster take place.

**Functions:** The function includes:

- District level health services responsibilities shall be mobilized to provide emergency medical treatment to the injured; sustained hospital care to the seriously injured or seriously ill
- Continue care at an appropriate level to patients in hospital and outpatients at the time of the earthquake and other hazards response
- Evacuation of the sick and injured to a location where care can be provided as well as sustained emergency care until evacuation can be carried out with medical or paramedical supervision
- District level coordination of delivery of medical supplies, blood and blood Products; operation of ambulance services
- Prevention of epidemic through education of the general population
- Carrying out of health inspections of food and water supplies
- Initiation of vaccination programs under epidemic conditions. Radiological and toxicological services could be in increased demand and require an expanded response
- There will also be a need to provide initial establishing of death, and the temporary safe storage of human remains in support of coroner operations.

The Health Department is to identify some safe locations to use as first aid centers and to shift the patients whenever needed. In each ward the general public should be trained up for first aid assistance and dispensary should maintain a rotating reserve stock of blood, saline, bandage, cotton, benzene, dettol and life saving drugs/injections.

**Immediate task:**

- Appoint one person as Nodal Health Officer for the district
- Ensure that the personnel working within the district come under the direct control of the District Nodal Health Officer
- Any other personnel once deployed for the purpose will directly come under the control

of the District Nodal Health Officer

- Identify emergency patient holding facilities
- To prepare and keep ready Mobile Hospitals and stock them with emergency equipment that may be required after the disaster
- Transfer patients who can be removed from hospitals to make room for the injured; where necessary implement a system of staging casualty collection, treatment, and evacuation to places where facilities are available (probably outside the Operational Area)
- Arrange delivery of emergency medical supplies; arrange for temporary suitable storage of the dead until taken over by the coroner

All efforts should be made to keep the health care receiving centers and outpatient service centers free from any kind of panic; prevent disease outbreak or spread; attend to mental health requirements; expand local public health services as necessary, particularly the supply of essential drugs and pharmaceuticals in areas where the private sector drug stores have ceased to function; carry out sanitary inspections.

### **12.7 Standard Operations Procedure (SOP) for Epidemic:**

On detection of outbreak of any epidemic in the district, the administration should investigate the root cause of the epidemic and initiate the action to mitigate the same as follows:

- The people affected should be immediately shifted to hospitals for medical attention and kept isolated to prevent spread of disease.
- Additional medical help/ medicines may be mobilized from neighbouring districts.
- Vaccination should be given to all unaffected persons and the general public should be educated about the precautionary steps to be taken against the prevailing epidemic.
- Steps should be taken to decontaminate the source of epidemic like water bodies (lake, wells etc.).
- There should be proper temporary morgue arrangement for safe preservation and disposal of corpses of persons died of epidemic.
- Clean up drive should be taken in the affected area as filth is the major source of contamination.
- Depending on prevailing situations, the administration should take action to close all the road side eateries/ food stalls and advise them to destroy all stale food. Strict control should be exercised on the licensed restaurants.
- Decision may be taken to close down all schools, colleges and other places of mass congregation like cinema halls, shopping malls, gyms etc.

### **12.8 Standard Operations Procedure (SOP) for COVID-19 Pandemic:**

Since the early days of the COVID-19 crisis the scientific community has constantly been striving to shed light on various issues such as the mechanisms driving the spread of the virus, its environmental and socio-economic impacts, and necessary recovery and adaptation plans and policies. Given the high concentration of population and economic activities in cities, they are often hotspots of COVID-19 infections. The following draft standard operating protocol has been prepared by DDMA, Kamrup (M) for COVID-19 Pandemic in the district.

### 12.8.1 Responsibilities of Rapid Response Team (RRT):

Members of the central RRT will work in close coordination with state and district RRTs both at district and circle levels. They will assist in following activities:

- Work with the State to identify geographically defined containment and buffer zones for cluster containment based on epidemiological data
- Assist state to plan and implement containment strategy
- Supporting the state RRT in Surveillance
- Assist in establishing system for sample collection, transfer to nearest designated laboratory
- Assist State in setting-up of COVID-19 control room
- Review state planning of setting-up of COVID-19 designated health facility as per GOI guidelines
- Review implementation of infection prevention and control practices in COVID19 designated health facilities
- Review risk communication for quarantine, social distancing, cancelling public transport etc
- Assist state in contingency planning for surge in COVID-19 cases (identification of hospital beds, PPE stock, ventilators, hospital staff, earmarking private facilities for shifting patients after public facilities are saturated)
- Assist state in review and analysis of COVID 19 data on daily basis.

### 12.8.2 Covid Surveillance team and their functions:

1. The Circle/Block level COVID Management team shall notify area wise in charges for COVID Surveillance under a medical officer working in that area.
2. The Surveillance Teams (consisting ANM, SW/ MPH, ASHA Supervisor/ASHA, revenue officials Mandal/ Gaon Burah etc) shall be responsible for initial assessment of the patient and whether the requisite facilities are there for home isolation.
3. The health worker should contact the patient daily preferably in-person or over telephone/ mobile and obtain the details of temperature, pulse, oxygen saturation, patients overall wellness and worsening of signs/ symptoms.
4. The Surveillance Team shall carry sufficient numbers of medicine kits and provide medicine Kits to the patient/ caregiver as per the policy of the State Government. The Kit may contain masks, paracetamol and other medicines along with a detailed leaflet to educate patients and family members in local language
5. The surveillance Team shall also undertake the patient education on the disease, its symptoms, warning signs, COVID appropriate behaviour and need for vaccination for all eligible members. 19. If there is reported worsening of signs/ symptoms and/or fall in oxygen saturation, the Surveillance team shall re-assess the patient and inform the Control Room for shifting the patient to hospital. 20. Immediate medical attention must be sought if serious signs or symptoms develop. These could include:
  - a. Unresolved High-grade fever (more than 100° F for more than 3 days)
  - b. Difficulty in breathing,
  - c. Dip in oxygen saturation (SpO2 93% on room air at least 3 readings within 1 hour) or respiratory rate >24/ min

- d. Persistent pain/pressure in the chest, v. Mental confusion or inability to arouse,
  - e. Severe fatigue and muscle pain
6. Patient under home isolation will stand discharged and end isolation after at least 7 days have passed from testing positive and no fever for 3 successive days and they shall continue wearing masks. However, they will continue for 7 more days of Home quarantine. The Surveillance team may inform the same to the patient.
  7. There is no need for re-testing after the home isolation period is over.
  8. Asymptomatic contacts of infected individuals need not undergo COVID test & monitor health in home quarantine. However, in case of symptomatic contacts and large number of positive cases in the same area may require cluster sampling by the surveillance team.
  9. In case of patients who are self testing and reporting as positive to 104/ NHM Citizen App/ District Control room and referred to the surveillance team, the surveillance team shall do house visit to confirm the status of the patient and up on their confirmation back to district control room, necessary registration as positive patient shall be done by the concerned DSO, IDSP. Such patients also shall be managed with same guidelines as above.

The Deputy Commissioner of the district shall remain overall in charge for COVID management of the district and shall notify the officials for coordination at all levels.

### **12.8.3 COVID Dedicated Facilities:**

#### **12.8.3.1 COVID Care Center (CCC):**

- 1 The COVID Care Centers shall offer care only for cases that have been clinically assigned as mild or very mild cases or COVID suspect cases.
- 2 The COVID Care Centers are makeshift facilities. These may be set up in hostels, hotels, schools, stadiums, lodges etc., both public and private. If need be, existing quarantine facilities could also be converted into COVID Care Centers. Functional hospitals like CHCs, etc, which may be handling regular, non-COVID cases should be designated as COVID Care Centers as a last resort. This is important as essential non COVID Medical services like those for pregnant women, newborns etc, are to be maintained.
- 3 Wherever a COVID Care Center is designated for admitting both the confirmed and the suspected cases, these facilities must have separate areas for suspected and confirmed cases with preferably separate entry and exit. Suspect and confirmed cases must not be allowed to mix under any circumstances.
- 4 As far as possible, wherever suspect cases are admitted in the COVID Care Center, preferably individual rooms should be assigned for such cases.
- 5 Every Dedicated COVID Care Centre must necessarily be mapped to one or more Dedicated COVID Health Centers and at least one Dedicated COVID Hospital for referral purpose (details given below).
- 6 Every Dedicated COVID Care Centre must also have a dedicated Basic Life Support Ambulance (BLSA) equipped with sufficient oxygen support on 24x7 basis, for ensuring safe transport of a case to Dedicated higher facilities if the symptoms progress from mild to moderate or severe.
- 7 The human resource to man these Care Centre facilities may also be drawn from AYUSH doctors. Training protocols developed by AIIMS is uploaded on MoHFW website. Ministry of AYUSH has also carried out training sessions. The State AYUSH Secretary/Director should be involved in this deployment. State wise details of trained

AYUSH doctors have been shared with the States. Their work can be guided by an Allopathic doctor.

#### **12.8.3.2 Dedicated COVID Health Centre (DCHC):**

- 1 The Dedicated COVID Health Centre is hospitals that shall offer care for all cases that have been clinically assigned as moderate.
- 2 These should either be a full hospital or a separate block in a hospital with preferably separate entry/exit/zoning.
- 3 Private hospitals may also be designated as COVID Dedicated Health Centers.
- 4 Wherever a Dedicated COVID Health Center is designated for admitting both the confirmed and the suspect cases with moderate symptoms, these hospitals must have separate areas for suspect and confirmed cases. Suspect and confirmed cases must not be allowed to mix under any circumstances.
- 5 These hospitals would have beds with assured Oxygen support.
- 6 Every Dedicated COVID Health Centre must necessarily be mapped to one or more Dedicated COVID Hospitals.
- 7 Every DCHC must also have a dedicated Basic Life Support Ambulance (BLSA) equipped with sufficient oxygen support for ensuring safe transport of a case to a Dedicated COVID Hospital if the symptoms progress from moderate to severe.

#### **12.8.3.3 Dedicated COVID Hospital (DCH):**

- 1 The Dedicated COVID Hospitals are hospitals that shall offer comprehensive care primarily for those who have been clinically assigned as severe.
- 2 The Dedicated COVID Hospitals should either be a full hospital or a separate block in a hospital with preferably separate entry/exit.
- 3 Private hospitals may also be designated as COVID Dedicated Hospitals.
- 4 These hospitals would have fully equipped ICUs, Ventilators and beds with assured Oxygen support.
- 5 These hospitals will have separate areas for suspect and confirmed cases. Suspect and confirmed cases should not be allowed to mix under any circumstances.
- 6 The Dedicated COVID Hospitals would also be referral centers for the Dedicated COVID Health Centers and the COVID Care Centers.

Essential personal hygiene items like bucket, soap, masks etc. up to value of Rs 500/- per person, will be provided as one time measure, at the start of institutional quarantine. At the end of institutional quarantine, the individual will be allowed to take these items while going for home quarantine.

Providing food to persons in Institutional Quarantine the DC, Kamrup (M) will ensure that the quality of food provided is not compromised within the upper ceiling of Rs. 500/- per person per day, in any type of institutional quarantine.

#### **12.8.4 Transport of Infectious Patients:**

It is recommended that transport of infectious patients is limited to movement considered medically essential by the clinicians, e.g. for diagnostic or treatment purposes. Where infectious patients are required to be transported to other units within the hospital or outside the following precautions may be implemented:

1. Infected or colonized areas of the patient's body are covered: - For contact isolation this may include a gown, sheets or dressings to surface wounds; these patients are transferred to a Standard Pressure or Protective Environment Isolation room – For respiratory isolation the patient is dressed in a mask, gown and covered in sheets; these patients are accommodated in a Negative Pressure Isolation Room – For quarantine isolation the patient may be transported in a fully enclosed transport cell or isolator with a filtered air supply and exhaust; these patients are accommodated in a high level quarantine isolation suite.
2. The transport personnel remove existing PPE, cleanse hands and transport the patient on a wheelchair, bed or trolley, applying clean PPE to transport the patients and when handling the patient at the destination. Gown-up and gown-down rooms located at the entry to a Unit will assist the staff to enter and exit the facility according to the strict infection control protocols required, thereby reducing the risk of contamination
3. The destination unit should be contacted and notified prior to the transfer to ensure suitable accommodation on arrival.
4. It is preferred that the patient is transported through staff and service corridors, not public access corridors During planning stages, design can assist transfer of infectious patients by providing service corridors and strategically placed lifts, capable of separation from other lifts. The nominated lift may be isolated from public and staff transit through access control measures and cleaned following transit of the infectious patient.
5. Design may also incorporate a designated floor for horizontal bed transfers of infectious patients away from busy clinical areas. The designated floor may be located at mid-level in the hospital
6. A combination of nominated lifts, corridors and a bed transfer floor would assist in the movement of infectious patients through the hospital and minimize the risk of spread of infection.

### **12.8.5 Instructions for Home Quarantined:**

The district administration under the overall supervision of State Health Authority shall be responsible for monitoring the patients under home isolation.

#### **A. Role of District Administration:**

- A responsible officer (Addl. Deputy Commissioner/ Asst Commissioner) shall be notified by the Deputy Commissioner for supervising home isolation activity at the district level, assisted by a notified Officer from Superintendent of Police, Joint Director Health Services and District Surveillance Officer of IDSP, and important officials from the line departments under the supervision of the Deputy Commissioner.
- A responsible officer (Circle Officer/ Attached Circle officer) shall be notified for supervising home isolation activity at the circle/block level, assisted by a notified Officer from Superintendent of Police, important officials of the line departments, especially Panchayat & Rural Development Department/ Education Department, SDM&HO in charge of Block PHC and Block Programme Manager, NHM.

#### **B. The home quarantined person should:**

- i. Stay in a well-ventilated single-room preferably with an attached/separate toilet. If

another family member needs to stay in the same room, it's advisable to maintain a distance of at least 1 meter between the two.

- ii. Needs to stay away from elderly people, pregnant women, children and persons with co-morbidities within the household.
- iii. Restrict his/her movement within the house.
- iv. Under no circumstances attend any social/religious gathering e.g. wedding, condolences, etc.

He should also follow the under mentioned public health measures at all times:

- i. Wash hand as often thoroughly with soap and water or with alcohol-based hand sanitizer
- ii. Avoid sharing household items e.g. dishes, drinking glasses, cups, eating utensils, towels, bedding, or other items with other people at home.
- iii. Wear a surgical mask at all the time. The mask should be changed every 6-8 hours and disposed off. Disposable masks are never to be reused.
- iv. Masks used by patients / care givers/ close contacts during home care should be disinfected using ordinary bleach solution (5%) or sodium hypochlorite solution (1%) and then disposed of either by burning or deep burial.
- v. Used mask should be considered as potentially infected.
- vi. If symptoms appear (cough/fever/difficulty in breathing), he/she should immediately inform the nearest health centre or call 104/1077.

### **C. Instructions for the family members of persons being home quarantined**

- i. Only an assigned family member should be tasked with taking care of the such person
- ii. Avoid shaking the soiled linen or direct contact with skin
- iii. Use disposable gloves when cleaning the surfaces or handling soiled linen
- iv. Wash hands after removing gloves
- v. Visitors should not be allowed
- vi. In case the person being quarantined becomes symptomatic, all his close contacts will be home quarantined (for 14 days) and followed up for an additional 14 days or till the report of such case turns out negative on lab testing

### **D. Environmental sanitation:**

- i. Clean and disinfect frequently touched surfaces in the quarantined person's room (e.g. Bed frames, tables etc.) daily with 1% Sodium Hypochlorite Solution.
- ii. Clean and disinfect toilet surfaces daily with regular household bleach solution/phenolic disinfectants
- iii. Clean the clothes and other linen used by the person separately using common household detergent and dry.

### **E. Duration of Home Quarantine:**

The home quarantine period is for 14 days from contact with a confirmed case or earlier if a suspect case (of whom the index person is a contact) turns out negative on laboratory testing.

## **F. Contact Tracing of Home Quarantine:**

In case of person recommended for Home Quarantine whether the person will be quarantined in his/ her residence or the local community centre, keeping in mind that in case the person stays at his residence, the same will become a containment zone for all residents of that house and will be line-listed and tracked and kept under surveillance at home for 14 days by the designated Lot Mondals/ Gaonburahs/ ASHA/ MPWs/ Local Nagarik Committee or Residential Society Members/ BLO/ Volunteers of DDMA/ NGOs/ socio-cultural organizations etc. forming Police Station Level Quarantine Management Committee. The Officer in-charge of local Police Station as the Incident Commander will perform the following responsibilities along with other Members of the Committee:

- i. Declaration of home quarantines with help of the Committee members after getting details from Kamrup (Metro) administration.
- ii. Keeping close vigil on person under home quarantine with his police force and Committee members
- iii. Monitor adequate supply of food items for the quarantined family by the Committee, which will be provided by district administration.
- iv. Maintain data of home quarantined persons with help of data entry operator provided by Kamrup (Metro) district administration. The data would, inter-alia, facilitate timely release from home quarantine.
- v. Monitor surveillance activities by Health & FW Department staff.
- vi. Activate the VDP/ Civil Defence members.

The Commissioner of Police will nominate a senior police officer not below rank of Additional DCP for every police district in City Guwahati, who will closely monitor and supervise the functioning of the Police Station Level Quarantine Management Committee in close coordination with DDMA, Kamrup (Metro) and Health & FW Department. The officer will also collate the Home Quarantine data of each Police Station jurisdiction and furnish data Police District wise to Deputy Commissioner, Kamrup (Metro) regularly.

DC, Kamrup (Metro) will direct Circle Officers to coordinate with concerned agencies for smooth management of the entire quarantine measures. He will also nominate a senior officer as Nodal Officer to coordinate/ liaise with all concerned in this regard.

### **12.8.6 District Covid Control Room and functions:**

- i. A dedicated 24x7 Control room for COVID shall be set up in the District Level, whose number shall be published for public use. The earlier Call centre for COVID or District Disaster Management Call centre may be utilized. Also a Whatsapp number/ email number/website must be provided for public to submit their "Self Undertaking" opting Home isolation.
- ii. Dedicated trained manpower well versed with the existing protocols for Home isolation and COVID management shall be put in place in every control room under a responsible officer.
- iii. Once the district wise positive cases for that day are reported by District Surveillance Officer to Control room, a phone call shall be made to all positive persons to confirm their status and to enquire about their option for home isolation. In case the patient prefers home isolation, the self undertaking format may be shared through district

- website for free download and submission of self undertaking.
- iv. The District Control Room shall also be receiving calls from those people who may use Home testing kits and report positive by themselves. All such calls shall be recorded and the name, phone number, age and address of the caller shall be reported to DSO IDSP of the district to register them as positive cases after confirming through Surveillance team through house visit. Similarly, the control room shall also receive information from State 104 and 24x7 Command & Control Room at NHM State Head Quarters regarding self testing positive people who have informed through 104 call centre and through NHM Citizen App.
  - v. Once the list of positive people is contacted and confirmed by the control room, the same list with contact number and address shall be handed over to the District In Charge for COVID for coordinating surveillance team visit circle/block wise the very next day and distribution of medical kit. The self declaration form from the patient may also be collected physically during the visit of the surveillance team if the same is not received on Whatsapp/portal.
  - vi. Subsequently on the 7th day of becoming positive, depending up on asymptomatic status of the patient, the control room will issue a message to the home isolated patient discharging from home isolation and directions for remaining 7 more days in home quarantine. Once such discharge is made, daily report of discharge shall also be submitted to the state.
  - vii. The 24x7 Control room shall also maintain the daily updated list of CCC/COVID Hospitals with the numbers of beds available (general/ with oxygen support/ ICU/ Ventilator beds CCC/ Hospital wise) and guide the patients in home isolation, but becoming serious and in need of hospital beds.
  - viii. The 24x7 Control room shall coordinate with 108 coordinator of the district for referral transport of serious patients to the nearest CCC/Covid Hospital as well
  - ix. While making such referrals, the Control room shall also inform the in charge Medical Officer of CCC/Covid Hospital about the impending admission(s).
  - x. The district control room shall maintain close communication with DC/SP/ADC/Jt. DHS/DSO IDSP of the district and also 104 & 24x7 Command & Control Room at the State level

### 12.8.7 Relief for Covid Home Quarantine:

Food items (as per notified Government norms) for the quarantine period will be provided by District Administration/ Circle Officer Assistant Commissioner directly to the quarantine families or through the committee.

Food items (in kind) as per indicative break-up may be provided to each family unit of 4 (Four) members in home quarantine covering a period of 7-10 days.

Sl No.	Name of items	Quantity	Approx. Rate (Rs.)
1	Rice	15 Kg	500.00
2	Dal	2Kg	300.00
3	Oil	2 liters	300.00
4	Salt	1Kg	30.00
5	Potato	5Kg	150.00
6	Onion	2Kg	120.00

7	Other Vegetable/ Egg/ Milk etc.	300.00
8	Any other essential items	300.00
<b>Total</b>		<b>2000.00</b>

The aforesaid quantum of food items of value of approximately Rs. 2000/-, will not be decreased in case of any family irrespective of duration of home quarantine.

However, the quantity of food items will be proportionately increased depending on (a) the number of family members in home quarantine and (b) duration of home quarantine.

Police Station Level Quarantine Management Committee will monitor strict compliance with home quarantine norms, while ensuring that the essential requirements of the quarantined persons are met.

#### **12.8.8 Measures in Flood Relief Camps in view of COVID-19 pandemic:**

- 1 There should be separate relief camps for persons of age of 60 years and above and for those below the age of 60 years in order to safeguard the vulnerable persons. In case of separate camps are not possible, there should be segregation of the two age groups within a camp.
- 2 There should not be any assembly of camp inmates for receiving food etc. Food should be distributed in the different locations in a camp where the inmates are staying. Dry food items may be preferred to facilitate the distribution of the food without crowding.
- 3 Efforts to be made to provide relief materials at the locations where flood affected people are taking shelter, so number of people who need to be accommodated in relief camps are minimize.
- 4 Face mask should be distributed among the inmates and wearing of face masks should be enforced. There should be adequate supply of soaps and sanitizers in the relief camps.
- 5 Regular spray of 1% sodium-hypochlorite should be done in relief camps Gaon Panchayat may be given this responsibility, in case of shortage of official staff for this purpose.
- 6 There should be sufficient number of toilets with availability of bleaching powders for cleaning.
- 7 In case of distribution of relief items by any social organization, these should be advised to hand over the relief items to the district administration for distribution to flood affected people, in order to prevent crowding when the organization hand over the relief items directly.
- 8 Random swab samples should be collected from the inmates of relief camps for COVID-19 testing.
- 9 Child Friendly Spaces should be designed and operated in a participatory manner where children affected by disasters can be provided with a safe environment, integrated services including play, recreation, education, health, and psychosocial support and/or information about services/supports provided with Line departments and NGOs / civil society organizations.

#### **12.8.9 Disposal of Covid Death Bodies:**

##### **Transportation:**

- 1 All staff identified to handle dead bodies in the isolation area, mortuary, ambulance and those workers in the crematorium/ burial ground should be trained in the infection

prevention control practices.

- 2 The body, secured in a body bag, exterior of which is decontaminated poses no additional risk to the staff transporting the dead body.
- 3 The vehicle, after the transfer of the body to cremation/ burial staff, will be decontaminated with 1% Sodium Hypochlorite.

#### **At the crematorium/ Burial Ground:**

- 1 The health worker attending to the dead body should perform hand hygiene; ensure proper use of PPE (water resistant apron, goggles, N95 mask, gloves).
- 2 The Crematorium/ burial Ground staff should be sensitized that COVID 19 does not pose additional risk.
- 3 The staff will practice standard precautions of hand hygiene, use of masks and gloves.
- 4 Viewing of the dead body by unzipping the face end of the body bag (by the staff using standard precautions) may be allowed, for the relatives to see the body for one last time.
- 5 Religious rituals such as reading from religious scripts, sprinkling holy water and any other last rites that does not require touching of the body can be allowed.
- 6 Bathing, kissing, hugging, etc. of the dead body should not be allowed.
- 7 The funeral/ burial staff and family members should perform hand hygiene after cremation/ burial.
- 8 The ash does not pose any risk and can be collected to perform the last rites.
- 9 Large gathering at the crematorium/ burial ground should be avoided as a social distancing measure as it is possible that close family contacts may be symptomatic and/or shedding the virus.

#### **12.9 Standard Operations Procedure (SOP) for Boat Capsize:**

In the event of boat cap size, following action plan is to be activated. All the Quick Response Teams (QRTs) must be equipped with high-speed rescue boats having sufficient capacity to accommodate victims and rescuers. The rescue boat must have medical first response kits, life saving medicines and stretchers for carrying victims.

1. On receipt of information on boat capsized incident, IWT to mobilise their teams as well as SDRF to carry out search operation. If required, necessary help may be taken from NAVY for aerial search.
2. Identify the spot of accident and direct rescue team there. This operation may require under water cameras for locating drowned people.
3. Rescue team of SDRF/NDRF/NAVY should consist of divers, swimmers, with all water rescue equipment like Stanley under water cutter/under water plasma cutting machines/under water chain saw/under water search camera and torch/gas cutting torches/gas cutter/under water welding pro to tackle level-2 disaster must be available.
4. Besides this, the rescue boat should be equipped with communication equipment.
5. Doctor/first -aiders should provide first aid to victims.
6. Adequate provision for ambulances and boat ambulances for quick evacuation to pre-identified and coordinating higher medical care centers.

### 12.10 Standard Operations Procedure (SOP) for Stampede:

In case of a stampede may people especially the children and aged get trampled and may get badly injured which may even result in death if first-aid / medical attention is not provided immediately. Like in any emergency planning, the affected persons should be given immediate medical attention. Various precautionary measures should be taken to prevent any stampede wherever there is assembly of large crowd.

Following are various such measures for the consideration of the district administration.

- i. Identify and list the events wherein a large group of people gathers at one place.
- ii. Survey the gathering site for confinement i.e. inside temple, auditorium, building, structure etc.
- iii. Study the layout and identify stampede prone pockets i.e. staircases, entry/ exit point, narrow lobby etc.
- iv. Estimate size of population going to gather. If the site area is not adequate to control an expected number of people, do not allow them to gather at first place.
- v. This can be achieved by informing people well in advance, staggering the visitors by issuing passes/ identity cards.
- vi. Study the layout and maintain adequate space between two clusters of people.
- vii. Build temporary watchtowers for monitoring.
- viii. Ascertain adequate ventilation in the area.
- ix. Ascertain uninterrupted power supply in the area. Make arrangement for standby power supply. As far as possible allow event to be conducted in day time.
- x. Inform people by Public address System and Close circuit TV to avoid any misunderstanding, rumor, and panic situation.
- xi. Post adequate staff to control mob.
- xii. Segregation of male and female/ children in the mob.
- xiii. Adequate arrangement for drinking water, food etc. As far as possible provide such facilities on mobile van, trolley instead of fixed counter/ stall.

## ANNEXURE

### IMPORTANT TELEPHONE NUMBERS (KAMRUP METROPOLITAN DISTRICT):

#### DISTRICT ADMINISTRATION

Sl No	Name	Designation	Contact No	Email ID
1	Pallab Gopal Jha, IAS	DC	6002062284	
2	Gauri Shankar Das, ACS	ADC cum CEO	9864097846	
3	Kalpna Deka, ACS	ADC	9435187092	
4	Dhrubajyoti Hazarika, ASC	ADC	9435197170	
5	Mriganka Choudhury, ACS	ADC	9435114644	
6	Sukanya Bora, ACS	ADC	8876513608	
7	Bikram Chetry, ACS	ADC	9864374468	
8	Jay Shivani, IAS	SDO	9407407447	
9	Hemanta Dutta, ACS	AC	9954153859	hemantadutta@gmail.com
10	Bhaskar Jyoti Kalita, ACS	AC	9650995375	bjkntpc@gmail.com
11	Rimjhim Konwar, ACS	AC	8486914293	rimkonwar@gmail.com
12	Anurag Rudra, ACS	AC	8486416146	
13	Nirmal jyoti Sarma, ACS	AC	8861684062	
14	Shekharan Phukan, ACS	EO	9127438876	
15	Monimala Gogoi	DIPRO	9864205081	

#### CIRCLE OFFICERS

Sl. No.	Name of the Circle Officer	Revenue Circle	Contact No	Email Id
1	Lakhyajit Duwaria, ACS	CO, Guwahati	9508209686	
2	Dipankar Barman, ACS	CO (A), Guwahati	8638029122	
3	Shantanu Gogoi, ACS	CO, Dispur	8376029984	
4	Chinmoy Neog, ALRS	CO (A), Dispur	7576865952/ 9864691846	dmdispurrc@gmail.com
5	Krishna Arjun Barman, ACS	CO, Chandrapur	9435455643	
6	Priyanshu Bharadwaj, ACS	CO, Azara	8812829918	coazara1@gmail.com
7	Gopal Sarma, ACS	CO, Sonapur	7576899747	
8	Himadri Bora, ALRS	CO (A), Sonapur	9101214551	smsnapurrev@gmail.com

**DDMA OFFICERS**

Sl. No	Name	Designation	Contact No.
1	Kaustav Talukdar	District Project Officer, DDMA Kamrup (Metro)	9854032708
2	Simanta Sonowal	Field Officer (DM), Guwahati Revenue Circle	9707727422
3	Barsa Neog	Field Officer (DM), Dispur Revenue Circle	8876086488
4	Sonu Mazumdar	Field Officer (DM), Sonapur Revenue Circle	8876725430
5	Ankumoni Gogoi	Field Officer (DM), Chandrapur Revenue Circle	8471997622
6	Ajay Mazumder	Field Officer (DM), Azara Revenue Circle	8486252581

**BLOCK DEVELOPMENT OFFICERS**

Sl. No	Name	Designation	Contact No.
1	Prasanta Borah, ACS	BDO, Dimoria Block	9365978431
2	Bonojyotshna Borgohain	BDO, Chandrapur Block	8720989897
3	Lalremsiami Ngamlai	BDO, Rani Block	8474078435

**STAKEHOLDERS-LINE DEPARTMENTS**

Sl. No	Department	Name	Designation	Contact No.
1	GMC	M.N Dahal, IAS	Commissioner	8826605380
2	GMDA	Kausar Jamil Hilaly, ACS	CEO	9435080266
3	APDCL	Rupranjan Kalita	CEO, GEC-I	9954335236
4	Health and FW Department	Dr. K. K Das	Jt. Director Health	9435105019
5	Forest	Rohini Ballav Saikia	DFO, Kamrup East Division	8133007935
6	WRD, East Div	Mahibur Rahman	Executive Engineer	8402971686
7	WRD, Mech.	P. Das	Executive Engineer	9435381829
8	PWD, West TRD	Sonit Kumar Das	Executive Engineer	8638713809
9	PWD, Dispur TRD	Bulu Ranjan Deka	Executive Engineer	9435011351
10	PWD, Bldg, Div. I	Arup Das	Executive Engineer	9864354847
11	PWD, Bldg, Div. II	Achintya Baruah	Executive Engineer	809947764
12	PHE, Div. I	Jayanta Mazumdar	Executive Engineer	8812040233
13	PHE, Div. II	Ghanashyam Kalita	Executive Engineer	84740 38320

14	Agriculture Department	Dhirendra Nath Karji	DAO	9435519441
15	AH & Veterinary Department	Dr Arun Sarma	DVO	9435116593
16	Soil Conservation	Pradeep Dutta	DO	9435017653
17	Education Department	Prashna Baruah	Inspector of Schools	9435294843
18	Social Welfare Department	Debajit Bora	DSWO	6000084878

**POLICE DEPARTMENT**

Sl. No	Name	Designation	Contact No.
1	Harmeet Singh, IPS	Commissioner of Police, Guwahati	0361-2540278, (Fax) 2546286
2	P.S. Mahanta, IPS	Joint Commissioner of Police (Admn./S&I Traffic) Guwahati & DIGP(AP), Assam	9435048480
3	Debasish Borah, APS	Dy. Commissioner of Police (West), Guwahati	9435160402
4	Sudhakar Singh, APS	Dy. Commissioner of Police (East), Guwahati	0361-2220124, 6026900540
5	Diganta Kr. Choudhury, APS	Dy. Commissioner of Police (Central), Guwahati	0361-2460190, 9435037642
6	Subhasish Baruah, APS	Dy. Commissioner of Police (Admn), Guwahati	0361-2540270, 8638530120
7	Hiranya Kumar Barman, APS	Dy. Commissioner of Police (Traffic), Guwahati	0361-2731947, 9435562135
8	Amal Sarma	Inspector (T), Commissionerate & Guwahati City, APRO	7002213947

**DTO KAMRUP (METRO)**

Sl. No	Name	Designation	Contact No.
1	Gautam Das	DTO, R & L	9531107480
2	Himangshu Das	DTO, Enforcement	9531107480
3	Rafiqul Islam	Secy. RTA, Kamrup (Metro)	9435020658

**1st BN NATIONAL DISASTER RESPONSE FORCE (NDRF)**

Sl. No	Name and Designation	Contact Nos.
1	NDRF Headquarter Control Room New Delhi	011-24363260/ 011-24369297
2	DG NDRF N/Delhi	011-24369278
3	H.P.S Kandari Commandant, 1 <sup>st</sup> NDRF Guwahati	8764394700
4	Control Room 1 <sup>st</sup> NDRF Guwahati	0361-2840284/ 9435117246

**FIRE & EMERGENCY SERVICE STATION**

Sl. No	Fire & Emergency Service Station	Name of the Officer In-charge	Contact Nos.
1	Dy. Director, F&ES	Dr Nanda Singh Borkola	8822303906
2	Guwahati Fire Station	Bipul Saharia	9864410418
3	Pandu Fire Station	Nabajit Nath	9508602247
4	Chandmari Fire Station	Loutfar Dewan	9284353204
5	Dispur Fire Station	Arup Kalita	9365897216
6	Lokhra Fire Station	Pranab Borah	8876632874
7	Sonapur Fire Station	Chabirranjan Kalita	9678553262
8	Chandrapur Fire Station	Gangadhar Kalita	8133069539

**PROPOSED SHELTER PLACES IN KAMRUP (M) DISTRICT:  
DISPUR REVENUE CIRCLE**

SI No.	Name of the Relief Camp	Name of the camp in charge	Latitude (Decimal Degree)	Longitude (Decimal Degree)
1	Kenduguri LP School	Shri Ananta Mahanta 9706344391	26.182814	91.83413
			26.182866	91.334209
			26.182835	91.834155
			26.182845	91.834245
2	Satgaon High School	Smti Nalini Talukdar 9401038554	26.157231	91.838228
			26.157223	91.838238
			26.157211	91.838302
			26.15717	91.838284
3	1No. Hengrabari L.P. School	Smti Rina Kalita Deka 7002930553	26.150785	91.798459
			26.150782	91.798496
			26.150755	91.798534
			26.150741	91.798489
4	Baghorbori High School	Shri Sailen Kr. Barman 8638465220	26.13691	91.82920
			26.136911	91.829124
			26.1368	91.82915
			26.136782	91.829222
5	Fatasil Champabati High School	Shri Paresh Ch. Deka, 0361-2475034	26.14321	91.72735
			26.143171	91.727342
			26.143189	91.727241
			26.143233	91.727254
6	Beltola High School	Shri Amulya Mohan Duarah 9707763103	26.12314	91.80389
			26.12315	91.80386
			26.12317	91.80387
			26.12316	91.80392
7	Dakshin Beltola High School	Shri Phanidhar Sarma 9577793106	26.11442	91.79246
			26.11433	91.79275
			26.114237	91.792459
			26.11425	91.79269

8	Dispur Gopal Boro H.S. School	Smti Indrani Talukdar 7099637364	26.148097	91.78615
			26.14785	91.78627
			26.14801	91.78633
			26.14788	91.78645
9	Noonmati High School	Shri Narayan Sarma 9707020621	26.18216	91.79933
			26.18217	91.7993
			26.182155	91.7994
			26.182176	91.799369
10	Narakasur High School	Shri Mamoni Borah, i/c 7896890554	26.14564	91.76272
			26.14571	91.76275
			26.14562	91.76276
			26.14569	91.76279

**GUWAHATI REVENUE CIRCLE**

Sl No	Name of the Relief Camp	Name of the camp in charge	Latitude	Longitude
1	Surajmal Juharmal Sanganeria Dharamsala Trust	Durga Dutta Sarma 8486426544	26°10'47.8"	091°44'28.6"
			26°10'48.2"	091°44'28.3"
			26°10'48.3"	091°44'28.4"
2	Terapanthi Bhavan	Binod kr. Ray 9678349904	26°10'44.9"	091°44'24.5"
			26°10'45.0"	091°44'24.1"
			26°10'44.5"	091°44'23.4"
3	Samata Bhavan	Hari Panday 8486425061	26°10'31.0"	091°44'15.0"
			26°10'30.5"	091°44'15.1"
			26°10'30.8"	091°44'14.8"
4	Jain Bhavan	Surendra Kumar 6900545852	26°10'25.5"	091°44'03.9"
			26°10'25.7"	091°44'04.1"
			26°10'25.9"	091°44'04.3"
5	Harayana Bhavan	9435195795	26°10'04.4"	091°44'00.8"
			26°10'03.7"	091°44'00.3"
			26°10'04.0"	091°44'00.5"

**SONAPUR REVENUE CIRCLE**

Sl.No.	Name Of The Relief Camp	Village Name	Latitude (Decimal Degree)	Longitude (Decimal Degree)
1	Maloibari Binapani ME School	Maloibari	26.17 N	92.12 E
2	Maloibari Jr. College	Maloibari	26.16 N	92.07 E
3	Maloibari L.P. School	Maloibari	26.17 N	92.09 E
4	Durung M.E. & High School	Durung	26.13 N	92.13 E
5	Kapalkata L.P School	Sonapur	26.12 N	91.99 E

6	Maloibari High School	Maloibari	26.17 N	92.10 E
7	Sonapur Govt. H. S. School	Sonapur	26.13 N	91.96 E
8	Digaru Railway Station premises.	Digaru		
9	Kalong Embankment from Ouzari to Barbila	Amarapathar		
10	Digaru Embankment from Sonapur to Kachutali	Sonapur		

**AZARA REVENUE CIRCLE**

Sl.No.	Name of the Relief Camp	Village Name	Latitude (Decimal Degree)	Longitude (Decimal Degree)
1	Garal Girls M.E. School	Garal	26°08'19" N	91°36'28" E
2	Palashbari Anchalik High School	Mazirgaon	26°07'46" N	91°34'15" E
3	Garaghuli Lp School	Gog	26°05'43" N	91°43'22" E
4	Jobe Patgaon L.P. School	Patgaon	26°04'53" N	91°36'37" E
5	Chakardoi Dekhbhakta Tarunram Phukan M.E. School	Mikirpara Chakardoi	26°06'25" N	91°38'07" E
6	Mirjapur Sishu Bidalaya	Mirzapur	26°07'03" N	91°36'43" E
7	Rajdharbora Higher Secondary School	Azara	26°06'48" N	91°36'52" E
8	1183 No. Agchia Girls' L.P. School	Agchia	26°07'25" N	91°34'24" E

**CHANDRAPUR REVENUE CIRCLE**

Sl No	Name Of The Relief Camp	Village Name	Latitude (Decimal Degree)	Longitude (Decimal Degree)
1	Pachim Mayong H.S	Pachim Mayong	26.241283	91.981229
2	Hatibagara Lp.S.	Hatibagara	26.2511665	91.971798
3	Niz Gubardhan Lps	Niz Gubardhan	26.241336	91.959312
4	Kajali Chowki Lp & Me	Kajali Chowki	26.252536	91.962862
5	Shahid Kushal Konwar Hs	Panikhaiti	26.200765	91.875801
6	Tintukura Lps	1no Kharghuli	26.208435	91.857318
7	Chandrapur Hs	Chandrapur	26.235334	91.925553

**RESOURCE INVENTORY FOR FLOOD – KAMRUP (METRO) DISTRICT**  
**(Equipment's: Raised Platforms, Machine and Country Boats, Life Buoys/ Jackets etc.)**

Si. No	Name Of Item	Owner's Name	Address	Quantity	Contact No.	Available Location/ Rev. Circle & Police Station
Boats (Total 25 boats available in Kamrup (M) dist.)						
1	Inflammable Rubber Boats (without Engine)	DDMA Kamrup (Metro)		5	98540-32708	Government Guest house. Kharghuli
2	Inflammable Rubber Boats (without Engine)	DDMA Kamrup (Metro)	O/o the Deputy Commissioner Kamrup (Metro)	1	98540-32709	Government Guest house. Kharghuli
3	Inflammable Rubber Boats (without Engine)	Fire & Emergency Services	Panbazar Fire Station	2	9435513496/ 03612734191	Panbazar Fire Station
4	FRP Boats	Fire & Emergency Services	Pandu Fire Station	2	03612674817/ 2679976	Pandu Fire Station
5	Vessel	IWT Division, Ulubari	O/o the Executive Engineer, IWT	4	98593-83360	Guwahati-north Guwahati Ferry Service
6	Vessel	IWT Division, Ulubari	O/o the Executive Engineer, IWT	3	96789-94502	Guwahati-Kurua Ferry Service
7	Vessel	IWT Division, Ulubari	O/o the Executive Engineer, IWT	3	99571-65321	Guwahati-Madhyam Khanda
8	Vessel	IWT Division, Ulubari	O/o the Executive Engineer, IWT	3	99548-63670	Guwahati-Rajaduwar
Life Buoy/ Jackets (Total 92 Life Buoy/Jackets in Kamrup (M) dist.)						
9	Life Jacket	DDMA. (Metro)Kamrup	O/o the Deputy Commissioner Kamrup (Metro)	18	9854032708	Government Guest house, Kharghuli.
10	Life Jacket	Fire & Emergency Services	Panbazar Fire Station	44	9435513496/ 03612734191	Panbazar Fire Station

11	Life buoy	Fire & Emergency Services	Panbazar Fire Station	30	9435513496/0 3612734192	Panbazar Fire Station
Others (Total 46 available in Kamrup (M) dist.)						
12	Diesel driven Electric Generator	O/o the Executive Engineer (PHE), Guwahati Div-II	O/o the Executive Engineer (PHE), Guwahati Div-II	4	94350-88788	O/o the Executive Engineer (PHE), Guwahati Div-II
13	Chemicals (Hydrated Lime, Ferric Alum, Bleaching Powder, Chlorine Tablet)	O/o the Executive Engineer (PHE), Guwahati Div-II	O/o the Executive Engineer (PHE), Guwahati Div-II	Multi-ple	94350-88789	O/o the Executive Engineer (PHE), Guwahati Div-II
14	Diesel Jeep	O/o the Executive Engineer (PHE), Guwahati Div-II	O/o the Executive Engineer (PHE), Guwahati Div-II	3	94350-88790	O/o the Executive Engineer (PHE), Guwahati Div-II
15	Truck Mounted Mobile water treatment plant	O/o the Executive Engineer (PHE), Guwahati Div-II	O/o the Executive Engineer (PHE), Guwahati Div-II	1	94350-88791	O/o the Executive Engineer (PHE), Guwahati Div-II
16	Tanker	M/S D D Construction & Suppliers	O/o the Executive Engineer (PHE), Guwahati Div-II	1	98641-32421	West Jyotinagar, Bamunimaidam
17	Tanker	D J Enterprise	O/o the Executive Engineer (PHE), Guwahati Div-II	2	98640-36821/ 2510347	S S Road, Lakhtokia, Guwahati-1
18	Tanker	Aaypee Associates	O/o the Executive Engineer (PHE),	2	98640-95979/ 98640-95992	44 Nabagiri Road, Chandmari

			Guwahati Div- II			
19	Tanker	M/S. Anu Drinking Water Suppliers	O/o the Executive Engineer (PHE), Guwahati Div- II	2	0361- 2461808/ 98641-32421	Barthakur Mill Road, Guwahati-7
20	Tanker	Sri. Pranjit Kr. Dutta	O/o the Executive Engineer (PHE), Guwahati Div- II	1	98640-31332/ 98594-11399	Nabagiri Road, Chandmari
21	Tanker	M/S. Choudury Drinking Water	O/o the Executive Engineer (PHE), Guwahati Div- II	1	98640-18981	Kalapahar
22	Tanker	M D Drinking Water Supply	O/o the Executive Engineer (PHE), Guwahati Div- II	1	99541-43901	Rehabari, Bilpar
23	Tanker	S P A Traders	O/o the Executive Engineer (PHE), Guwahati Div- II	1	98640-91320	Dispur Lastgate
24	Tanker	Sri. Nirangan Barman	O/o the Executive Engineer (PHE), Guwahati Div- II	1	98641-36460	Noonmati, GRC path
25	Water Pump 400 hp	WR Deptt. Guwahati Mech. Div	WR Deptt. Guwahati Mech. Div. Guwahati-29	4	95350-14563	Bharalumukh Pumping station
26	Water Pump 250 hp	WR Deptt. Guwahati Mech. Div	WR Deptt. Guwahati Mech. Div. Guwahati-30	2	94350-14564	Bharalumukh Pumping station

27	Water Pump 150 hp	WR Deptt. Guwahati Mech. Div	WR Deptt. Guwahati Mech. Div. Guwahati-31	2	94350-14565	Bharalumukh Pumping station
28	Water Pump 52 hp trolley mounted	WR Deptt. Guwahati Mech. Div	WR Deptt. Guwahati Mech. Div. Guwahati-32	5	95353-51311	In reserve
29	Water Pump 45 hp submersible	WR Deptt. Guwahati Mech. Div	WR Deptt. Guwahati Mech. Div. Guwahati-33	2	95353-51311	In reserve
30	Water Pump 25 hp polder pumb	WR Deptt. Guwahati Mech. Div	WR Deptt. Guwahati Mech. Div. Guwahati-34	2	95353-51311	In reserve
31	Water Pump 10 hp	WR Deptt. Guwahati Mech. Div	WR Deptt. Guwahati Mech. Div. Guwahati-35	2	95353-51311	In reserve
32	Water Pump 12 hp Diesel self-priming	WR Deptt. Guwahati Mech. Div	WR Deptt. Guwahati Mech. Div. Guwahati-36	6	95353-51311	In reserve
33	Water Pump 5 hp	WR Deptt. Guwahati Mech. Div	WR Deptt. Guwahati Mech. Div. Guwahati-	1	95353-51311	In reserve

**LIST OF POL DEALERS AND ADDRESS**

SI No.	Name of POL Dealers	Address
1	M/S Chandmall Sarawgi & Co	Palantanbazar
2	M/S G.S.Enterprises	A.T.Road
3	M/S Thannsingh Nathmall	Ulubari, G.S.Road
4	M/S Baruah Service Station	Ambari, GNB Road
5	M/S Kiron Service Station	Survey, Beltola
6	NRL	Jaya Nagar
7	Raja Rajendra Narayen Dev	Survey, Beltola
8	Raj Service Station	Basistha
9	Deka Filling Station	Rukminigaon
10	ATC	Beltola
11	Shivam Service Station	Beharbari
12	Sanjivani Fual Point	Beltola

13	Chaganmal Sarowgi & Sons	Dispur
14	Bimol Auto Agency	Maligaon
15	M/S Kishor & company	Adabari
16	M/S NRL Oil Depot	Adabari
17	M/S Saraighat Service Station	Adabari
18	M/S Prabhat Oil Station	Santipur
19	M/S Shew Service Station	Betkuchi
20	M/S Pradip Oil Depot	Dharapur
21	M/S Narayan filling Station	Dharapur (Goral) Near Airport.
22	M/S Balaji Service Station	Goarchowk, N.H.Road
23	M/S Ramoni Service Station	Azara
24	M/S North East Service	Sundarbari
25	M/S Satya Naryan Service	Gotanagar Tetelia, N.H.Road
26	M/S Sugani Service Station	Pub- Boragaon, N.H.Road
27	M/S Goswami Service Station	Silpukhuri, Guwahati.
28	M/S Lakshmi Service Station	Guwahati Club
29	M/S Shew Prasad & Sons	G.S.Road
30	M/S Bora Service Station	G.S.Road
31	M/S Ulubari Petrol Service Station	G.S.Road
32	M/S Das Service Station	Kalaphar
33	M/S Basumatary Filling Station	Kalaphar
34	M/S Bumming Service Station	Kahilipara
35	M/S Manesh Service Station	Mathgharia
36	M/S Bevan Service Station	Noonmati
37	M/S GRES Ltd.	Noonmati
38	M/S R.K.filling Station	Patharquari, VIP Road
39	M/S VIP Service Station	Megzine, VIP Road
40	M/S Sivam Fillinfg Station	Chachal, VIP Road
41	M/S NRL Energy station	Sundarpur, Zoo Road
42	M/S Naba Service Station	Near State Zoo
43	M/S Ambika Service Station	R.G. Baruah Road
44	M/S Shah Eastern Traders	Near Ganeshguri Fly Over.
45	M/S Nessa Service Station	Bhangagarh, G.S.Road.
46	M/S Sunil Automobiles	Christanbasti, G.S.Road
47	M/S Chandmal Serawgi & Co.	Chandmari.
48	M/S Chandmal Serawgi & Co.	Lokhara charali
49	M/S Chandmal Serawgi & Co.	Sonapur
50	M/S Lakhara Service Station	Betkuchi, N.H. Road

51	M/S Bhabani filling Station	Lokhara (Betkuchi)
52	M/S Energy station	Soukuchi (Lokhara Road)
53	M/S Bharali Service station	Lalganesh (Lokhara Road)
54	M/S Machkhowa Service Station	T.R. Phukan Road, Borolumukh
55	M/S Didare Service station	Hatigaon

#### LIST OF LPG G DISTRIBUTORS

Sl No.	Name of Distributors
1	M/S Shivam Gas service
2	M/S Jyoti Gas Agency
3	M/S Blue Flame Agencies
4	M/S Dipu Gas
5	M/S Shikha Agency, Bharalumukh
6	M/S Shyama Gas Service
7	M/S Nabajyoti Gas Agency
8	M/S Bloomy Gas Agency
9	M/S Priyam Gas
10	M/S Keshab Gas Agency
11	M/S Deepjyoti Gas Agency
12	M/S Navadeep Gas Service
13	M/S P.S. Gas Agency
14	M/S sankerdev Gas Agency
15	M/S Ganesh Bharat Gas Agency
16	M/S Bhaskar Gas Agency
17	M/S Sandhan Gas service
18	M/S Hangsa Gas Agency
19	M/S City Gas Service

#### LIST OF GODOWNS IN GUWAHATI CITY:

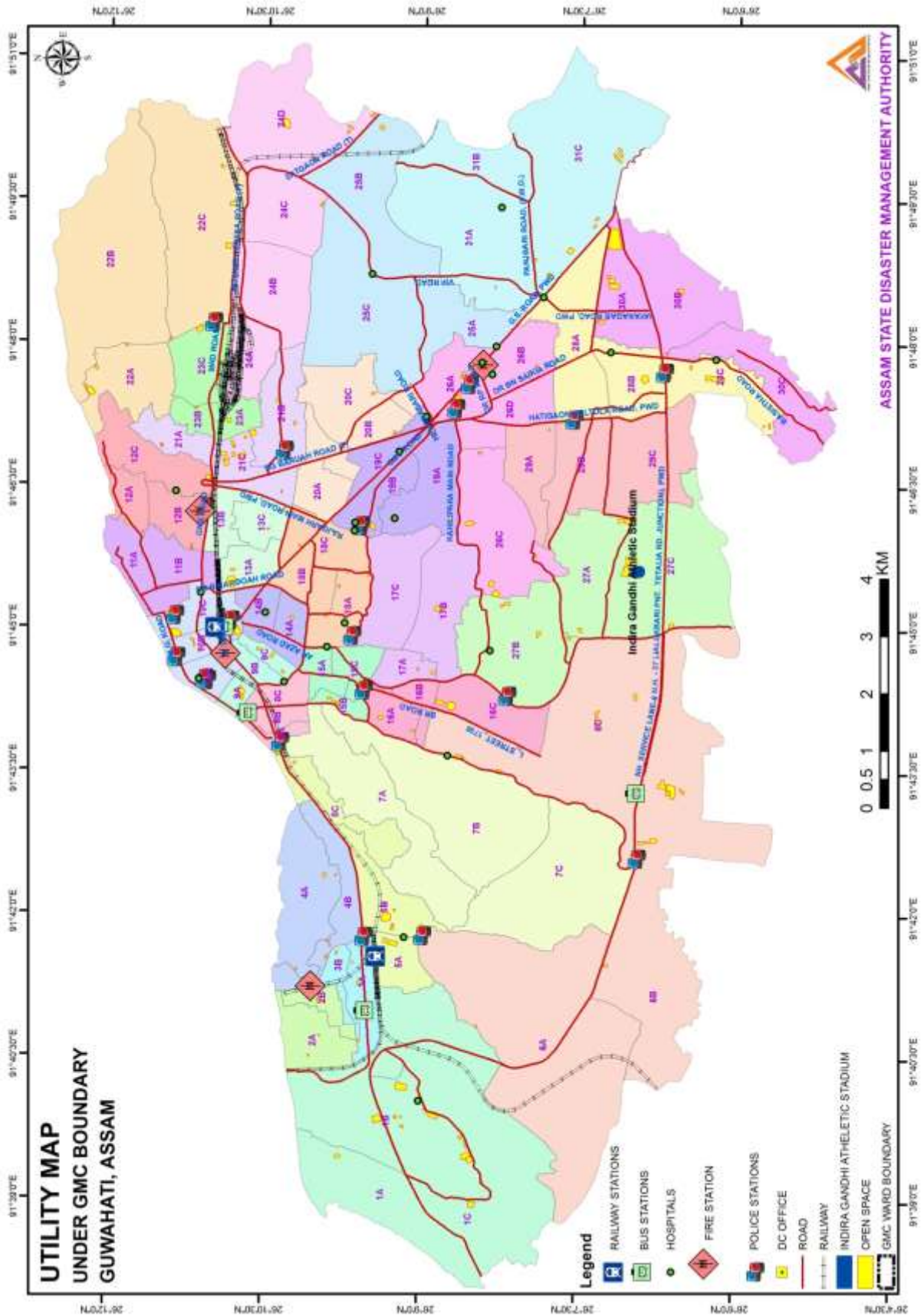
1. FCI Godown with food storage depot at New Guwahati.
2. Assam State Warehousing Corporation have their godowns in different locations in Guwahati
3. Rajucharani GPSS at Dharapur
4. Sonapur GPSS at Sonapur
5. Borkhat Panbari GPSS at Panbari
6. Demoria GPSS at Demoria
7. Rani Bholagaon GPSS at Barihat
8. Guwahati HCCS Ltd. At
  - a. Fatasil ambari
  - b. Tetelia
  - c. Narengi
9. North Guwahati WCCS at North Guwahati

**LIST OF SUPPLIERS OF FOOD GRAINS/ESSENTIAL COMMODITIES:**

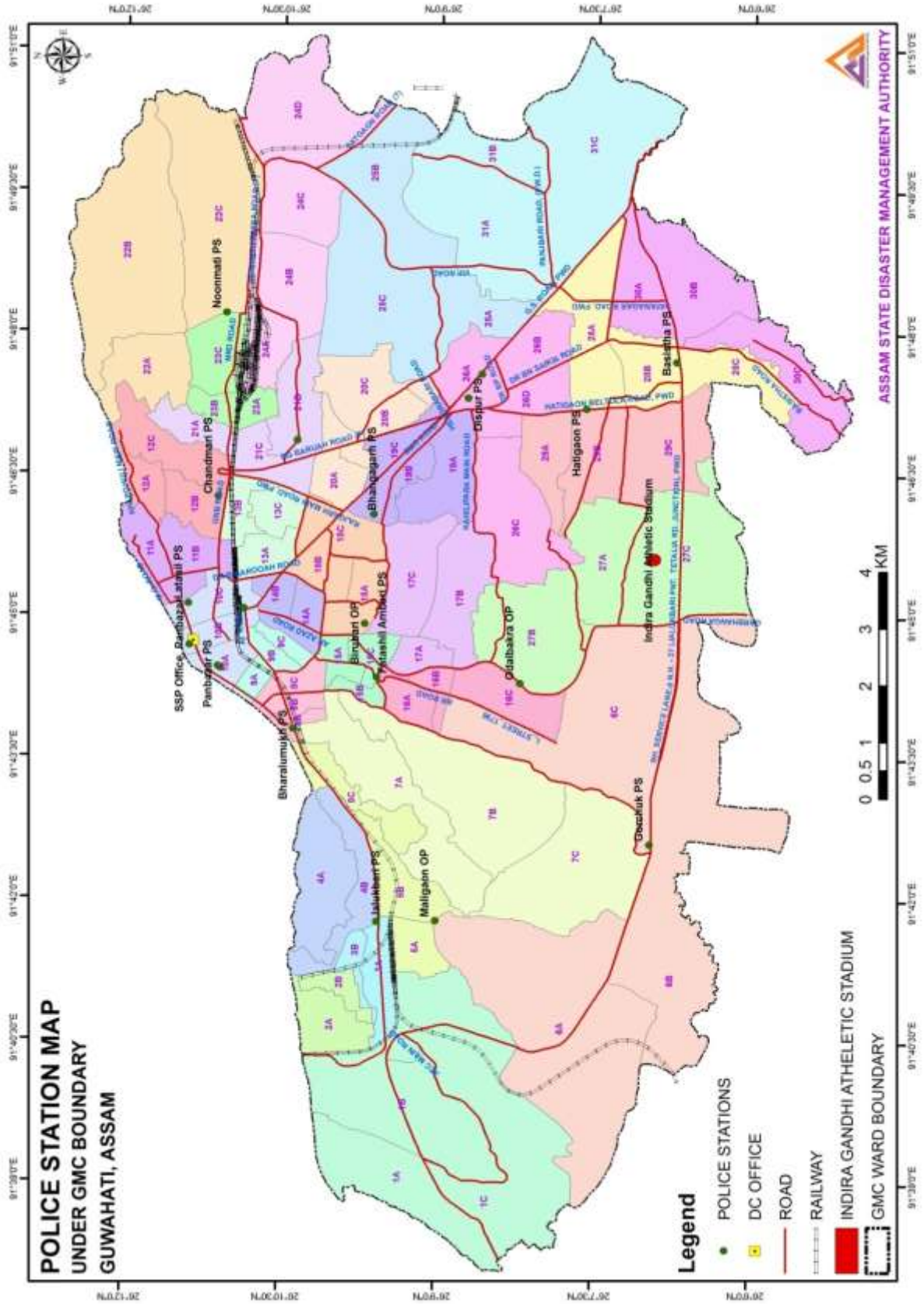
Sl. No.	Name	Address
1	M/S Babulal Ramswarup	MG Road, Fancy Bazar
2	M/S Shanti Shiewdanmal Gajanand	Fancy Bazar, Guwahati
3	M/S Dutta Brothers	Chunsali, Guwahati-20
4	M/S Brahmaputra Roller Flour Mill	Noonmati, Guwahati
5	M/S Ganesh Roller Flour Mill	Bamunimaidan, Guwahati
6	M/S Riddhi Roller Flour Mill	G.S. Road, Christianbasti, Guwahati
7	M/S Brijhora Roller Flour Mill	G.S. Road, Guwahati
8	M/S Deepak Roller Flour Mill	G.S. Road, Christianbasti, Guwahati
9	M/S Guwahati Roller Flour Mill	G.S. Road, Christianbasti, Guwahati
10	M/S Maa Kamakhya Industries	Lal Ganesh, Guwahati

## REFERENCE

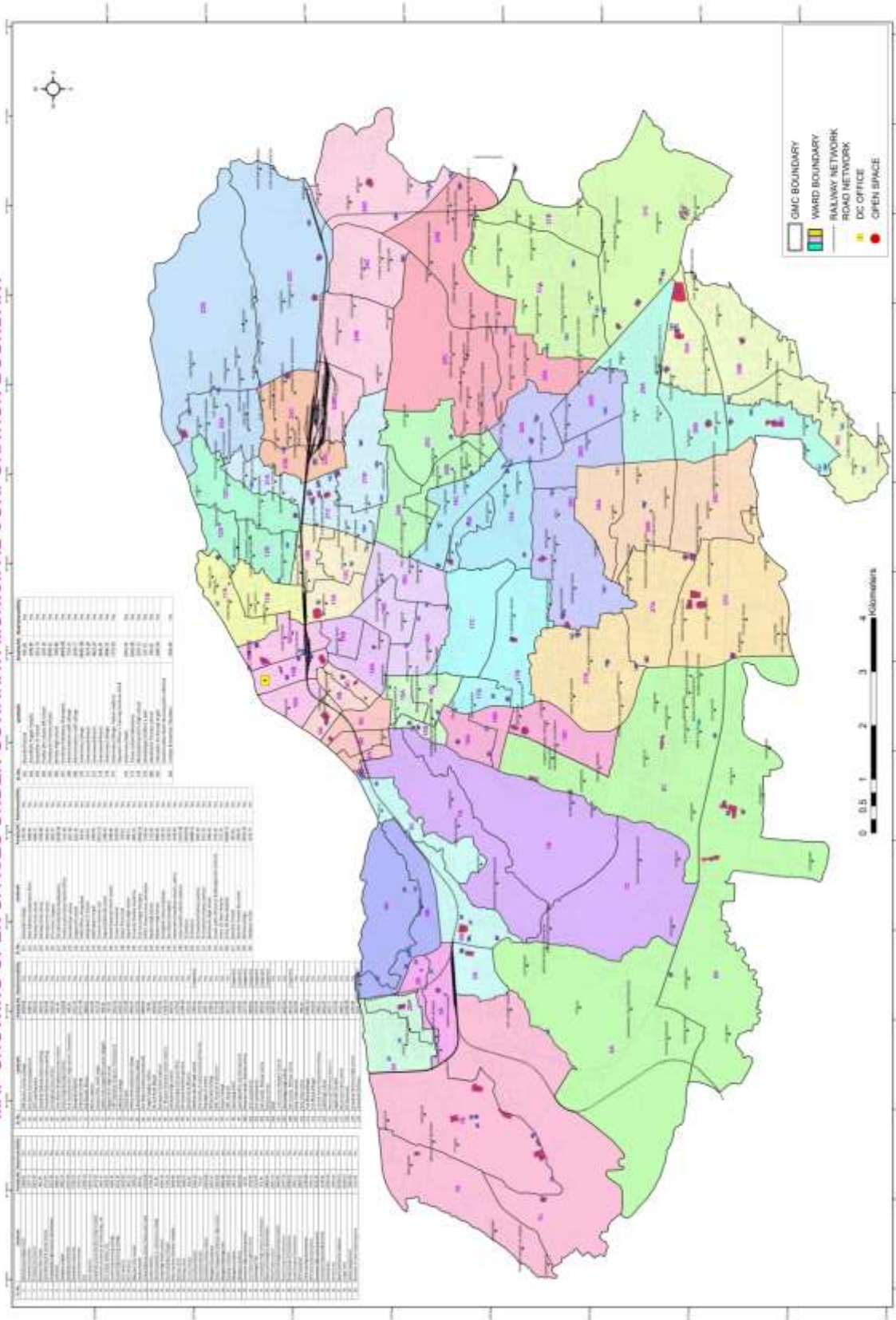
- *“Model Framework for preparation of DDMP” provided by National Disaster Management Authority (NDMA).*
- *“State Level Model Framework for District Disaster Management Plan (DDMP)”, Assam provided by Assam State Disaster Management Authority (ASDMA).*
- *Govt. of Assam, Revenue & Disaster Management Department Notification No. RGR/ASDMA/08/2014/02 dated 20<sup>th</sup> May 2014.*
- *SOPs and Guidelines of Ministry of Home Affairs, Govt. of India.*
- *SOPs and Guidelines of Assam State Disaster Management Authority (ASDMA), Revenue & Disaster Management Department, Govt. of Assam.*
- *SOPs and Guidelines of Health & Family Welfare Department, Govt. of Assam.*

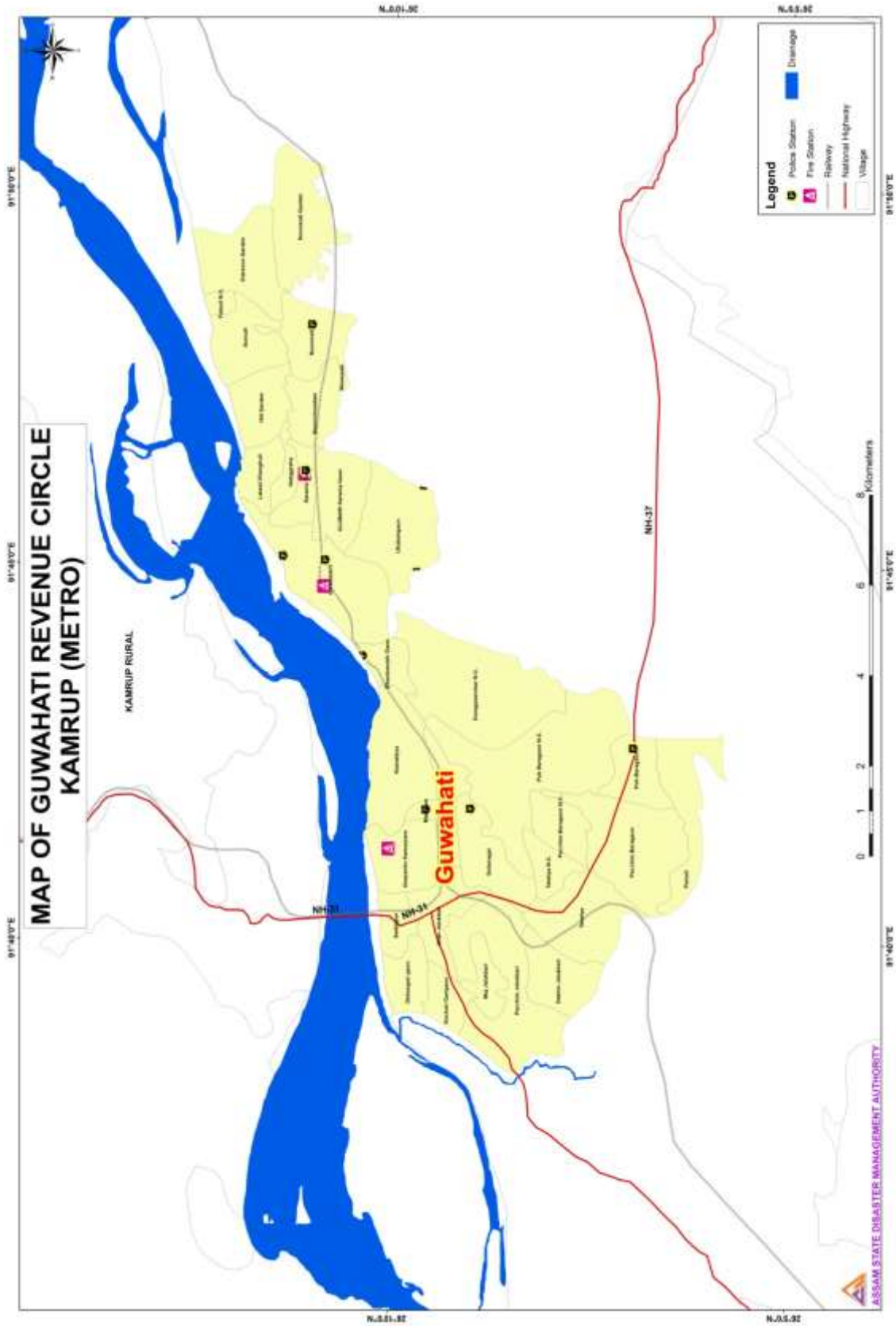




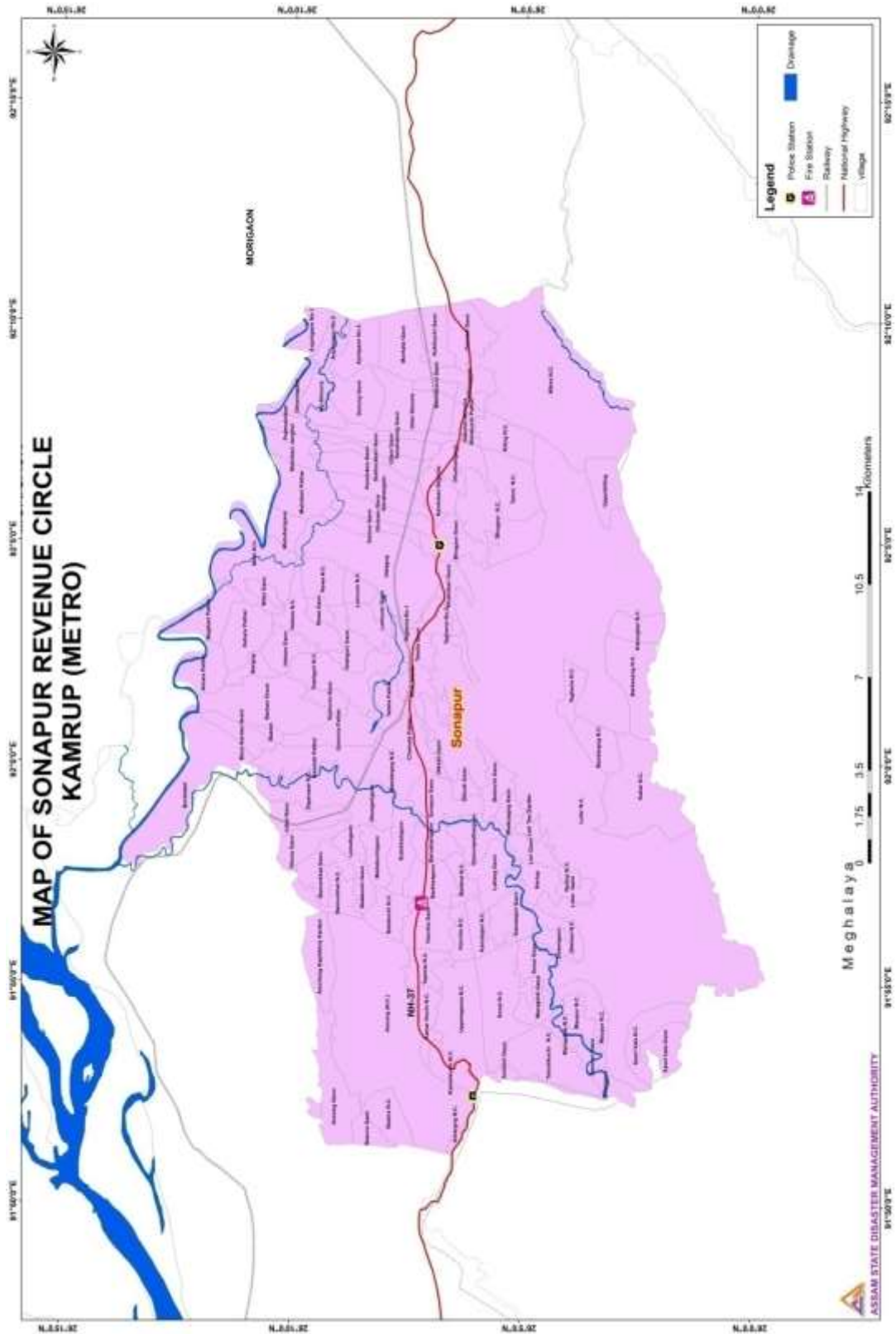


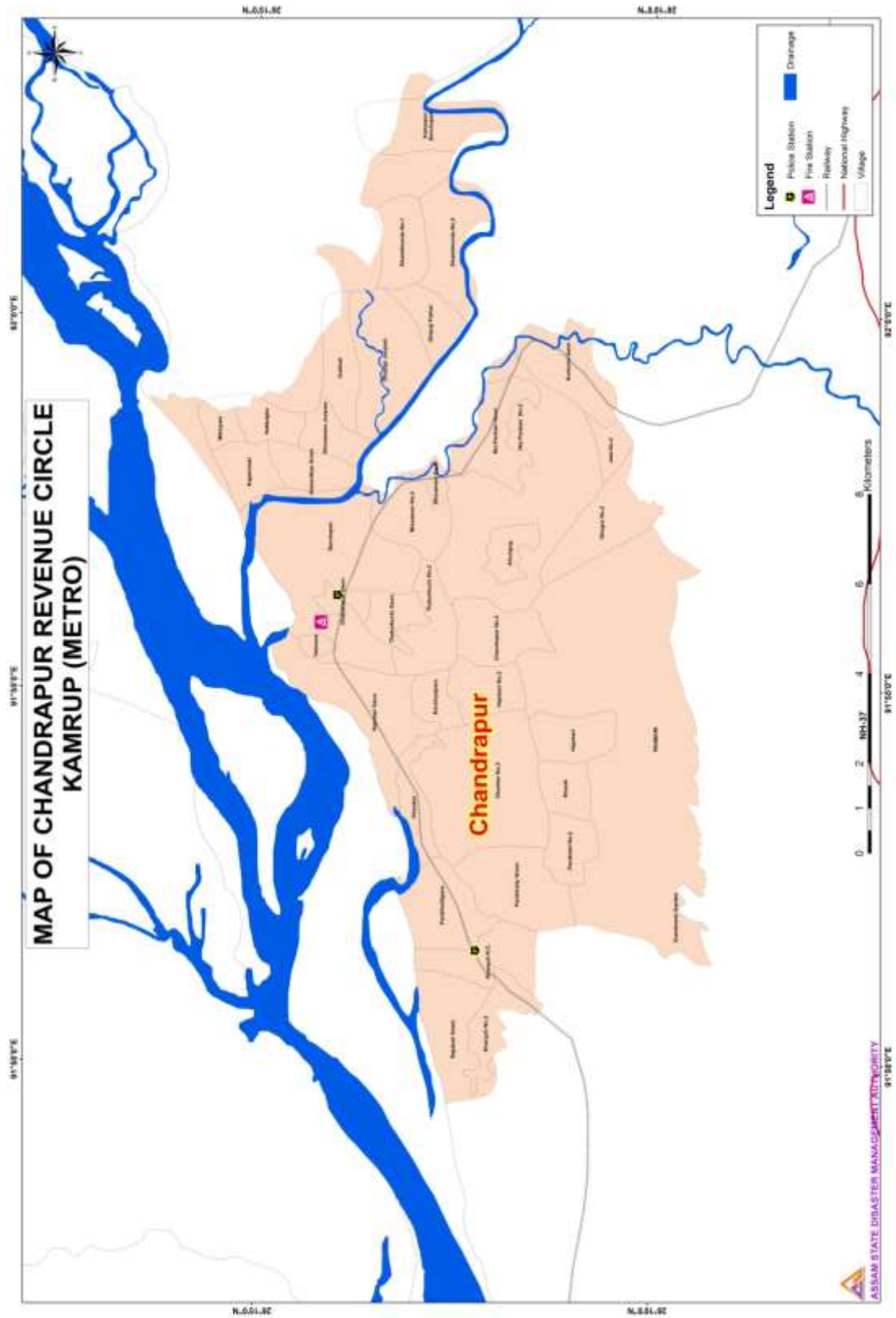
MAP SHOWING OPEN SPACES UNDER GUWAHATI MUNICIPAL CORPORATION BOUNDARY

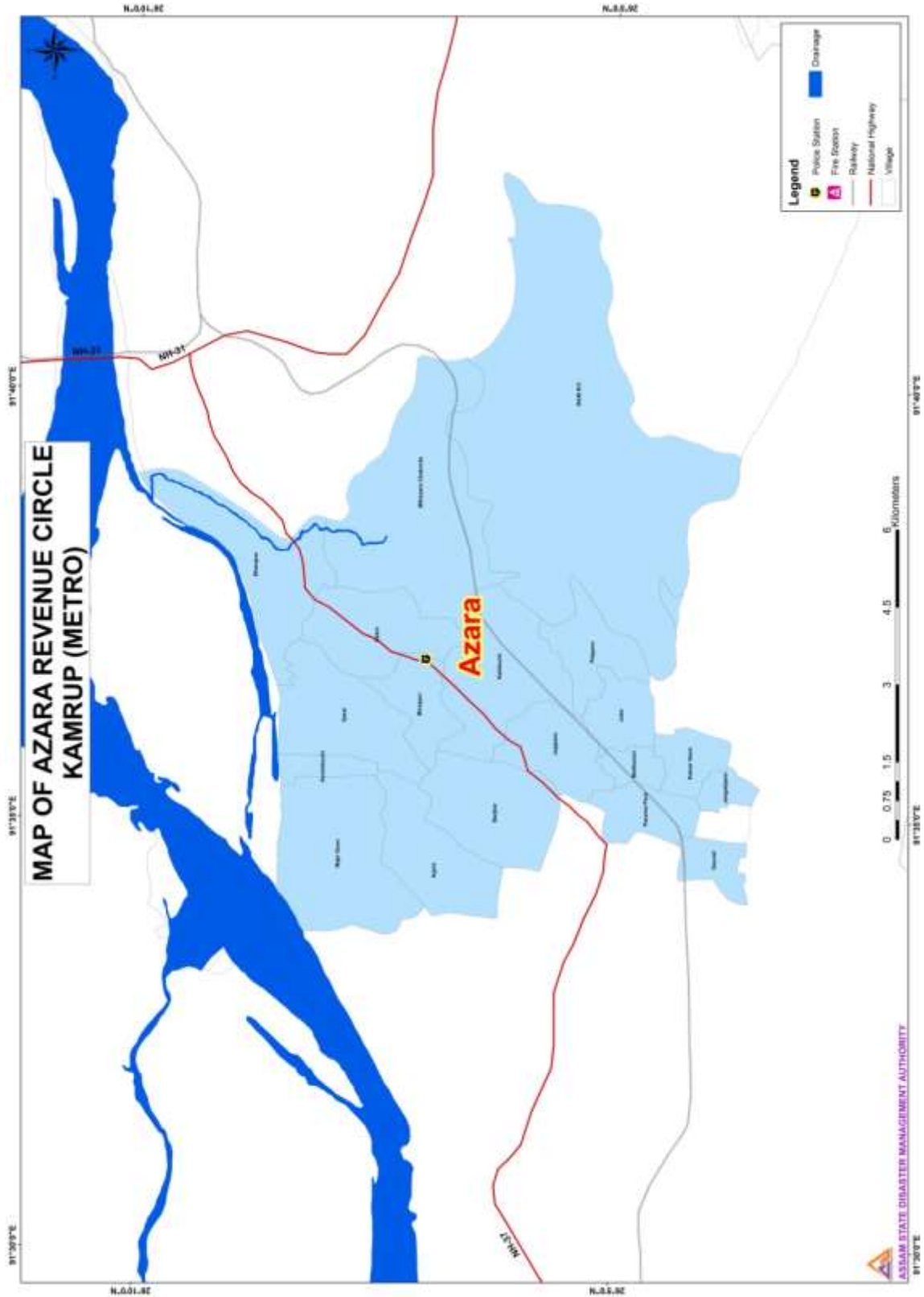












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