

District Disaster Management Plan

(2016 - 2017)



Name of the District: Mangan, North Sikkim

Contact No.03592-234856



Map of North District
Sikkim

P R E F A C E

North district is a land of rivers, rivulets, drainages and agriculture is its predominant occupation. This district has been experiencing Natural Calamities since times immemorial. Hailstorms, Inundation of land by flash floods and severe landslides during monsoon season and earthquake are common features of this district. Besides, continuous torrential rain coupled with thunder storms add to the miseries of the people. There is constant worry at all levels to fight against these adversities.

As it is said that prevention is better than cure, certain remedial measures have been spelt out in this booklet of planning for the guidance of all concerned. The problems have been discussed in details this plan to grapple with the probable contingencies arising out of landslides, heavy rainfalls etc, from time to time. The basic objective of this action plan is to ensure safety of the lives and properties of the people and domestic animals during disasters. The **District Disaster Management Plan (DDMP)** which outlines the measures to be taken in the event of any natural or man-made disaster during the year 2016-17 has been prepared on the past experiences. The Plan deals with Risk Assessment and Vulnerability Analysis, Identification of Disaster Prone Areas, Response Structures, Inventory of Resources, Standard Operating Procedures, Directory of Institutions and Key Individuals, etc. The Plan is prepared to help the Collector & District Magistrate and the District Administration focus quickly on the essentials and crucial aspects of both Preparedness and Response

It is hoped that all concerned will rise to the occasion to ensure that lives and livelihoods, during Natural Calamities like earthquake/landslides/Flash Flood/heavy rainfall, get adequate assistance to get rid of their sufferings and also to ensure that precautionary measures are taken so that people feel safe.

Shri. Karma R. Bonpo, IAS
Collector-cum-District Magistrate
North District, Mangan

Contents

<i>CHAPTER – I</i>	<i>Page</i>
Multi-Hazard Disaster Management Plan- Introduction:	1-8
1.1 Introduction	
1.2 Vision	
1.3 Rationale	
1.4 Objectives	
1.5 Perspective	
1.6 Strategy	
1.7 Role of District Administration	
 <i>CHAPTER- II</i>	
Overview of the District:	9-13
2.1 Locations, Area and Administrative Division	
2.2 Salient Physical Features and Land Use Pattern	
2.3 Forests	
2.4 Climates and Rainfall	
2.5 Socio-economic Profile	
2.6 Agriculture and Cropping Pattern	
2.7 River Systems and Dams	
2.8 Power Stations and Electric Installations	
2.9 Transports and Communication Network	
2.10 Industries and Mines	
 <i>CHAPTER- III</i>	
Risk Assessment and Vulnerability Analysis	13-15
3.1 Disaster Specific Proneness to Various Types of Disasters	
3.2 Disaster Probability	
3.3 Ranking and Probability of Disaster Episodes in the District	
 <i>CHAPTER- IV</i>	
Maps:	17-31
4.1 Map of North Sikkim showing its Sub-divisions	
4.2 Map of Sub-Divisions (Chungthang and Mangan)	
4.3 Map of North Sikkim showing GPU wise Boundaries	
4.4 Map of North Sikkim showing Blocks Boundaries	
4.5 Map of North Sikkim showing Education Institutes	
4.6 Map of North Sikkim showing Health Institutes	
4.7 Map of North Sikkim showing Public Infrastructures	
4.8 Map of North Sikkim showing Vulnerability prone Areas	

CHAPTER- V

Capability Analysis	33-36
5.1 Inventories and Evaluation of Resources	
5.2 Capability Analysis of Institutions/office in District	
5.3 Communication and Media (Mass-media-VHF/Telephones and others)	
5.4 Administrative Preparedness for Different Hazards	
5.5 Disaster-Specific Capability Analysis with the Human Resources and Skills	
5.6 Public and Private Sector Resources Inventory and Capability Analysis	

CHAPTER- VI

Prevention and Response Strategies	37-44
6.1 Planning assumptions based on Past Experience	
6.2 Response Measures and Approaches	
6.3 Rescue and Relief	
6.4 Post-Disaster Evaluation and Measures	
6.5 Submission of the Final Report	

CHAPTER-VII

Institutional Arrangements at the District Level	45-71
7.1 Responsibilities of the Collector, ADM, EO, SP, CDMO and other Line Depts	
7.2 Disaster Management Committee at the District level	
7.3 District Control Room	

CHAPTER- VIII

Mitigation Strategy for Different Hazards	72-75
8.1 Short –term Measures	
8.2 Long-term Measures	
8.3 Sector-wise Vulnerability Reduction Measures	
8.4 Mock Drill	
8.5 Plan Evaluation	
8.6 Dissemination of DDMP	
8.7 Post-Disaster Evaluation	
8.8 Plan Update	

CHAPTER-IX

Role and Responsibilities in Planning, Preparedness, Response, Recovery, Training and Awareness	76-77
9.1 Role of Zilla Parishad	
9.2 Role of NGOs/CBOs	
9.3 Role of Religious Institutions/Missionaries	
9.4 Role of Public/Private Industries and Corporations	
9.5 Role of Armed/Paramilitary Forces	

CHAPTER-X

Information, Education and Communication (IEC)	78-80
10.1 Plan Dissemination and Evacuation	
10.2 Dissemination of other IEC Materials	
10.3 Training and Drills	
10.4 Community Based Disaster Preparedness Plans and Mock Drills	
10.5 Setting up of Disaster Volunteer Force- Identification and Training	

CHAPTER- XI

Follow-up Actions	81-104
11.1 Standard Operation Procedures for all Functions	
11.2 General Advance Preparedness for All the Line Departments	
11.3 Check-lists for Different Departments and Officers	
11.4 Schedule for Updating Plans	

ANNEXURE

ANNEXTURE I

School Building as Safe Shelter

ANNEXTURE II

POLICE STATION along with wireless system

ANNEXTURE III

Public Distribution System, Traders, List of NGOs, Financial Institutes

CHAPTER-I

MULTI-HAZARD DISASTER MANAGEMENT & RESPONSE PLAN

1.1 Introduction:

At the very outset, disaster refers to a serious disruption of the functioning of a society, causing widespread human, material, or environmental loss, which exceeds the ability of the affected society to cope using its own resources. To put it in other words, it is the occurrence of a sudden mishap/calamity/grave occurrence that disrupts the basic fabric and normal functioning of a society (or community).

Types of Disasters: Natural

Earthquake
Flood
Heavy Rain
Drought
Landslides
Pollution Forest Fire
Chemical
Avalanches
Pest
Infection
Heat
Wave
Hailstorm
s

Man Made

Road Accident
Rasta Roka
Communal Violence
Riots

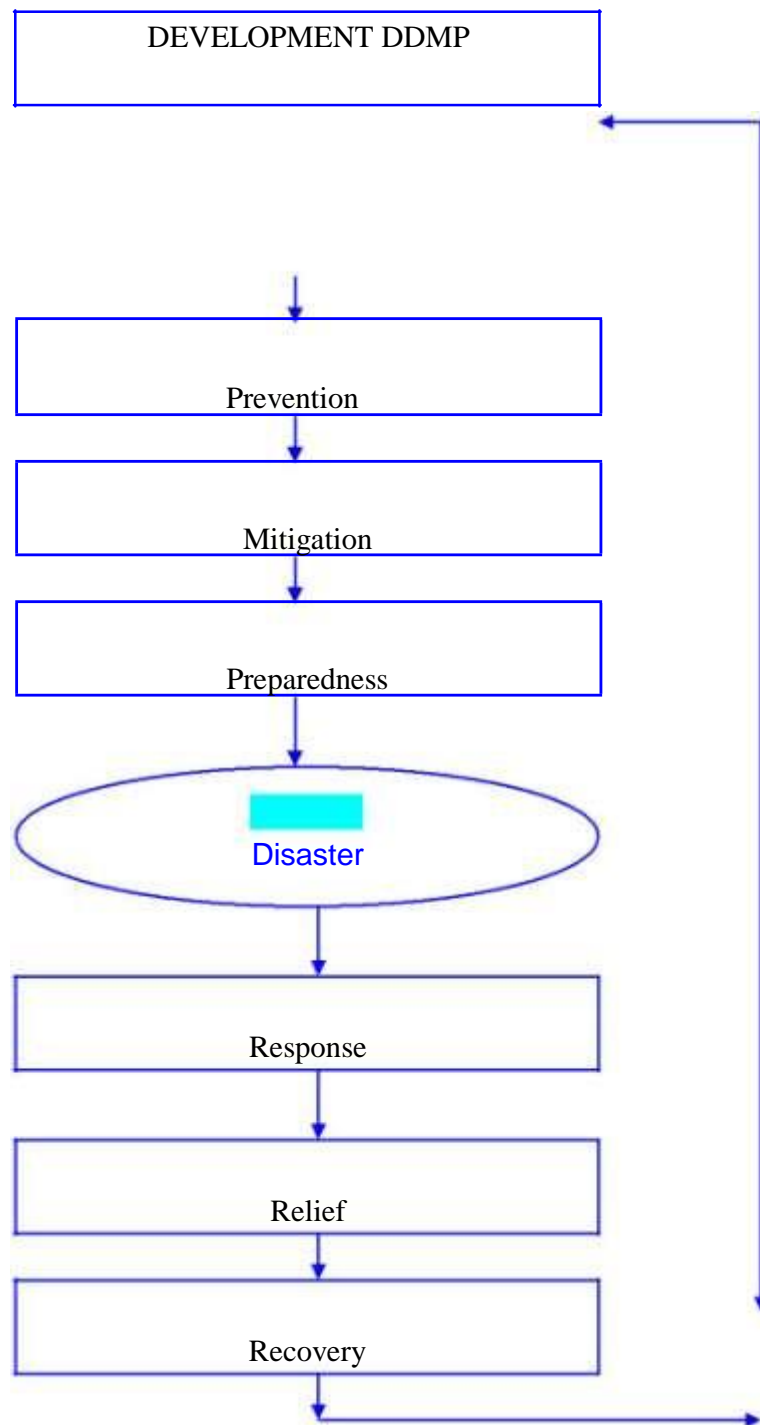
Railway Accidents

1.2 Vision

North District, situated in the womb of Mount Kanchandzanga has always been at the centre stage of natural calamities like Landslides, Earthquakes, Avalanche, Flash floods, Heavy Rainfall, etc. Keeping in mind these frequent disastrous happenings in the district that causes major setbacks to lives, livelihoods and property (both movable and immovable), the District Administration felt the urgency of the need of staying prepared to face these adverse situations well in advance. The devastation caused by floods and cyclones has posed a challenge before the administration to rethink and redefine the preparedness and the mitigation strategies to analyze each and every decision making process to gear up the rescue and restoration during such situations as well as building up the capacity to face further calamities in future. The District Administration has realized the necessity to compile a plan to prevent/minimize the loss and also to facilitate faster recovery during an emergency of all kind. This booklet is more of a guidebook, which can help the administration, remains better prepared for disasters to safeguard lives, livelihoods and property.

In broadest terms, the vision of the plan will be - good communication, authentic and accurate database, documented and rehearsed to be activated in the shortest possible time with minimum simple orders and procedures ensuring active participation by the administration, communities and volunteers at all levels, making optimal utilization of human and material resources with no gaps or no overlaps to prevent/minimize loss to lives and property and to ensure fastest restoration of the situation.

Chart Representation of the DDMP:



1.3 Rationale

North District, Mangan lies in proximity to the hilly terrain, it is mostly affected by the Landslides, Earthquake Hail-storm, Flash flood, Drought and Whirl wind etc. Nevertheless the peculiar traditional Housing structures especially in rural areas are more vulnerable to landslide during rainy season. Keeping in mind these frequent disastrous happenings in the district that cause major setbacks to lives, livelihoods and property (both movable and immovable), the District Administration felt the urgency of the need of staying prepared to face these adverse situations well in advance. The devastation caused by various disasters has posed a challenge before the administration to rethink and redefine the preparedness and the mitigation strategies to analyze each and every decision making process to gear up the rescue and restoration during such situations as well as building up the capacity to face further calamities in future. The District Administration has realized the necessity to compile a plan to prevent/minimize the loss and also to facilitate faster recovery during an emergency of all kind. This booklet is more of a guidebook, which can help the administration, remains better prepared for landslide and earthquake to safeguard lives, livelihoods and property. Based on the past experiences, to combat natural disasters, the rationale of an effective and realistic District Disaster Management Plan was felt. A comprehensive DDMP will strengthen the efforts of the District Administration.

1.4 Objectives

The objectives behind the preparation of the District Disaster Management Plan is

- ❑ To mitigate impact of natural and man-made disasters through preparedness at District, Block, Gram Panchayat and Village level.
- ❑ To provide effective support and resources to all the concerned individuals, groups and departments in disaster.
- ❑ To assist the line departments, block administration, communities in developing compatible skills for disaster preparedness and management.
- ❑ To disseminate factual information in a timely, accurate and tactful manner while maintaining necessary confidentiality.
- ❑ To develop immediate and long-term support plans for vulnerable people in/during disasters.
- ❑ To create awareness among the people about hazard occurrence and increase their participation in preparedness, prevention, development, relief, rehabilitation and reconstruction process
- ❑ To have response system in place to face any eventuality
- ❑ To affect or elicit the least possible disruption to the normal life process when dealing with individuals in disaster
- ❑ To ensure active participation by the government administration, communities, NGOs, CBOs and volunteers at all levels making optimal utilization of human and material resources at the time of disaster.

1.5 Perspective

A formal plan for managing disaster would include:

- Pre planning a proper sequence of response actions
- Allocation of responsibilities to the participant agencies
- Developing codes and standards operating procedures for various departments and relief agencies involved
- Inventory of existing facilities and resources
- Mechanism for effective management of resources
- Coordination of all relief activities including those of NGOs to ensure a coordinated and effective response
- Coordinating with the state response machinery for appropriate support
- Testing the plan including mock drills
- Defining levels of acceptable risk
- Monitoring and evaluation of actions taken during relief and rehabilitation

1.6 Strategy

The preparation of a Disaster Preparedness Plan involves the following steps:

Steps	What is to be done	Who are to be involved	How it is to be done
I	Review and Analysis	Collector, ADM, ADC (Dev), SDM BDO, RDA, Panchayat Presidents, Village community, NGOs/CBOs, Community/Village level workers	<ul style="list-style-type: none"> Past history of disasters to be discussed and documented Extent of severity and damage to be recorded The nature of the Warning issued to be analyzed The nature and extent of the rescue and restoration done, to be revisited
II	Situation Analysis	BDO, RDA, Field functionaries, Panchayat Presidents, Village community, NGOs/CBOs, Community/Village level workers	<ul style="list-style-type: none"> Mapping the geography and topography of the risk prone areas, block-wise, GP-wise and village-wise Demographic details to be recorded Mapping of the habitation in the concerned areas The natural resources to be marked on the maps Listing all the livelihoods and properties The existing risk prone/ safe infrastructure to be marked on the map
III	Hazard Analysis	-do-	<ul style="list-style-type: none"> Identification of all possible hazards in the area based on past experience and available records Identification of the most vulnerable areas with relation to threat to life, livelihoods and

Conti...

IV	Vulnerability Assessment	-do-	<p>property</p> <ul style="list-style-type: none"> ▪ Locations of the vulnerable areas are to be mapped separately ▪ Identification of the vulnerable people such as, the elderly, the disabled, children and pregnant women, families living in thatched houses, fishermen at sea (if any), ailing people, etc. ▪ Identification of property or assets which are likely to be affected, such as, cattle and other livestock, kachcha houses, weak structures and other installations, crops, horticulture and plantations, etc. ▪ Identification of weak points on embankments (if any) ▪ Marking the drainage system in the concerned area
V	Opportunity Analysis	-do-	<ul style="list-style-type: none"> ▪ Identification of the existing resources which may help to reduce risks to life and property ▪ Identification of the safe houses and buildings for shelter and storage ▪ Listing the existing flood/cyclone shelters, if any ▪ Identification of the elevated and up-lands which can act as natural barriers to protect livestock ▪ Listing of the existing health and sanitation facilities ▪ Identification of safe routes for evacuation ▪ Identification of the sources of funds to carry out the preparedness activities

1.7 Role of the District Administration

In anticipation of any disaster, the district administration has taken various precautionary measures. Functioning of the Emergency Operating Centre, Closure of past breaches in river and canal embankments and guarding of weak points, rain recording and submission of rainfall report, communication of Gauge reading, deployment of power, installation of temporary VHF stations, arrangement for keeping telephone and telegraph lines in order, storage of food stuff, arrangement for keeping drainage clear, agricultural/health/veterinary measures, selection of shelters, etc. have been properly planned. The government officials of different departments have been apprised of their duties for pre, during and post disaster periods. The BDOs, Panchayat Presidents, Executive Officers of Municipalities, Executive Engineers of Water Resources and River Development Department, CDMO, SP, CDVO and CSO have been requested to take all precautionary and preparatory measures and to remain alert to face the challenge of any disasters. The other government officials have also been apprised of their roles and responsibilities to be played during pre-disaster arrangement and during/post-disaster management. Every possible kind of cooperation from all the line departments has been sought for by the district administration in combating the severe natural calamities that may occur anytime.

CHAPTER –II

OVERVIEW OF THE DISTRICT

2.1 Locations, Area and Administrative Division

North District lies in proximity to the hilly terrain and in the womb of Mount Kanchandzanga; it is bounded by small Himalayas. Its altitude above the sea level is 3950 feet and is 65 km away from the capital, Gangtok. It is one of the biggest district in terms of its area in Sikkim. Its boundary touches with all three districts of the state and also have border with China and Nepal.

General

Geographical Area:	4226 sq. KM
Population (Census 2011):	41023 (Male=24513 Female=18841)
Male to Female Ratio:	1000:769
Literacy:	77.39%
Number of Sub-Divisions:	4
Number of Revenue Blocks:	45
Number of Gram Panchayats:	20
Number of Dzumsa:	2
Number of Panchayat Wards:	101
Number of Assembly Seats:	3

Educational Information

Schools

Number of Sr. Sec. Schools:	3
Number of Sec. Schools:	10
Number of Upper Primary Schools:	13
Number of Primary Schools:	29
Number of Lower Primary Schools:	22
Pre-Primary Centres:	2
Monastic Schools:	9

Total Number of Schools: **88**

Teachers

Post Graduate Teachers:	21
Graduate Teachers:	87
Primary Teachers:	253
Language Teachers (Lepcha):	48
Language Teachers (Bhutia):	56
Language Teachers (Limboo):	1
Total Teachers:	466

Health Information

Hospitals:	1 (Mangan)
Primary Health Centres:	3 (Phodong, Passingdong, Chungthang)
Primary health Sub-Centres:	19 (Lachen, Lachung, Shep-Gyer, Naga, Namok, Ramthang, Tinchim, Phensang, Kabbi, Singhik, Lum, Gor, Heegyathang, Lingdong, Pentong, Lingdem, Lingthem, Tingbong, Salim Pakel)

Number of Doctors

Chief Medical Officer:	1
District Medical officer Gyane:	1
RCH Officer:	1
Sr. District Tuberculosis Officer:	1
Medical Officers:	8 (Phodong-2, Passingdong-1, Chungthang 1, Mangan-4)
Dentist:	2(Mangan1, Chungthang-1)

Religions

Buddhist:	
Monasteries:	20
Mani Lhakhangs:	47
Lhakhangs And Tshamkhangs:	6

Hindu

Mandirs (Temples):	6
--------------------	---

Christian

Church:	2
---------	---

Other Information

Number of Town (Notified):	1
Number of Consumer Cooperatives:	10
Number of Multipurpose Cooperative Societies:	5
Major Cash Crop:	Cardamom
Major Rivers:	Tista, Lachung Chhu, Chakung ChhuUmram Chhu, Yumthang Chhu etc.
Other Agricultural Products:	Paddy, Apple, Potato, Cabbage, Corn
Major Tourist Spots:	Kabi, Phodong, Mangan, Chungthang, Lachen, Lachung, Yumthang,

Helipads

1. Ringhim Helipad- Mangan.
2. Pegong Helipad 88° 38' 55" E
27° 35' 40" N
3. Fhopho Ground 88° 38' 40" E
27° 36' 1" N

2.2 Salient Physical features and Land Use Pattern

The entire district is covered with hilly terrain track and the coastal belt of rivers like Teesta is very fertile for land cultivation. It has a total of 18,883.441 hectares of cultivated area .The classification of the type of land are:

Land Utilization Information

Land Type	Area (Hect.)
Paddy Field	1349.852
Dry Field	7098.424
Barren	953.325
Orchard	80.78
Cardamom	9401.06
Khasmal	20461.79
Total Nos. of Plots	52160
Total Nos. of Holding	5800

2.3Forests

North District is one of the largest district in Sikkim with very less population. 52% of the area is covered by forestland in north district; only 48% of land is covered by population and crops. Most part of north district fall under Kanchandzanga National Park belt.

2.4Climate and Rainfall

Climate of the district is generally moderate with less humidity. May is usually the hottest month. Occurrence of large number of landslides is the regular feature of the district during the summer season i.e. May to August. December and January is the coolest month of the year.

Rain Recording Stations:



Total No. of Rain Recording stations in the District - **6 (Six)**



Location of Rain Recording stations:

Sl no	Sub-division	GPU	Station	Tel. no.
1	Chungthang	Chungthang	Chungthang	--
	-do-	Lachung Dzumsa	Lachung	--
	-do-	Lachung Dzumsa	Yumthang	--
2	Mangan	Singhik Sentam	Singhik	--
	_do-	Ringhim Nampa Tam	Mangan	--

	-do-	Lum-gor-Sangtok	Dikchu	--
--	------	-----------------	--------	----

2.5 Socio-Economic Features

Agriculture and cardamom cultivation are the two major sources of income in the district of Mangan, North Sikkim. Few percentages of people have small business. Some people in the Govt. service and other town-areas have sound business of hotels and restaurants. The district has got many tourist spots and religious places:

<i>Sl.No.</i>	<i>Place</i>	<i>Altitude In Feet</i>	<i>Distance (KM) From</i>	
			<i>Gangtok</i>	<i>Mangan</i>
1	Kabi Lungtsok	4800	24	41
2	Phensang	4700	30	35
3	Phodong	4500	39	26
4	Mangan	3950	65	0
5	Chungthang	5,600	95	30
6	Lachen	9800	122	57
7	Lachung	8800	116	51
8	Yumthang	12000	140	75
9	Thangu	13,500	150	85
10	Gurudongmar.	18000	183	118
11	Cholamu	18000	192	127

These places attract tourists and picnickers round the year. Income generated from tourists is also quite encouraging.

Agriculture and cardamom cultivation are the two major sources of income in the district of Mangan, North Sikkim. Few percentages of people have small business. Some people in the Govt. service and other town-areas have sound business of hotels and restaurants. The district has got many tourist spots and religious places:

<i>Sl.No.</i>	<i>Place</i>	<i>Altitude In Feet</i>	<i>Distance (KM) From</i>	
			<i>Gangtok</i>	<i>Mangan</i>
1	Kabi Lungtsok	4800	24	41
2	Phensang	4700	30	35
3	Phodong	4500	39	26
4	Mangan	3950	65	0
5	Chungthang	5,600	95	30
6	Lachen	9800	122	57
7	Lachung	8800	116	51
8	Yumthang	12000	140	75
9	Thangu	13,500	150	85
10	Gurudongmar.	18000	183	118
11	Cholamu	18000	192	127
12	Donkaila Pass	18400		
13	Yumey Samdong	15000		

These places attract tourists and picnickers round the year. Income generated from tourists is also quite encouraging.

2.6 Agriculture and Cropping Pattern

Out of the total area of 18,883.441 Hect. of cultivable area, cardamom area constitutes 9401.06 Hect. It clearly implies the cropping pattern of the district which is apparently dominated by cardamom and rest of the area, is reserved by paddy, cabbage, potato, corn, apple etc.

2.7 River Systems and Dams

Major Rivers: Tista, Lachung Chhu, Chakung Chhu, Umram Chhu, Yumthang Chhu etc.

2.8 Power Stations and Electric installation

Running Power Houses

Sln.	Power Houses	Installed Capacity (MW)	Yr. of Commission
1.	Meyong Power House	4.0	1993
2.	Lachung power House	.2	1992
3.	Tserten Power House	.1	1988

Power Projects Under progress

Stage	Location	Capacity
1. Teesta Stage III	Mangan-Monpu (Global Tender Floated)	1200MW
2. Teesta Stage IV (Bid evaluation under way)	Singhik-Sentam	520MW
3. Teesta Stage V	Dikchu- Balu Tar	510 MW
4. Sneha	Dikchu	96 MW
5. Panam	Upper Dzongu	300MW
6. Rabom Power House	Lachen	3MW
7. Himagiri		

Sikkim Engineers Pvt. Ltd.

2.9 Transport and Communication Network

The Principal means of transport is by road as the National Highway 10 runs through the district. The District headquarter has got two alternative roads other than NH10 i.e. via Dikchu road and Dzongu road to connect with capital and also with the neighbouring districts. Yet many blocks and Gram Panchayat Unit are not connected with road and hence connected through village footpath as the alternate means of transport.

2.10 Industries and Mines

The small cottage industries are available in North District, namely Chungthang Cottage industry and Lingdong Cottage industry.

CHAPTER-III

RISK ASSESSMENT AND VULNERABILITY ANALYSIS

3.1 Disaster Specific proneness to Various Types of Disasters

TYPE OF HAZARDS	TIME OF OCCURRENCE	POTENTIAL IMPACT	VULNERABLE AREAS
Landslides	May -August	Loss of life, livestock, crop and infrastructure	<i>Entire District</i> Major landslide area: Namok Khola, Dikchu, Pazingreet, Entire Mangan, Singhik, Lanthey Khola, Meyong and Ritichum
Avalanche	July-September	Loss of life, crop, infrastructure and animals	Lachen, Lachung, Thangu, Yumthang, Keshyung (Dzongu)
Drought	November-January	Crop Loss, Water scarcity	<i>Entire District</i>
Hail storm	March-May	Loss of Life	-do-
Epidemics	Anytime	Loss to human life	-do-
Fire	November-January	Human Loss and house damage	<i>Entire District</i> especially in Lachen and Lachung Dzumsa
Accidents			
Earth Quake	Anytime	Loss of Life, Livestock and Infrastructure	-do-
Heavy rainfall	June-August	Loss of crops,	-do-
Flash Flood	June-August	Loss of crops, damage infrastructures, houses, bridges etc.	-do-

3.2 Disaster Probability

Flash Flood:

During rainy seasons, all the major rivers in the district carry gallons of water pose potential threat of flood. Things get worse as the flood devastates the crops in the affected area and is also a source of epidemics.

Fire Accidents:

Fire accidents present a serious problem to the houses in Lachen and Lachung D'zumsa in the district. This is mostly due to the peculiar housing pattern adopted in the D'zumsa. These houses have generally built of wooden planks made out of timber, bamboo and straw. They spring up in clusters. Any occurrence of fire destroys houses and properties thereby causing serious damage to the affected people.

Draught:

Sometimes want of rain at the proper time either defers commencement of agricultural operations or affects growth of crops. Occurrence of drought is not so frequent in North district as it lies on the coastal belt of Tista river and furthermore the rivers are always full of water. Past occurrences show that the entire district is prone to draught.

Earth Quake:

Though North district has never experienced any earthquake causing damage to lives or infrastructure, the possibility can never be ruled out as it can happen any time.

Month

Name of Disaster												
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Landslides					←→							
Avalanche							←→					
Drought	←→										←→	
Hailstorm			←→									
Fire Accident	←→										←→	
Earthquake	←→											
Flash Flood						←→						
Heavy rainfall						←→						
Epidemic	←→											

3.3 Ranking and Probability of Disaster Episodes in the District

Based on the previous disasters experienced by the district in the past, probability of Landslide ranks first. Accordingly the occurrence of other disasters such as Heavy rainfall, Flash Flood, fire accident, Hailstorm, Avalanche, drought, epidemic and earthquake as mentioned.

History of Disaster and Probability of Disaster episodes in the District.

Sl no.	Types of hazard	Year of occurrence	Area affected	Human	Crop affected	Household	Infrastructure	Animals
1	Avalanche	15-6-1997	Thangu	20 death 1 injured	–	–	Base camp destroyed	–
2	Flash flood	31-3-1998	Lachung	–	–	–	Main bridge washed away	–
3	Landslide	_do_	Toong	2 people killed	Cardam om fields	1 kacha house	–	–
4	Landslides	23-6-1998	Peneng	–	Cardam om fields and standing crops	Cracked School building & 1 house	–	–
5	Landslides	26-6-1998	Lachung	1 injured	Cabbage field	1 kacha house	–	–
6	Accident	5-8-1998	Naga	1 killed	–	–	–	–
7	Lightning & heavy rainfalls	26-6-2000	Phudong	–	–	–	–	2 cattle
8	Landslides	2000	Paqssingdang	–	Cardam om fields	–	–	–
9	Landslides	2000	Lanthey	–	Cardam Om	–	Sanitation source, electricity, transportation road	–
10	Landslides	2000	Tingchim	–	–	4 no. of Houses	–	–
11	Landslides	20-9-2001	Mangan bazaar	–	–	Houses damage	–	–
12	Landslides	2001	Thieng	–	Cardam om fields	2 houses	Electricity line disrupted	–
13	Landslides	2001	L/Mangshilla	–	Cardam om field	4 no. of houses	–	–
14	Fire	2001	Tingchim	–	–	1 house	–	–
15	Hail storm	2001	Kabi, Phensang,	–	Cardam Om	–	–	–

Conti...

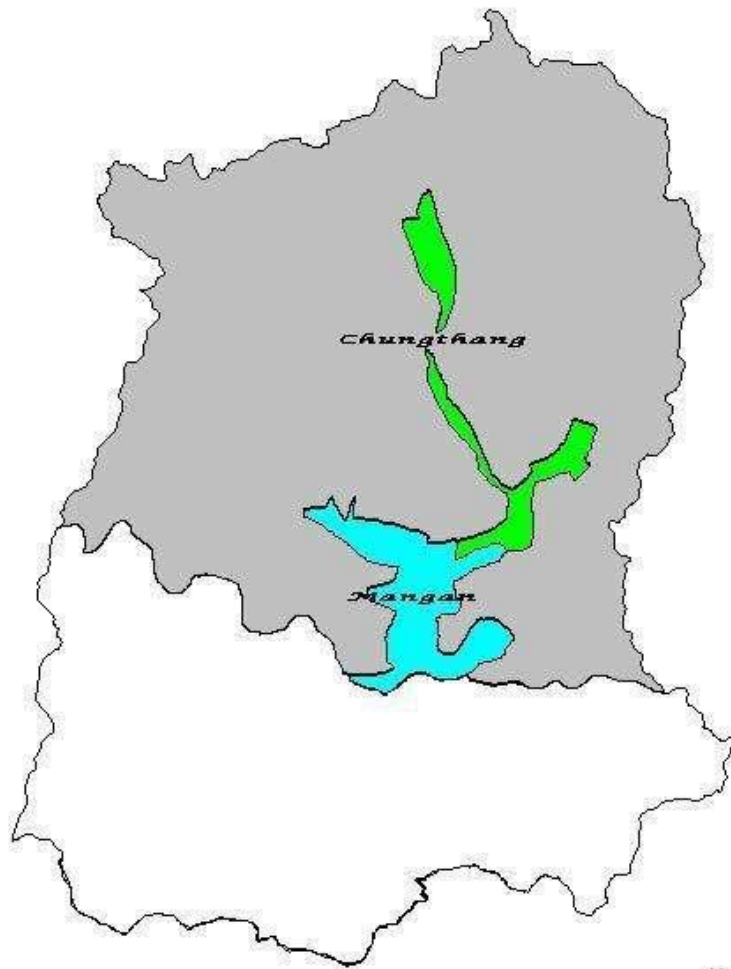
			Chewang Phudong, Tumlong		fields			
16.	Heavy storm	26-11-2002	Chungthang division	–	–	–	Damage of power station	–
17.	Landslides	2002	Phudong	–	Cardam om field	1 house	–	–
18.	Landslides	2002	Rongong	–		2 houses	–	2 pigs & 2 cows
19.	Landslides	2002	Tumlong	–	Cardam om field	–	–	–
20.	Fire	2002	Namok	-	–	1 house	–	–
21.	Landslides	2002	Phamtam	–	Cardam om field	–	–	–
22.	Landslides	2002	Ramthang	–	Cardam om field	–	–	–
23.	Landslides	2002	Tingvong	–	Cardam om field	–	Disrupted draining water, electricity, roads.	–
24.	Fire	2002	Sakyung	–	–	1 house	–	–
25.	Landslides	2002	Lingdem	–	Cardam om fields	1 house	–	–
26.	Heavy rainfalls	2-5-2003	Gairi goan	–	Cardam om field	1 house cracked	–	–
27.	Whirl wind	3-5-2003	Ramthang	–	-	Houses cracked	–	–
28.	Fire	2003	Lachung	–	–	2 houses	–	–
29.	Landslides	2003	Lachen	–	–	2 houses	–	–
30.	Earthquake	2011	Entire North	46				

CHAPTER-IV

MAPS

SIKKIM

Map of North Sikkim showing its Sub-Divisions

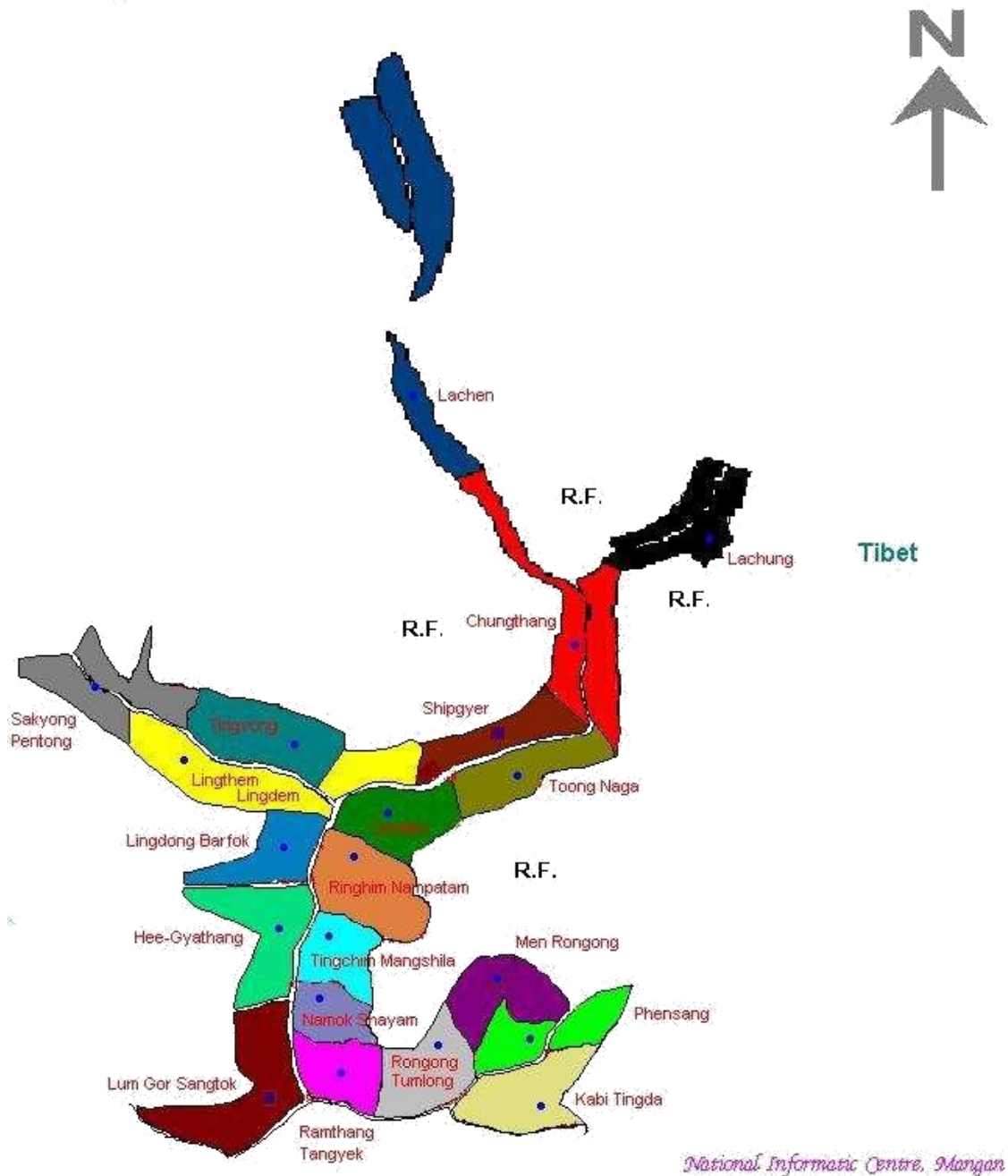


National Informatic Centre, Mangan



SIKKIM

Map of North Sikkim Showing GPU Wise Boundaries

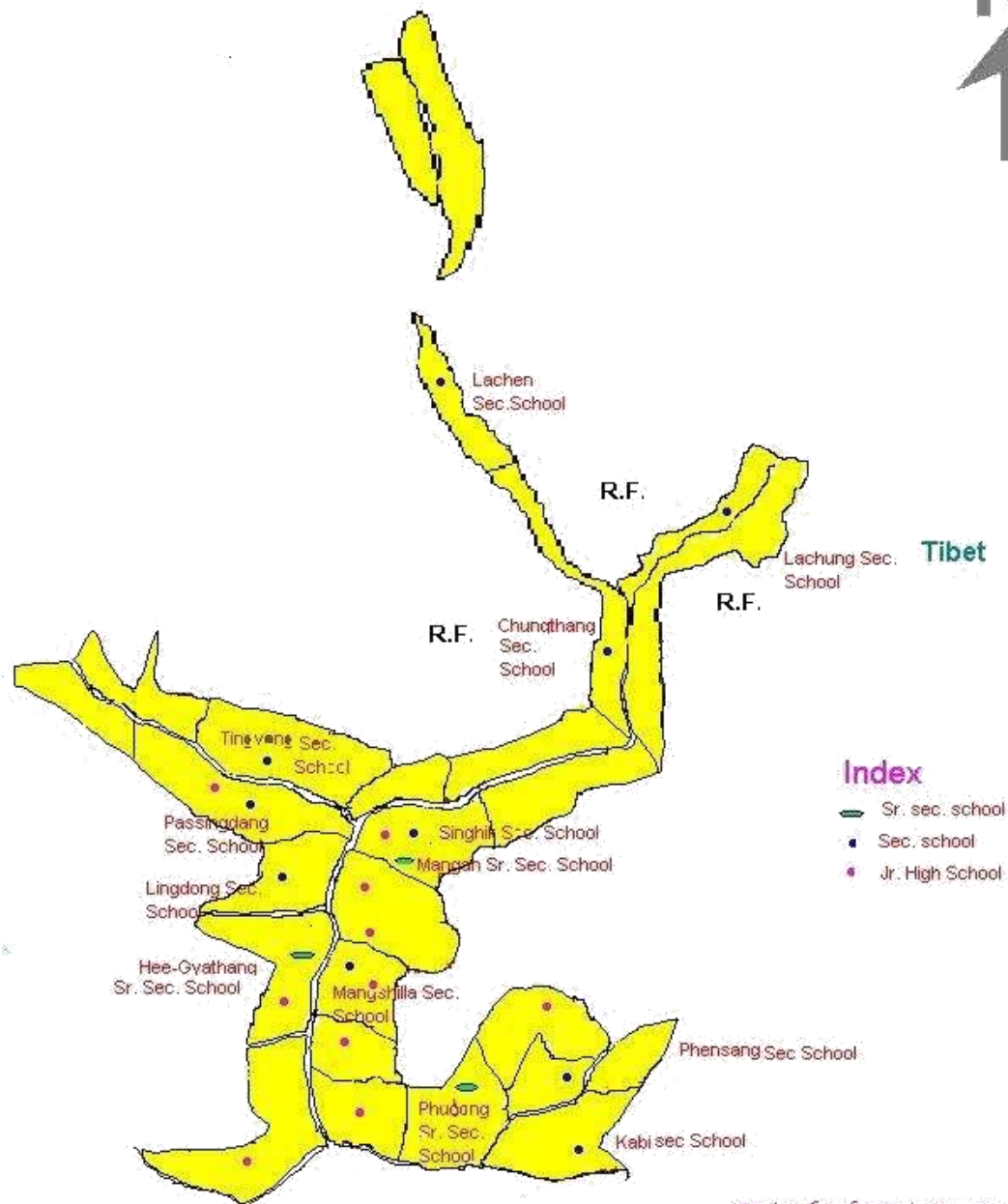


Map of North Sikkim Showing Blocks Boundaries



SIKKIM

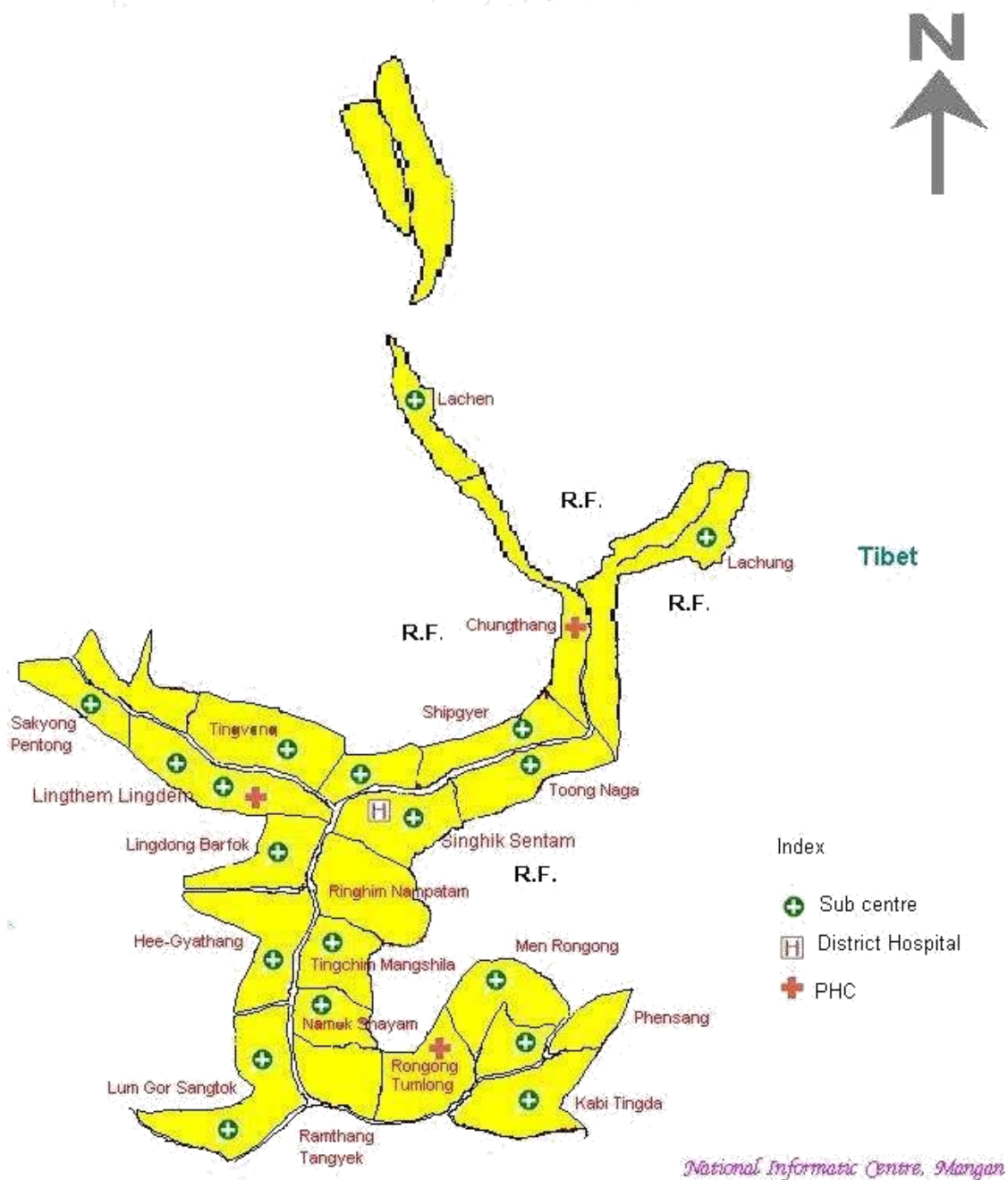
Map of North Sikkim Showing Education Institutes



National Informatic Centre, Mangan

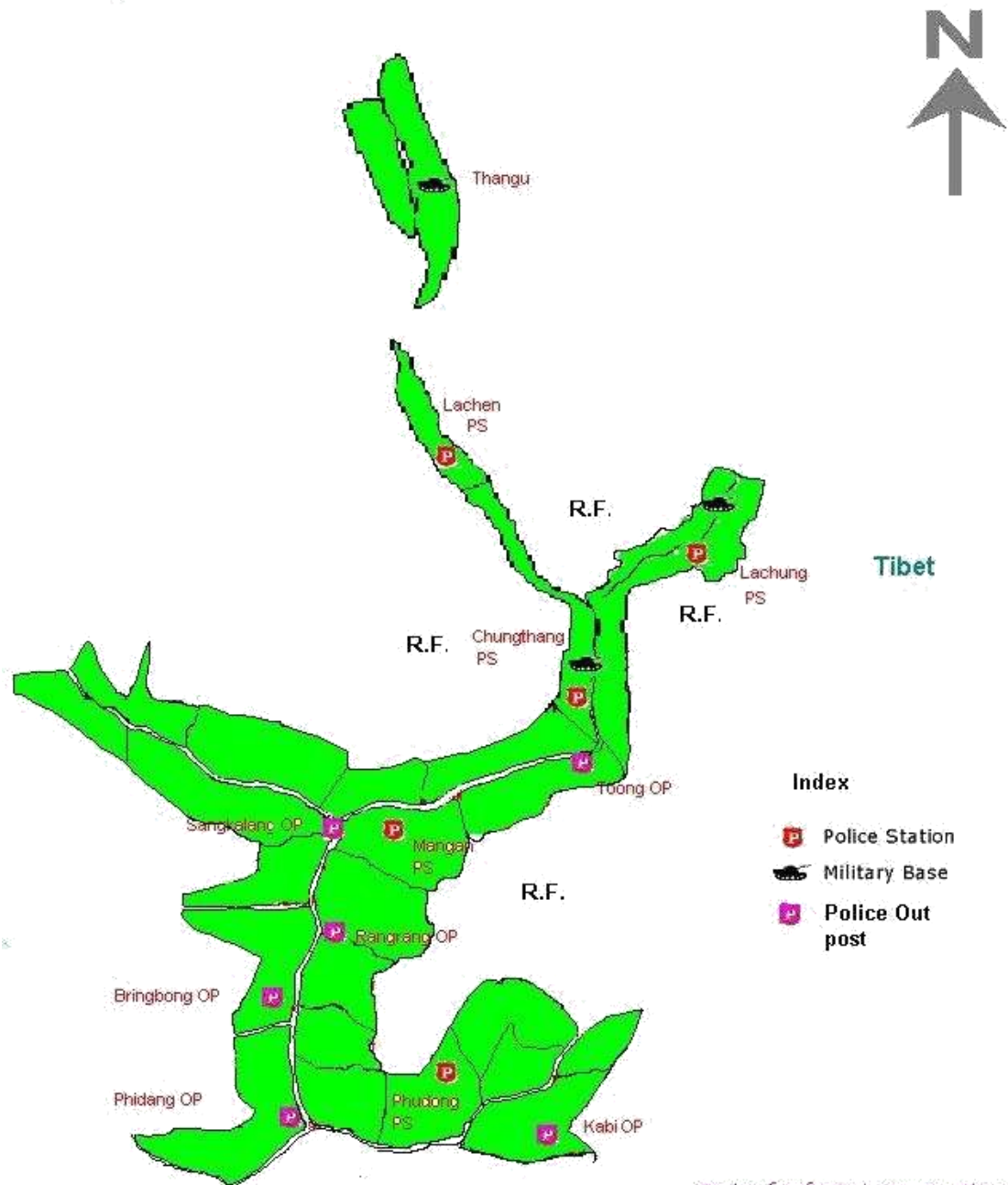
SIKKIM

Map of North Sikkim Showing Health Institutes



SIKKIM

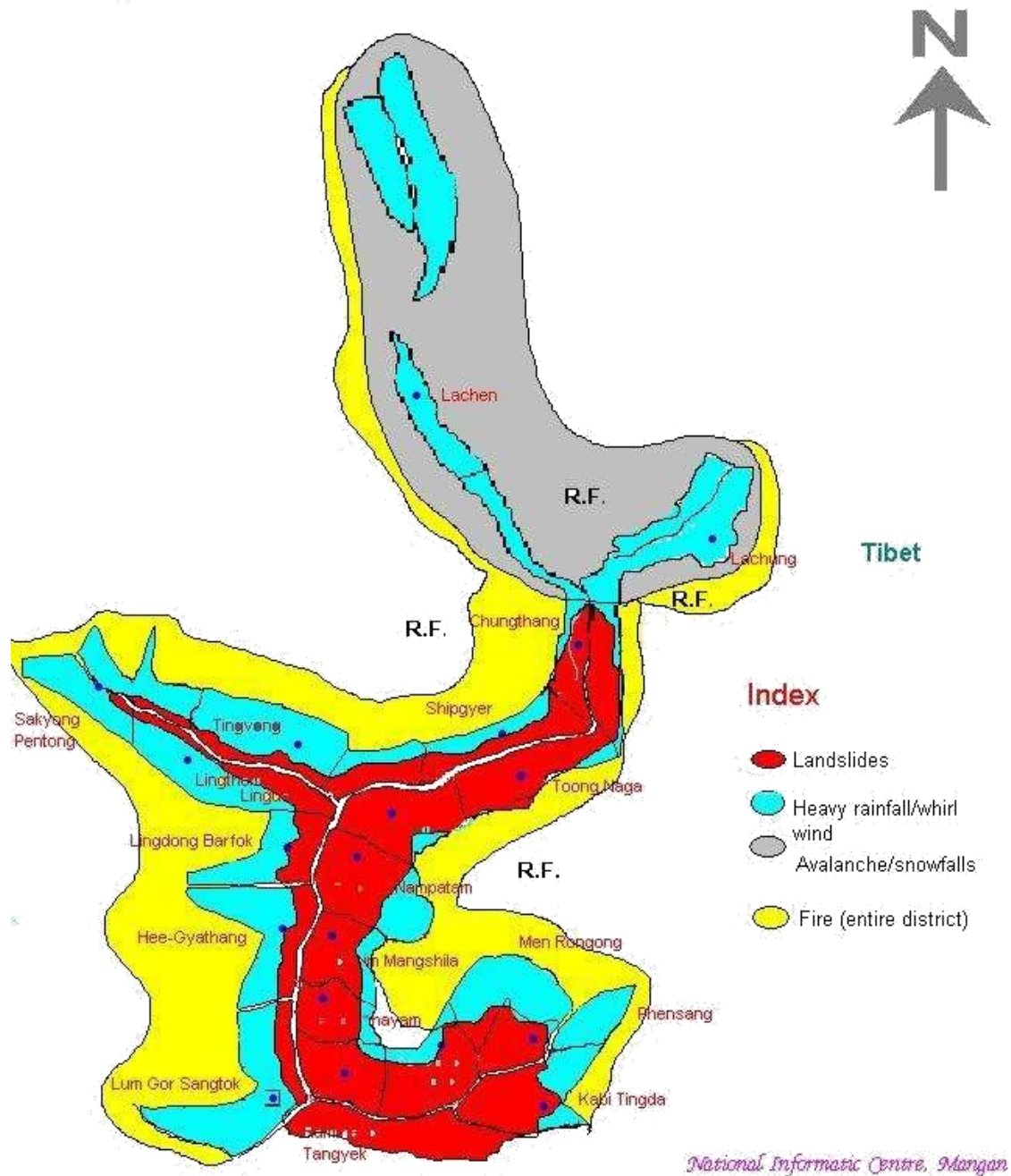
Map of North Sikkim Showing Public Infrastructure



National Informatic Centre, Mangon

SIKKIM

Map of North Sikkim Showing Vulnerability prone area



CHAPTER-V

CAPABILITY ANALYSIS

5.1 Inventories and Evaluation of Resources Analysis:

Analysis and assessment of the resources and opportunities form the stepping-stone in the preparatory stage. Authentic assessments can make the planner aware of their tenacity and wants, so that they can equip themselves with all the required items and materials well in advance. The resources necessary for disaster preparedness and during and after disasters are listed below:

5.1.1 Shelters:

Accommodation for rescued/evacuated people has to be planned in advance. People living in low-lying areas have to be shifted to places at a higher elevation. Advance identification of such sites is an important element of disaster preparedness. Schools and other public buildings located at safe elevations should be inspected before the rainy season and strengthened. People are not prepared to move to distant locations away from their sources of livelihood. Institutions located at safe elevations have come in handy to provide shelter to people who have to be evacuated from danger risk prone areas. For this purpose there are altogether 9 shelters available in the district at the following places.

Name of the GPU	Name/Location of the Shelter
Ringhim	Community Center, Mangan
Nampatam	Power Guest House, Mangan
	Zilla Bhawan, Pentok
Lachen Dzumsa	Lachen Dzumsa Hall
Lachung Dzumsa	Lachung Dzumsa Hall
Chungthang	Gymnast Hall, Chungthang
SinghikSentam	Mangan Sr. Sec. School
Hee-Gyathang	Hee-Gyathang Sr. Sec. School
Rongong Tumlong	Phudong Sr. Sec. School

Apart from these, the secondary, JHS and other school buildings and forest guesthouse in different places can be used as temporary safe shelter.

5.1.2 Storage of Food

Storage of food in accessible pockets is as vital as building shelters. All the Gram Panchayat Offices are used as storage points when need arises. The RDAs, Panchayat Secretaries and the storage agents in charge of the respective GP are the contact person for the G.P. offices. Adequate quantity of rice has been kept with each storage agent at each GP for distribution to the victims as immediate relief. These locations are used as storage locations for medicines, blankets. It has been decided to keep adequate stock of rice in the following places for distribution of emergent relief.

Storage facilities with capacity:

Sl no	Type of storage structure	Location	Capacity	Contact person	Address	Contact No.
1	Food grain godown	Mangan bazaar	11,000 qtl.	Mr. Sonam Pintso Bhutia	Food godown Mangan.	9647875557
2	Food grain godown	Chungthang	500 qtl.	Mr. Palden Dzangpo	Food godown Chungthang.	9434179069
3	Food grain godown	Dikchu bazaar	500 qtl	Mr. Anil Khulal	Food godown Dikchu bazaar	9679009858
4	Sub food godown	Lachung	300 qtl	Mr. Palden Dzangpo	Food godown Chungthang.	9434179069
5	Sub food godown	Lachung	200 qtl	Mr. Palden Dzangpo	Food godown Chungthang.	9434179069

5.2 Capability Analysis of the Institutions/office in District:

All the departments at the Collectorate are connected with telephone (both external and internal), VHF's has to be installed at the Collectorate and at the Sub-Division offices. Disaster Warning System also has to be installed at various places in District. All the line departments have been directed to keep themselves ready as per the guidelines mentioned in this booklet. The NGOs and CBOs operating in the district have been asked for preparing area specific hazard plans and forming task groups involving local volunteers. Other institutional arrangements have been elaborated in the coming pages.

5.3 Communication and Media:

Wireless and V.H.F. stations are the quickest means of communication of weather warning and other important messages on Disasters. Regular wireless, V.H.F. sets are available in all police stations. The list is given in ANNEXURE- II

5. 4 Administrative Preparedness for different Disasters

The following steps have been taken as a part of administrative preparedness to combat any eventualities during and immediately after the disaster:

1. Emergency Operating Centre is functioning round the clock in the district. ADM's Office, Offices of the CDMO, CDVO, District Agriculture, All Executive Engineers of Irrigation, R&B (PWD), RWSS, Rural Works Division, PHD.
2. Senior Level Officers from different departments will be assigned charges for all the disaster zones along with the RDAs of respective GPUs.
3. SDO Telegraphs / Telephones have been requested to keep the lines in order at the time of calamity
4. Rain recording stations installed in 6 particular areas in the district. Due to non-replacement of rain recording materials for last 6/7 years, proper measurement of rainfall could not be assessed in the district. Daily report of rainfall is being obtained from the Horticulture Department.
5. The Executive Engineers of Irrigation Department have been intimated to report Gauge reading of the rivers, daily during monsoon and to keep drainage clean
6. The Executive Engineers of Water Resource and River Development Department have been reported to repair all weak points/ breaches caused in the last flash 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 eventualities
7. Executive Engineer, RWSS has been directed to repair / replace the defunct tube wells on war footing basis before the rainy season
8. The Superintendent of Police has been intimated to monitor the installation of Police Wireless Stations and make arrangements for army assistance.
9. Food & Civil Supply Officer have been directed by the Collector and District Magistrate to store adequate foodstuff at interior, vulnerable strategic and key areas for immediate relief.
10. NGOs have been identified GP wise and task force been formed in collaboration with the district administration to carry out relief operation, rescue and evacuation, etc.
11. CDMO has arranged Medical Relief Camps and doctors have been deployed for the purpose and the CDMO has been directed to keep the mobile medical team ready for the purpose.
12. Indent of different vaccines has been taken to protect animals against contagious diseases, medicines supplied to the field functionaries for routine treatment as part of veterinary measures.
13. HRDD and RM&D Department will remain in charge of safe Shelters
14. PWD Officer will look into the repairs of roads, bridges, concrete steel work and make other necessary arrangements as per requirement.
15. Review of pre-disaster arrangements has been carried out and the contingency plan for the district has been provided to all the head of the departments.

5.5 Disaster Specific Capability Analysis with the Human Resources and Skills

All the line departments such as Health, Veterinary, Irrigation, Police, Revenue, Electrical, PWD, RWSS, etc. are instructed to stay prepared with the equipments and manpower before the specified disaster seasons. They will give a list of their resources and requirements to the District Collector well in advance so that proper preparatory measures will be at place. The team leaders at district level have to prepare a list of task force for the rescue, evacuation and relief operation. Training should be conducted at the District, Block, GP and village levels to ensure that the awareness for disaster mitigation is built up among the communities. Mock drill should be conducted in anticipation of disasters to enhance the skills of the task force.

CHAPTER-VI

PREVENTION AND RESPONSE STRATEGIES

Prevention is always better than cure. All the measures required to be taken before disaster (anticipatory stage), during the disaster (concurrent stage) and after disaster (post disaster stage) are incorporated into the integrated contingency plan which clearly specify details of the mechanism of coordination, monitoring and supervision of both prevention, rescue and relief operation. Analysis of vulnerability and classification of areas with reference to degrees of risks faced by the disasters areas are tasks which should precede the preparation of the Contingency Plan, which has to be tailored to meet the nature and magnitude of risk.

In the case of landslides, the management during the various phases falls within the purview of many Departments. These Departments are required to prepare a contingency plan spelling out clearly the arrangements for drafting additional personnel, their deployment, the chain of command, stock-piling of supplies and monitoring. The landslides prone area has to be divided into convenient administrative units and the staff deployment and stocking of supplies and equipments has to be done with reference to those units.

Issue of landslides warning, protection of embankments guarding of weak and vulnerable points on various rivers and streams etc. are among the major strategies of the Water Resource and River development Department. Restoration of roads and salvaging of structures affected by flash floods have to be attended to by the Public Works Department, Public Health Department has to organize clearance of debris, disposal of corpses and carcasses. Its plan should also provide for prompt provision and repair of drinking water taps and supply of protected water to the people in the affected areas and also in the areas where temporary shelters are set up to accommodate people evacuated, rescued from landslide affected areas as well as in marooned areas.

People in the affected areas have to be immunized from water borne and other diseases. The water sources have to be disinfected. The person responsible for undertaking these works should be earmarked in advance and plans for constitution of mobile teams and establishment of field hospitals finalized.

The health of cattle in the affected areas is equally important. Provision of fodder, treatment of cattle and prophylactic measures are the important items that should figure in the Contingent Plan of the Animal Husbandry Department.

The immediate responsibility of Agriculture Department is to maintain necessary stocks of seeds and other imputes.

The tasks generally assigned to Revenue agencies include advance stocking of food grains and other essential consumer's articles and building materials etc. in areas, which are likely to be cut off by landslides. Positioning of power at strategic locations before the occurrence of disasters, selection of elevated sites and temporary shelters for accommodation of affected people who are to be evacuated or rescued and provisions of temporary shelters for these persons, supply of food, clothes, utensils etc. to landslides victims, assessment of house damages and distribution of grants for repair and reconstruction of houses and general assessment of the ever all damage.

The services of Police, Home Guards, National Cadet Corps and members of National Service scheme etc., are mobilized for rescue and relief operation. In the case of major disasters help of Army is available for rescue and relief operation. They have to be trained properly to stay ever ready for immediate response to such events

Training is also necessary for the people and local leaders so that they can respond to the disaster situation in an appropriate manner.

Following factors must be put together to minimize loss of lives, livelihood and property in disaster:

1.	Event	-	Prediction
2.	Warning	-	-
3.	Risk Avoidance Action		
4.	Hardware	-	-
5.	Emergency Plan (District Disaster Management Plan or District Contingency Plan)		
6.	Activation of the Plan		

6.1 Planning Assumptions based on Past Experiences

District Collector

▪ Proper functioning of Emergency Operating Centre (District, Sub-Division) to be monitored

- Areas will be cut off from the main route
- Senior Level Officers should be deployed before the areas get cut off
- Vehicles should be deployed
- Installation of wireless systems and telephones to be ensured for communication
- Storage of food (infant food, dry food) in vulnerable pockets to be monitored
- Arrangements for keeping drainage clear to be made
- Army assistance to be kept ready
- Relief measures to be organized

Superintendent of Police

- There will be communication problem
- There will be law and order situation in the affected areas
- Army and Civil Defense assistance will be required
- Routes might be blocked with carcasses
- There will be a traffic jam on the roads

Revenue

- Local residents' workers or volunteers may initiate some search and rescue but will lack specialized techniques
- Spontaneous volunteers will require coordination
- Access to damage areas will be limited. Some sites may be accessible only through water or Air

CDMO

- Outbreak of epidemic or medical emergency as secondary disaster
- Contamination of water and food, requirement of adequate drugs and medical accessories
- Unclean disaster affected site
- Disruption of communication and transport facilities
- Disruption of labs and hospital, urgent need for mental health crisis council for disaster victims
- Disruption of sanitation facilities
- Loss of power and missing people in shelters may increase disease and injury.

RWSS

- Most of the water available will be unfit for drinking
- Existing storage bodies of water may be damaged and unusable
- There will be an alternative need (poly packs) of water to assist victims in rescue operation
- People to be informed of emergency supply of water
- Tankers and containers to be acquired for distribution of water
- Sources of possible water sources and unacceptable water sources to be identified
- Water to be distributed to camps and hospitals

Keeping in view all the past happenings and miseries a District Crisis Group has been formed with the following as members:

DISTRICT DISASTER MANAGEMENT COMMITTEE

Sl.No	Designation	Depart.	Phone Number		Designation
1	Hon'ble Adakshya	Zilla Panchayat		9434030305	Advisor
2	DM/DC	LR&DM	234234 (O)	8116012999	Chairman
3	ADM/ADC	LR&DM		9933872873	Convener
4	SP	Police	234242	7797896219	Member
5	CMO	Health		9434117251	-do-
6	JD	HRDD	234203	9475544535	-do-
7	JD	Agriculture		9564857793	-do-
8	JD	Horticulture		9647879310	-do-
9	JD	Soil Cons.		7076737835	-do-
10	JD	AH&VS		9434179160	-do-
11	DFO	Forest (T)		9494488499	-do-
12	DFO	Forest (L/U)			-do-
13	DFO	Forest (S/F)		9434127196	-do-
14	ACF	Forest (T)		9407182996	-do-
15	ADC (Dev.)	RMDD			-do-
16	WO	Social Welfare.		7872886585	-do-
17	DPO	Zilla Panchayat		7872971552	-do-
18	DIO	IPR		9635821099	-do-
19	DIO	NIC	234215	9593746726	-do-
20	CDPO	ICDS		9434211733	-do-
21	DRCS	Co-operative		9494143983	-do-
22	DCSO	Food & civil Supplies		9474611141	-do-
23	AE	Buildings		9434117665	-do-
24	AE	Roads & Bridges		7872283433	-do-
25	AE	Power		9434184322	-do-
26	AE	RMDD		9002105167	-do-
27	AE	PHE		8967889988	-do-
28	AE	WR & RD		8159066257	-do-
29	RTO	SNT		9474767859	-do-
30		Mtn Brigade			-do-
31		BRO		8509929942	-do-
32		UD&HD		9474352007	-do-
33					

6.2 Response Measures and Approaches

- **Guarding the Weak-points:** There are some weak points in embankments, which require constant watch at the time of monsoon. The Engineers of WR & RD Department have been advised to take arrangement for deployment of their staff with required materials such sand bags, bamboo mats etc. to protect the weak points. The Supdt. Of Police, has been requested to issue suitable instructions to the Thana/OP Officers for deployment of Constables, Home Guards etc. at the weak points by obstruct cutting of embankments and roads by the miscreants. The Sub-Collectors should inspect important weak point, Panchayats well in advance who will offer their views about the adequacy of precautionary measures taken.
- **Keeping the drainage clean:** The Executive Engineer, WR & RD /Drainage Division, has been instructed for clearance of drainage channels/nalas for free flow of water before onset of monsoon
- **Health Measures:** For taking health measures in the event of disasters and any crisis the district has been divided in to 4 zones with 23 centers. District Medical Officer as well as other District Level Officers is kept in charge of each zone for effective supervision. A control room has been opened in the Office room of CDMO, Mangan. Advance disinfections of drinking water sources in the landslides, drought and epidemic prone areas and identification of drinking water sources in each village are in continues process.
- **Veterinary Measures:** The following arrangements have been made for preventive inoculation and treatment measures during disasters. The stock of life saving drugs and others equipments in the field centre/hospitals have been stocked sufficiently.
- **Agricultural Measures:** The Deputy Director, Agriculture has been communicated the guidelines in regard to Agriculture measure to be taken in advance for probable disasters. The guidelines in short is as follows: -

If damage is beyond 75% re-transplant the crop. Weeding and application of fertilizer are to be followed to maintain the growth of the crop as usual.

If partially damaged, do gap filling and follow recommendation. If completely damaged, re-transplant. Fertilize moderately wherever possible In lower tracts where there is possibility of further damage due to re-occurrence, do not transplant.

Pests:

Careful watch has to be ensured on pests and Diseases incidence on crop sown after any disasters. Advance stocking of pesticides and fungicides should be made in endemic areas with some sprayers and dusters for community approach to combat the rest & Diseases.

Field staffs should be kept alert during contingent situation to move about the affected areas, advise to farmers to protect the crop.

6.3 Rescues and Relief

6.3.1 Rescue/Evacuation of marooned population

Rescue of people who are marooned in isolated patches poses a serious challenge during high floods. Rescue work is undertaken by the local Officers, Police force and local villagers and volunteers. At the time of major disasters, the help of army is also available.

6.3.2 Distribution of Emergency Relief

When people are in acute distress due to severe natural calamities like high flood or strong cyclone, major landslides, it becomes impossible for the people to produce food. Their belongings are washed away and houses damaged. It becomes necessary to provide the affected people with dry food, clothing's, shelter and other necessities of life. This kind of relief is categorized as Emergent Relief.

Emergent relief is sanctioned irrespective of the consideration of status, caste or religion and at such a juncture haves and have-nots are levelled down to the same position.

Emergent relief may include distribution of rice, dal, potato, salt, kerosene, match boxes and other bare necessities of life including cooked food and clothing. It may include provision of improvised shelter with timber bamboo, tarpaulins, straw, polythene etc.

The Sub-Collectors have been authorized to sanction emergent relief for 3 days as per terms and conditions. Distribution of emergent relief for more than 3 days, he may seek order of Collector in the matter.

SCALE OFFER.

500 Grams per adult per day
250 Grams per minor per day

SCALE OF FOOD STUFF OF COOKED FOOD (FREE KITCHEN)

	<u>Adult</u>	<u>Child</u>
Rice	300 Gms.	125 Gms.
Dal	50 Gms.	25 Gms.
Vegetable worth	Rs. 100.00	Rs.50.00
Fuel, condiments	Rs. 100.00	Rs.50.00
& Other expenses.		

FODDER

Supply of fodder not exceeding one K.G. per animal per day up to maximum 3 days.

6.3.3 Post disasters measures

It is necessary to take following post measures immediately after disaster subsides.

- ❖ Distribution of G.R. among old disable persons (proposal will be submitted by Sub-Collector after reviewing the situation).
- ❖ Distribution of house building grant after assessment of damage.
- ❖ Assessment of damage to public properties to be undertaken by different field officers.
- ❖ It has to be examined if a special feeding programme is required to be undertaken.
- ❖ Immediate restoration of roads, are to be taken up immediately by different District Level Officers to normalize the day-to-day business of the people.
- ❖ It is to be examined if labour intensive works are required to be undertaken to provide labour in the affected pockets.
- ❖ The chief district veterinary officer will take immediate steps for disposal of carcasses to avoid epidemic in affected areas.
- ❖ The Chief Medical Officer will take immediate steps for disinfections of drinking water sources.
- ❖ Supply of pure drinking water to the people of affected areas is of great importance. Installation of temporary water taps at shelter points/camps supply of drinking water in marooned villages, shelter camps by tankers/disinfections of drinking water in rural areas.

6.4 Post-Disaster Evaluation and Measures

6.4.1 Assessment of Damage by other Department.

Any property if damaged by Natural Calamity. The Sub-Collector shall undertake assessment of damages with the help of District Level Officers. In case of other Deptts. having their own field officers, they should get the assessment done quickly by such officers. The assessment shall be done as speedily as possible soon after the abatement of Natural Calamity.

6.4.2 Assessment of Crop Damage

Dist. Agriculture Officers will have under take immediate survey of the damages as outlined below:

- a) Area covered under different groups and area damaged.
- b) Approximate loss of crops mainly cardamom, paddy, wheat and other major crops in quintals and value in rupees.
- c) Cropping pattern both for alternate crops *Rabi/Khariff*.
- d) Requirement of seeds, seedlings fertilizers pesticides etc. to be assessed.
- e) It is to be examined if seeds/seedlings can be supplied to the affected cultivators at subsidized rates.
- f) Availability of seeds, seeding etc. and procurement punch sets.
- g) Funds needed, funds available and not additional requirement thereof.

6.4.3 Housing and Rehabilitation

- House damage in the wake of major disaster in the rural areas presents a serious problem. As these houses are generally mud built with thatched roof, the worst sufferers are the economically backward people who normally reside in vulnerable prone areas of these villages. Rehabilitations schemes are undertaken to provide housing to as many people as possible after a devastating disasters. Such houses are either to be located on the land allotted by the government or in their own safe land.
- The Panchayat President and the BDO of concern GP may visit the sites suitable for housing purposes in a village during normal times and if the people living in vulnerable prone areas are willing to shift to new sites proposed to be given under State Relief Code, they can obtain their willingness in writing and furnish such lists to the Sub-Collector and the Collector. A register for this purpose may be maintained for future use in office of all concerned Revenue Officers.
- The houses shall be built according to the requirement of beneficiaries and their pattern of living subject to financial limitation. The people must involve themselves in the housing programme.
- For this purpose, facilities available under Indira Awaas Yojana Schemes, REDRH etc. should be availed of.

6.4.4 Restoration

6.4.4.1 Restoration Programme

The restoration programme may involve two stages of works. In the first stage some repairs are immediately necessary to avoid further deterioration for making the works worthy for immediate use. Restoration of communication power supply, hospital facilities, water and sanitary arrangements are some of the programme, which may come under this category. The concerned Deptts. of Govt. may lay down priorities in the restoration programme having regard to the necessary and availability of funds.

6.4.4.2 Restoration Work

After disaster the concerned Departments should take up restoration work on war footing to bring back normalcy in the affected areas. The concerned Departments will act as follows:

1.	Exe. Engr. of (R&B), Forest Department, RM&DD.	They will take steps for clearance of fallen trees and Departmental buildings from the roads for free movement of vehicles etc. Immediate repair of roads and bridges be taken up.
2.	Telephone Exchange Deptt.	Immediate restoration of Telephone and telegraph lines.
4.	Chief Dist. Vet. Officer	Removal and disposal of carcasses, vaccination, cattle treatment, supply of fodder etc.
5.	C.D.M.O.	Precaution should be taken that no epidemic is spread during disaster.
6.	Agriculture Deptt.	Treatment of saline inundation fields. Supply of seeds in area where crop has been damaged.
7.	R.W.S & S. Div.	Repair of damaged water source/ installation of damaged water pipeline.
8.	Power department	Immediate restoration of power lines and provide and

6.4.5 House Building Grant

On receipt of the preliminary damage report from the Collector State Steering Committee meeting shall take steps for release of funds for payment as Ex-gratia grant to the eligible persons. The District collector has been authorized to sanction relief to the victims on the spot.

6.5 Submission of the Final Report:

As per the State Relief Code the final report of the disaster shall be prepared by all line department and submit to the District Collector. All line officials as well as the Panchayat shall take immediate steps after the operation in providing the authentic information to facilitate the Emergency Operating Centre in preparing the final report. After the preparation of the final report, the EOC need to submit the same to Collector, ADM for necessary action and send the copy to SRC for record, future guide and preparedness. This report should contain all the information relating to losses, damages, restoration etc. This will help the district and the State Govt. in preparing proposal for developmental work to be undertaken in the affected areas and appraising different funding agent for granting fund for developmental works.



CHAPTER-VII

INSTITUTIONAL ARRANGEMENTS AT THE DISTRICT LEVEL

7.1 Responsibilities of the Collector, ADM, EO, SP, CDMO, CVDO and other Line Departments:

7.1.1 Roles and Responsibilities of the Collector and District Magistrate

PHASE	ACTIVITIES	OTHER OFFICIALS TO BE INVOLVED	RESOURCES/ EQUIPMENTS TO BE PROCURED FROM
Pre Disaster	<p>☀ Preparedness Before the Disaster:</p> <ul style="list-style-type: none"> Reviewing and analyzing the calamity situation in the district over the next one-year through a meeting at the District level involving all the departments of the district as well as Sub-division and GP levels and the locally active NGOs/CBOs Identifying disaster prone zones and strategies to stay prepared for the worst. Ensure IEC through Emergency section/Panchayats /NGO's /AW centers /Street plays/ Workshops Reviewing the EOC and making it functional as per SOP fixed by him (SOP to be prepared earlier) Making the EOC well equipped and depute senior officers from time to time to review the receipt of information and dissemination. Call a meeting for NGO/CBO co-ordination. And discuss issues such as Capacity assessment of different NGOs/CBOs Preparing a checklist (containing the dos and don'ts) and pass on to NGOs/CBOs Ensuring/installing communication system to the inaccessible villages. Checking stock of the Public distribution system and arrangement of the temporary godowns. Checking the Resources with other department such as Police, Fire, and of NSS/NCC/NYKS. Preparing a list of vehicles/ambulance already deployed and/or to be deployed on hire during crisis. 	<p>All District level officials.</p> <p>All Sub collectors</p> <p>Emergency Officer</p> <p>All Panchayats. All RDA & field functionaries</p> <p>DIPRO (District Information and Public Relation Officer.)</p> <p>Dist. Fisheries Officer. Leading NGO/CBOs</p> <p>NSS/NCC/NYKS Police,</p> <p>Fire, Civil Defense.</p>	<p>Relief Commissioner, POLICE/FIRE</p> <p>R&B/NH</p> <p>Fisheries</p> <p>RTO</p> <p>Civil Defense.</p> <p>Commandant/coordinator of NCC/NSS/NYKS/</p>


During Disaster	<ul style="list-style-type: none"> ▪ Keep stock of road cleaning equipments and vehicles for relief operation. ▪ Assigning specific duties to different officers/Sr. Officers at Headquarters. ▪ Stay in constant touch with other line departments. ▪ Ensure proper functioning of warning systems & communication systems. ▪ Ensure Mock drill of the rescue and relief teams. ▪ Prepare a map showing the location of temporary shelter camps with accessibility. <p>* Identify Shelter/Temporary shelter in high elevated places and arrangement of tents etc</p> <ul style="list-style-type: none"> ▪ Identify and mapping of Disaster (of all kinds) Prone areas ▪ Ensure formation of village level Disaster Management Committee through Block Development officers. <p> Dissemination of Warning:</p> <ul style="list-style-type: none"> ▪ Receiving Warning from reliable sources and crosschecking them for authenticity. ▪ Disseminate warning to District level officials /Revenue field functionaries /PRIs & coordination with the Revenue control room ▪ Keep the EOC active round the clock. ▪ Distribute duties to the District level officials, Sub-collectors, Panchayats and Field functionaries. ▪ Arrange vehicles and public address systems for information dissemination. ▪ Establish coordination with the NGOs/CBOs and the village communities and assigning them duties. ▪ Ask 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> Search, Rescue and Evacuation:</p> <ul style="list-style-type: none"> ▪ To co-ordinate with NGOs/CBOs/Police for support. ▪ Arrangement & Deployment of vehicles etc. for evacuation ▪ Evacuate people from marooned areas and administer emergent relief. ▪ Organize trained task force members and Depute to marooned & Cut-off areas for evacuation. 	<p>All District level officials. All Sub collectors. All Panchayats DIPRO. Dist. Fisheries Officer. Leading NGOs. Police.</p> <p>Police Fire Brigade. Leading NGO. Panchayats, field functionaries Programme Co-coordinators of NSS/NCC</p>	<p>VHF from the Police/ Mike-set /Batteries/Generators available in the district office/ from the Private parties on requisition</p> <p>vehicle/rope/rescue kits and trained resource personnel from SRC/SSC/Army UNIT/Civil Defense/ Hired from the private parties according to the</p>
-----------------	--	---	---

	<ul style="list-style-type: none"> ▪ Deployment of police for maintain discipline and peace keeping during evacuation ▪ Mobilize people to move to safe shelters. ▪ Deployment of Police/Fire Brigade for search and rescue. ▪ Ensure proper utilization of the rescue materials. ▪ Provide Rescue kits at the affected areas <p>☀ Distribution of Relief Materials:</p> <ul style="list-style-type: none"> ▪ Keep a record of the affected area and people so as to account for the relief materials needed. ▪ Procure and transport of relief materials to affected areas ▪ Arrange free kitchen in the shelter camps & affected areas and assign responsibilities to officials for proper distribution ▪ Coordinating with the NGOs/CBOs ▪ Encourage other voluntary organizations from outside for rescue and relief operation. ▪ Distribute basic medicines and disinfectants to prevent epidemic ▪ Ensure Health care activities by the CDMO in the shelter camps & through mobile Units/Temporary Health in regular intervals ▪ Ensure Cattle health activities by the CDVO through Mobile units/Temporary Health camps in the affected areas ▪ Ensure that there is enough storage of food and pure water in the shelters. ▪ Monitor all the activities in the affected areas. 	<p>Sub-collectors. EO, CDMO, CDVO, ADC (Dev.), Panchayats Field functionaries Medical Officers Police. PHD/RTO/ Leading NGO</p>	<p>requirement</p> <p>FCI, Private stockiest, SRC, Director Health services, Director Animal Husbandry, UNICEF/ Other NGOs/INGOs</p>
--	---	--	--

<p><i>Post-Disaster</i></p>	<p>☀ Short-term Measures:</p> <ul style="list-style-type: none"> Formation of special task force with required equipments. Assign responsibilities for specific areas. Emergency cleaning of debris to enable reconnaissance. Remove fallen trees and branches from the roads to facilitate local relief work. Form a work team and carry emergency tool kits. Deployment of towing vehicles, earth moving equipments, cranes, Construction of temporary roads. Keep National & other Highways clear from disaster effects Assessment of damages. Temporary supply of food, drinking water and medicines to the shelters and affected areas Arrange for safe shelter for animals. Provide lighting facilities for shelter places. Deploy home guards and constables to maintain law and order Provide temporary arrangements for income generation for the affected people Drought resistance short duration paddy seeds to be made available to farmers. Encourage NGOs/INGOs to carry out restoration and reconstruction works Ensuring crop insurance Supervise all the activities <p>☀ Long Term Measures</p> <ul style="list-style-type: none"> Immediate restoration of Road communication,. Irrigation system, Educational institutions, Govt. Institutions, Electrical installation, Drinking water supply, Construction of IAY/REDRH houses for the BPL families and massive plantation to maintain ecological balance. Meeting with district level officials /Officials at Head quarter and chalk out emergency plan with vulnerable areas and resource list Co-ordination meeting of NGOs /PRIs. &Assignment of duties. 	<p>All the district level officials /officers at district Headquarters/Panchayats, Field Functionaries.</p> <p>SRC/Public Works Department/Water Resources /Education and youth services/PR Department/Forest Department/Social Forestry</p>	<p>Cranes, Road cleaning equipments, Water tankers, funds, vehicles, Gensets, Earth moving equipments, seeds, fertilizers, pump sets,</p> <p>PHED, RWSS, Deputy Director Agriculture.</p> <p>Funds from all possible Sources</p>
-----------------------------	---	--	--


	<ul style="list-style-type: none"> ▪ Pre-positioning of staff in the likely cut off areas ▪ Arrange food and other basic requirement for emergency response. ▪ Collect information from different areas and to act accordingly. ▪ Co-ordination meeting with officials at Headquarters by 12 hours intervals and 24 hours intervals with the field officials. ▪ Regular collection of situation report of the risk and vulnerable areas from the officers assign for the purpose. ▪ Provision for administering emergent relief and the other basic needs ▪ Contact with SRC for supply of Temporary shelter materials. ▪ Keeping in touch with CSO for supply of food articles procuring from FCI/Whole sellers. ▪ Deputation of Volunteers to different probable affected areas. ▪ Helping the evacuees for returning to their houses. ▪ Immediate arrangement of free kitchen in the cut-off and inaccessible areas ▪ Relief distribution. ▪ Monitoring of Relief distribution. ▪ Provision of safe drinking water ▪ Provision of Medical facilities. ▪ Repair/Restoration of Roads and Bridges. ▪ Transportation of Relief and Human Resources 	<p>All District level officials/NGOs/CBOs/Sub-Collectors/ Officials of the District office/SRC</p>	<p>Materials for temporary shelter procured DFO/SRC/SSC/UNDP/NGO etc. Vehicles – RTO/Private agencies. Medical requirements from CDMO Cattle feed from CDVO Volunteers</p>
--	---	--	--

7.1.2 Roles and Responsibilities of the Additional District Magistrate (A.D.M)


PHASE	ACTIVITIES	OTHER OFFICIALS TO BE INVOLVED	RESOURCES/ EQUIPMENTS REQUIRED	REMARKS
Pre Disaster	 Preparedness: <ul style="list-style-type: none"> Playing a second fiddle to the Collector in all aspects. 	EO, POLICE, Field Functionaries, Panchayats	VHF, Telephone, HAM Internet	Comprehensive planning and proper situational analysis
	<p>Warning Dissemination:</p> <p>Ensure proper dissemination of warning.</p> <p>Ensure proper functioning of EOC.</p> <p>Deployment of Office in charges of Collectorate in EOC round the clock basis.</p>	Other officials of the dist office.	Connection	
During Disaster	<p>Rescue and Evacuation:</p> <p>Arrangement of Vehicles</p> <p>Keep the Police and Fire Personnel ready.</p> <p>Keep staffs at the EOC ready.</p> <p>Deploy of additional staff if necessary</p> <p>Distribution of Relief:</p> <p>Proper allocation of relief materials to the affected areas</p>	<p>RTO/ POLICE, Field Functionaries, Panchayats</p> <p>Telecommunication, Other officials of the dist office.</p> <p>NCC/NSS NGOs/CBOs</p>	Vehicles, Police personnel, Other staffs VHF, Telephone, HAM Internet Connection	Things to be done on war footing and with careful monitoring



Conti...

	<ul style="list-style-type: none"> Allocation of officials for proper distribution of relief materials Supervision of relief distribution 			
Post-Disaster	<div>✶</div> <p>Restoration:</p> <ul style="list-style-type: none"> Keep liaison with all line departments Restoration of roads transport and communication systems Collection of progress report on restoration and reporting to the Govt/SRC Periodical visits to the affected areas to supervise the restoration works <div>✶</div> <p>Distribution of Relief Materials:</p> <div>✶</div> <ul style="list-style-type: none"> Collecting the list of the affected people and property from the field functionaries, panchayats Prepare a comprehensive damage report Allotment of relief materials/financial assistance Monitor to make sure that everything is at its place <div>✶</div>	All Field Functionaries/ Panchayats, Officials of Revenue Department NGOs/CBOs & Line department	Reports on repairs/ restoration	Careful listing of beneficiaries and proper distribution



	 <p>Coordination:</p> <ul style="list-style-type: none"> ▪ Coordination with line departments and civil society organizations ▪ Supervise restoration activities under taken by different voluntary agencies. 			
--	--	--	--	--

7.1.3 Roles and Responsibilities of the CDMO

PHASE	ACTIVITIES	OTHER OFFICIALS TO BE INVOLVED	RESOURCES/ EQUIPMENTS TO BE PROCURED FROM	REMARKS
Pre-Disaster	 <p>Preparedness and Warning Dissemination:</p> <ul style="list-style-type: none"> ▪ Stock pilling of Life saving drugs/ORS packets/Halogen tablets on receipt of warning from the Collector/EOC ▪ Transmit messages to all PHCs to stock medicines and keep the medical staff ready ▪ Disease surveillance and transmit reports to the higher authorities on a daily basis. ▪ Vaccination. ▪ To obtain and transmit information on natural calamities from the EOC ▪ Ensuring distribution of areas of operation among the mobile team. ▪ Pre-distribution of basic medicines to the people who are likely to be affected ▪ Shift the patients who are in critical situation to the District Hospital ▪ Awareness messages to stop the outbreak of epidemics ▪ Conduct mock drills 	CDVO SDMO SDVO Medical Officers of PHCs / CHCs. ICDS NGOs/CBOs Private Practitioners in the locality/First Aid Trainers	Medicines, Required medical equipments, First Aid kits Ambulances, Public Address systems, Mobile vans, Tents	

During Disaster	 Rescue and Evacuation <ul style="list-style-type: none"> Constitute mobile teams and visit the worst affected areas. Dis-infection of Drinking water sources. Opening of site operation camps Regular Health Check up at Shelter camp & affected areas Assigning responsibilities to the ADMOs/ SDMOs for close monitoring of Health camps. 	-do- Rescue team, Volunteers at the Shelters, Police, Fire officers, Trained volunteers	-do-	
Post-Disaster	 Restoration and Rehabilitation <ul style="list-style-type: none"> Organize Health Camps, Deploy mobile fully equipped and manned Medical vans Close monitoring of Health camps. Ensure adequate quantities of medicine/disinfectants Make sure that there is no outbreak of water borne diseases/Malnutrition Co-ordinate with the District Rehabilitation Committees, other line departments, NGOs /ICDS projects, village committee, PHD, RWSS, etc. 	-do-	-do-	

7.1.4 Roles and Responsibilities of the SP

PHASE	ACTIVITIES	OTHER OFFICIALS TO BE INVOLVED	RESOURCES/ EQUIPMENTS TO BE PROCURED FROM	REMARKS
Pre-Disaster	 Preparedness and Dissemination of Warning <ul style="list-style-type: none"> Receipt of Warning from the EOC Communication establishment with District and Sub-division/GP Control rooms and departmental offices within the division. Alert the team force for deployment at the time of calamity To issue directive to police field functionaries to co-operate with Rescue Teams. 	Home Guard/ APR forces EO, SIs	VHF, Other improved telecommunication systems SP signal.	
During Disaster	 Rescue and Evacuation: <ul style="list-style-type: none"> Clearance of roads and other means 			No Scope for

	<p>of transportation</p> <ul style="list-style-type: none"> ▪ Traffic management and patrolling of all highways and other access roads to disaster sites ▪ Make sure that discipline is maintained ▪ Assist district authorities for taking necessary action against hoarders, black marketers and those found manipulating relief material ▪ Co-ordinate with fire personnel. ▪ Provision of security in transit camps/feeding centers/relief camps/cattle camps/cooperative food stores and distribution centers ▪ Safe guarding of belongings of evacuees <p>☀ Distribution of Relief:</p> <ul style="list-style-type: none"> ▪ Maintain laws and order at the Shelters and the relief camps ▪ Coordinate with military service personnel in the area ▪ Deploy officers/ police personnel to record death cases ▪ Assist the community in organizing emergency transport ▪ Assist the District officials/NGOs in distribution of relief materials. ▪ Provide escorts in transit of relief materials to the relief camps/affected areas. 	-do- NCC, NSS Trained Volunteers Local Youth NGOs/CBOs	-do- Rescue kits, Vehicles Equipments for clearance of roads and other related stuffs	Complacenc y
Post- Disaster	<p>☀ Short term Measures:</p> <ul style="list-style-type: none"> ▪ FIR of the disasters, the damages and the death cases. ▪ Assist in collecting damage statistics of private properties and distribution of assistance such as HB grant. ▪ Maintain law and order <p>☀ Long Term Measures:</p> <ul style="list-style-type: none"> ▪ Close Coordination with district administration and local/external NGOs in reconstruction and rehabilitation process ▪ Assist the District authority whenever the need arises ▪ Periodical visits to the affected areas to ensure law and order 		Vehicle communication systems.	

7.1.5 Roles and Responsibilities of the District Emergency Officer

PHASE	ACTIVITIES	OTHER OFFICIALS TO BE INVOLVED	RESOURCES	REMARKS
<i>Pre-Disaster</i>	<ul style="list-style-type: none"> Make sure that everything stays at place in the EOC. See to it that the DDMP and the contingency plan for disaster reach all the line departments. Disseminate the warning to the sub-division/GP offices and ask them to disseminate further to reach each and every household. Deploy staff of EOC round the clock Make sure that all the shelters receive enough water and food stocks in advance Establish contact with all the line depts. Over phone, email, wireless, sat phone and VHF Procure all the required resources from all the possible sources. Regular update of information received from the blocks 	Field Functionaries, Panchayats, NGOs/CBOs, DCR Staff,	VHF from the Police/SSC HAM RADIO from SSC Mike-set /Batteries/ Generators available in the district office/ from the Private parties on requisition	
<i>During-Disaster</i>	<ul style="list-style-type: none"> Coordinate with all the line departments for rescue and evacuation. Check the stocks with the EOC and asking for more if needed. Distribute the relief materials to all the places. Check every bit of receipt and dispatch of relief items Establish round the clock contact with all the depts., Field Functionaries and Panchayats and with the shelters. 	Collector, ADM, SP, CDMO, CDVO, Field Functionaries, panchayats NGOs/CBOs, EOC Staff, NGOs, Community level	Relief Items, Food Stocks, Rescue and evacuation equipments, Vehicles,	
<i>Post-Disaster</i>	<ul style="list-style-type: none"> Receive the list of beneficiaries from different Sub-division and GPs Crosschecking the list of beneficiaries to avoid fabrication 	Field Functionaries, panchayats, Beneficiaries		

7.1.6 Roles and Responsibilities of the Field Functionaries and Panchayats

PHASE	ACTIVITIES	OTHER OFFICIALS TO BE INVOLVED	RESOURCES/ EQUIPMENTS TO BE PROCURED FROM	REMARK
Pre Disaster	<p>☀ Preparedness:</p> <ul style="list-style-type: none"> Provide authentic information required by the EOC Prepare a record of previous disasters in the locality and analyzing the effects Prepare hazard maps of the GPs in minute details Map the cut off areas with alternate route map. Identify safe shelters in the maps Keep a List of storage Points & facilities available, dealers of foodstuffs. Keep a list of vulnerable people and area and weak points on embankments (if applicable) Create a EOC at the respective level and assignment of duties to the staff. Pre-position of staff for site operation centers. Uninterrupted communication with the DCR Arrange alternative communication/generator sets, etc Form of GP/village level disaster committees and task forces Organize awareness camps at GP/village levels 	<p>All the Field functionaries. Police/Fire personnel/RTO / Village/GP level task force/trained volunteers Local NGOs/CBOs</p>	<p>Vehicles, Police personnel, Other staffs VHF, Telephone, HAM Rescue kits Mobile Vans,</p>	<p>If possible prepare Contingency plan for all the Vulnerable GPs and Villages</p>

	<p>☀ Dissemination of Warning:</p> <ul style="list-style-type: none"> ▪ Crosscheck with the EOC for the authenticity of the warnings ▪ Arrange or requisite vehicle to disseminate received warning information's to the population of vulnerable / weak places ▪ Disseminate warning/ coordinate with EOC ▪ Warn the people about probable affected areas ▪ Mobilize the people to leave for identified shelters with their domestic animals and personnel belongings. 			
During Disaster s	<p>☀ Rescue and Evacuation:</p> <ul style="list-style-type: none"> ▪ Deploy Police/Fire Brigade for search and rescue. ▪ Co-ordinate with civil defense/NCC/NSS for rescue operation. ▪ Ensure availability of rescue materials. ▪ Guide the evacuees in the identified shelter places and arrange all common needs for them. ▪ Provide of rescue kits. ▪ Clearance of roads and water logging for restoring communication to affected GPs/Villages. ▪ Assist the District Team in every possible ways ▪ Coordinate with the NGOs/CBOs for rescue work ▪ Mobilize the local youth to help the rescue team <p>☀ Distribution of Relief:</p> <ul style="list-style-type: none"> ▪ Keep the record of everything at the shelters ▪ Arrange of free kitchen in the shelter camps./worst affected areas. 	-do-	-do- Food stocks and other indispensable items	Things have be done or war footing and effectively

	<ul style="list-style-type: none"> ▪ Deploy staff for proper distribution of relief materials ▪ Arrange communication system in the worst cut off areas. ▪ Ensure supply of safe drinking water & health facilities in the affected areas/shelter camps. ▪ Coordinate with NGOs/Other voluntary organizations 			
Post Disaster	<p>Restoration and Reconstruction:</p> <ul style="list-style-type: none"> ▪ Collect damage statistics of PR department properties /ICDS/school buildings etc. ▪ Ensure distribution of HB grants and other financial assistant ▪ Provide temporary income generation activities for the worst affected people ▪ Supervise Relief operation and restoration work in the affected areas. ▪ Restore the transport and educational institutions on high priority ▪ Help the local economic activities to come back to normalcy ▪ Provide of grants/loans for the local traders and shop-keepers ▪ Keep liaison with District administration and other line departments ▪ Ensure coordination with the RI and G.P/Village committee. ▪ .Co-ordinate with NGOs/Civil society organization etc. 	-do-	-do-	Careful assessment to be done for facilitating the reconstruction and restoration works

7.1.7 Responsibilities of other Line Departments:

DESIGNATION OF THE OFFICER	DUTIES TO BE PERFORMED IN NORMAL TIME.	DUTIES TO BE PERFORMED AFTER RECEIVING 1 ST WARNING	DUTIES TO BE PERFORMED AFTER THE DISASTER.
Asst. Engineer, Electrical	<p>He should see that the field staff checks the electrical line and replace old materials used in the power supply.</p> <p>He should see that all had wiring in service connections are rectified.</p> <p>He should enumerate the diesel sale available and his jurisdiction and keep it available.</p> <p>He should see that trees, branches etc. fall on electrical lines are out and removed.</p> <p>The field staff should see that electrical supply in the places where landslides may be serve is cut off.</p> <p>The field staff should be in touch with local Panchayats and inform the situation at frequent intervals.</p> <p>To provide Diesel generators to hospital water works. Control Room Collector's office in case of failure of powers.</p>	<p>On receipt of the 1st be communicated to all the subordinate staff.</p> <p>He should see that all the vehicles under his control be kept in perfect order.</p> <p>Alert the entire staff to return their Head qtrs. and get in touch with immediate requirement.</p> <p>They should give wide publicity that houses consumers should arrange lanterns and battery light for use in case of power is out off.</p>	<p>Restoration of power</p> <p>1.Hospital, Water supply</p> <p>2.Control Room</p> <p>.</p> <p>3.Live wires on ground should be removed promptly.</p> <p>Damaged or felled electrical poles should be immediately replaced and obstructions on roads should be got removed.</p>
Assistance Engineer PHE	<p>The branches to canal drain to be closed.</p> <p>The Embankments should be Strengthened.</p> <p>It should be checked whether the passage bridge and channels are in good condition.</p> <p>The obstruction in the canals if any should be got removed immediately to be enabling free flow of water.</p>	<p>1st warning should be communicated to all the subordinate staff and employees.</p> <p>They should be alerted to check whether the canals and drains are in proper condition to allow free flow of water.</p> <p>The stations tour</p>	<p>Damages due to Hazards to Govt. properties lives of man and cattle etc. should be assessed and reported to Panchayats, Sub-Collector concerned immediately.</p>

	<p>The bocks and shutters of the canals are to be checked and satisfied that they are in good condition.</p> <p>Water supply in to canals should be out off by closing the sluices.</p> <p>The canals and drains should be free from obstruction</p>	<p>should take their duty places and be readily available.</p>	
Fire officers	<p>The Fire Engineers should alert and other vehicles should be kept in good working condition.</p> <p>Materials required for use in emergency should be indented for and kept in reserve</p> <p>Message received from public on disaster for help should be immediately attended.</p> <p>Keep in touch with each of the other fire stations in the</p>	<p>The 1st warning should be immediately communicated to fire stations.</p> <p>The staff should be called on for duty. Full complement of the staff should be available for the vehicles should be obtained and kept in reserve.</p>	<p>Removal of collapsed houses, walls etc. should be attended</p> <p>Persons involved in house collapsed should be promptly reserved.</p> <p>Report on the relief activities, under taken should be promptly reported.</p>
Executive engineer roads and buildings	<p>Govt. buildings should be inspected and necessary repairs to be executed</p> <p>Script for slides, pamphlets, and cultural programmers should be got prepared immediately.</p> <p>Arrangements should be made to obtain poster and films by addressing the Director through the Collectors.</p>	<p>The 1st warning should be communicated immediately to all subordinate officers.</p> <p>Wide propaganda should be arranged.</p> <p>The Sub-Divisional public relation officer should be available at their Head qtrs.& got</p>	<p>Photographs of damages should be taken. The field staff should convey formation regarding the quantum of disaster loss of property lives men and cattle.</p> <p>They should be posted with up-to-date information and the information should be passed to</p>

	<p>Public address equipment should be obtained and kept ready.</p> <p>The community Radio sets available in the villages should be ascertained</p> <p>The names of Hamlets where they are not available to be reported.</p> <p>The public should be fully educated regarding the precautionary measures & after disaster through available media.</p> <p>Specific duties should be assigned to the field staff.</p> <p>The field staff should proceed to the place of work allotted</p>	<p>ready for disaster duty within short notice.</p> <p>Ensures that all community Radio sets are in working condition.</p>	<p>the Collector immediately.</p>
<p>Regional Transport Officer</p> <p>Motor Vehicle Inspector</p> <p>Civil Supplies Officers</p> <p>Divisional Manager Telephone</p>	<p>List of vehicles in condition to be requisitioned & kept ready.</p> <p>The MVI/Asst. MVI will report before A.D.M. (Relief)</p> <p>The Asst. Engineer & Jr. Engineers will remain alert.</p> <p>Based on the experience on the previous disasters sufficient no. of vehicles should be procured and kept in District head quarters.</p> <p>To contact all Sub-division Control Room and Collector's Office.</p>	<p>Availability of petrol, oils should be ensured.</p> <p>The R.T.Os and M.V.Is should be asked to serve requisition orders on owners of vehicles for duty.</p> <p>Soon after receipt of 1st warning all the public call officers to be informed to instruct the village Panchayats Volunteers for dissemination of warning in the villages.</p>	<p>Electricity Deptt. for restoration.</p> <p>Roads and buildings for clearance.</p> <p>Restoration of Telephone lines to EOC, Collector, Hospital, fire station S.P. and other offices as per the list appended.</p>

		<p>All telephone sets to be informed of disaster warning soon after the receiver is lifted from the Book as in the case of New years greetings and to request to telephone users to convey disaster warnings to other public.</p> <p>Provision of vehicles.</p>	
--	--	---	--

7.2 Disaster Management Committee at the District Level:

The District Disaster Management Committee (DDMC)/ is set up because of the frequent occurrence of disasters in the district. The primary aim of the committee is to have proper coordination among all the line departments. The Collector is the Chairman of the DDMC. The District Disaster Management Committee exists to assist the Collector in

- Reviewing the threats of disaster
- Analyzing the vulnerability of the district to such disasters
- Evaluating the preparedness and
- Considering suggestions for the improvement of the District Disaster Management Plan

7.2.1 RESPONSIBILITIES OF THE COMMITTEE

- ❖ To educate the public on different hazards and what protective steps should be taken
- ❖ To make arrangements for emergency action
- ❖ To effect evacuation from the vulnerable prone Villages when necessary
- ❖ Rescue and Rehabilitation
- ❖ Post disaster action and review

7.2.2 Timeline For Meeting and Membership:

The DDMC must meet at least once in six months i.e. in the month of April and September before the Disaster Season under the chairmanship of the District Collector to update the plan. For this one month's prior notice should be given to all concerned departments before convening the meeting. The President of the Zilla Parishad should be invited as a "Special Invitee" in the meeting of the DDMC. Collector should review the work of DDMC regularly. The Committee will meet almost daily till the emergency is over. The DDMC would consist of following functionaries:

Sl.No	Designation	Depart.	Phone Number		Designation
1	DM/DC	LR&DM	234234 (O)	8116012999	Chairman
2	Adakshya	Zilla Panchayat		9434030305	Co-Chair
3	ADM/ADC	LR&DM		9933872873	Convener
4	SP	Police	234242	7797896219	Member
5	CMO	Health		9434179076	-do-
6	JD	HRDD			-do-
7	JD	Agriculture			-do-
8	JD	Horticulture			-do-
9	JD	Soil Cons.			-do-
10	JD	AH&VS			-do-
11	DFO	Forest (T)			-do-
12	DFO	Forest (L/U)			-do-
13	DFO	Forest (S/F)			-do-
14	DFO	Forest (W/L)			-do-
15	DDO	RDD			-do-
16	WO	Social Welfare.			-do-
17	DPO	Zilla Panchayat			-do-
18	DIO	IPR			-do-
19	DIO	NIC	234215		-do-
20	CDPO	ICDS		9434211733	-do-
21	DRCS	Co-operative			-do-
22	DCSO	Food & civil Supplies			-do-
23	AE	Buildings			-do-
24	AE	Roads& 7 Bridges			-do-
25	AE	Power			-do-
26	AE	RDD			-do-
27	AE	PHE			-do-
28	AE	Irrigation			-do-
29	RTO	SNT			-do-
30		Mtn Brigade			-do-
31		BRO			-do-
32		UD&HD			-do-
33					

The District Collector should include in the agenda of the District Coordination Meeting, the subject of updation of the district disaster management plan by incorporating the changes in names of officers, telephone numbers and addresses of the officers concerned. The District Collector should also take review of changes in other indicators pertaining to the district like creation of additional infrastructure, development projects, changes in inventories, etc. and incorporate these changes while updating the Plan. The members should substantiate/assist the Committee with all the updated information about their concerned areas of operation time to time.

7.3 Emergency Operating Centre (EOC)

This section is prepared to help the members of EOC to understand the structure and functioning of EOC. Following the important Three C's i.e. **Command**, **Control** and **Communication** for effective response in an emergency, it will be able to minimize the hardships of the community and improve the quality of the process of recovery. This control room will be able to provide timely, support and well thought –of interventions to the grass root staff as well as volunteers as it will be the hub of three C's.

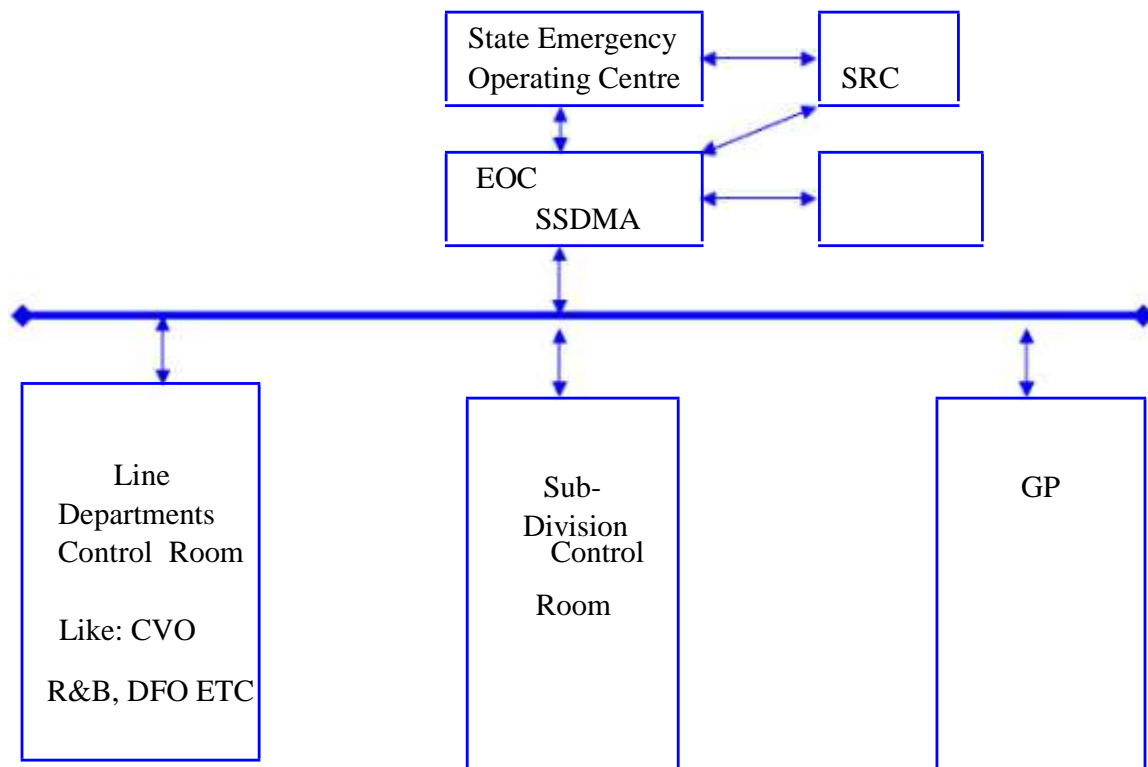
7.3.1 Purpose of the EOC

The Emergency Operating Centre under the control of District Collector will operate round the clock and will be the nerve center to

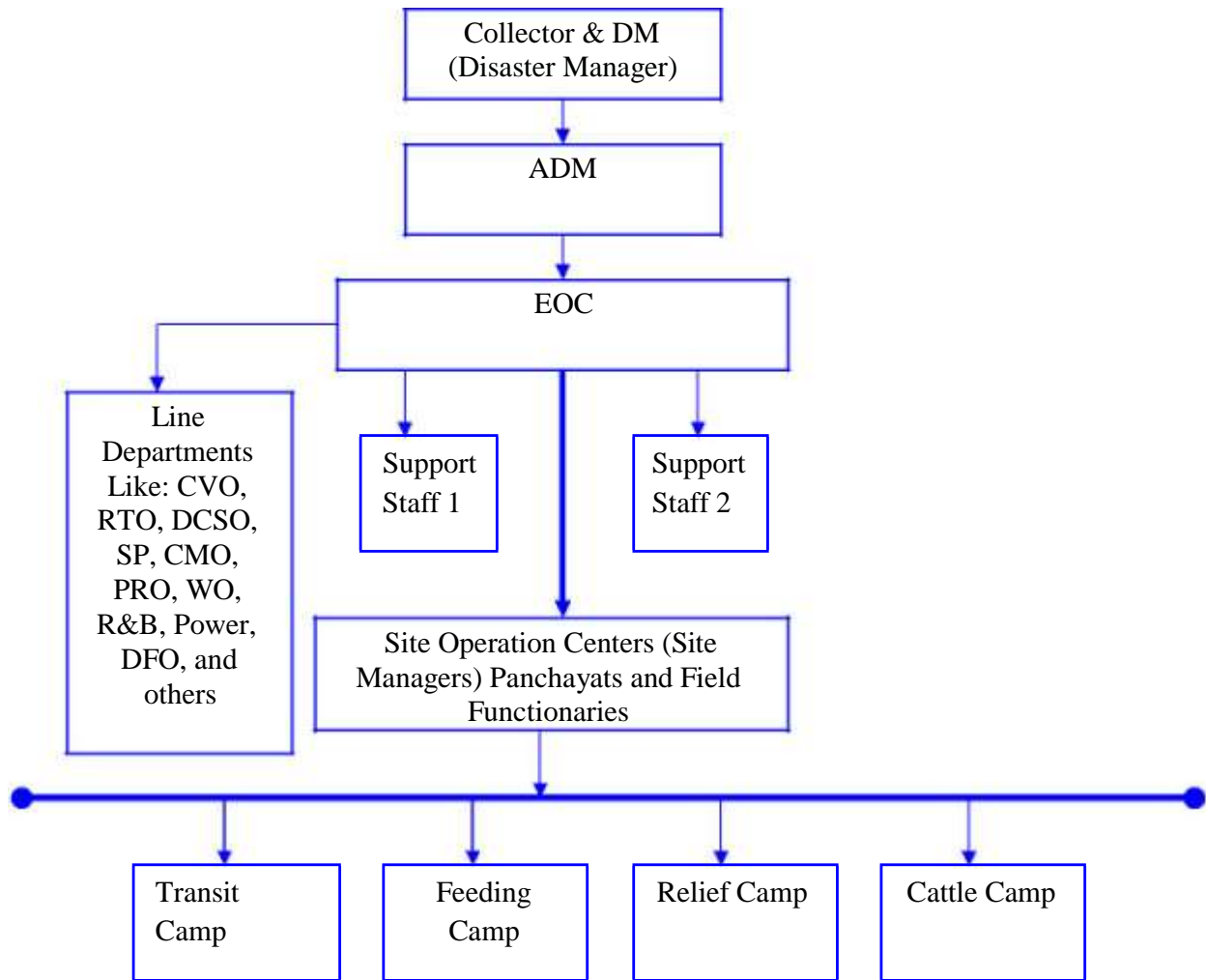
- ❖ Monitor
- ❖ Co-ordinate
- ❖ Implement the actions/activities for Disaster Management.

At a disaster time the EOC will operate under the central authority of the District Collector, exercising emergency power to issue directives to all departments to provide emergency response service. He will also co-ordination with the State Response Machinery like: State Relief Commissioner and Sikkim State Disaster Response Force for appropriate support and smooth flow of information. The EOC should be manned round the clock.

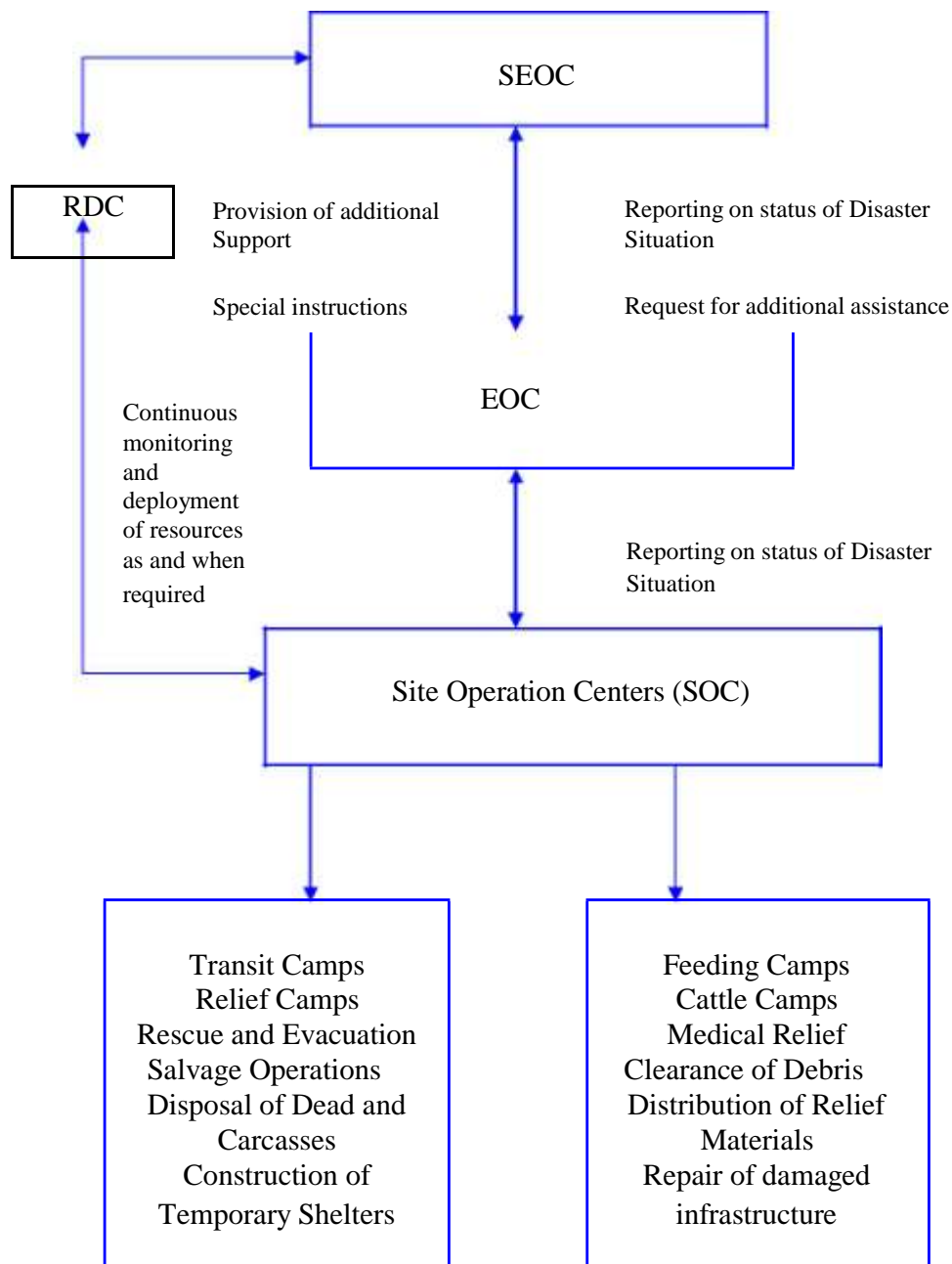
7.3.2 Information Flow Chart of the DCR



7.3.3 Co-ordination Structure at District Emergency Operating Centre



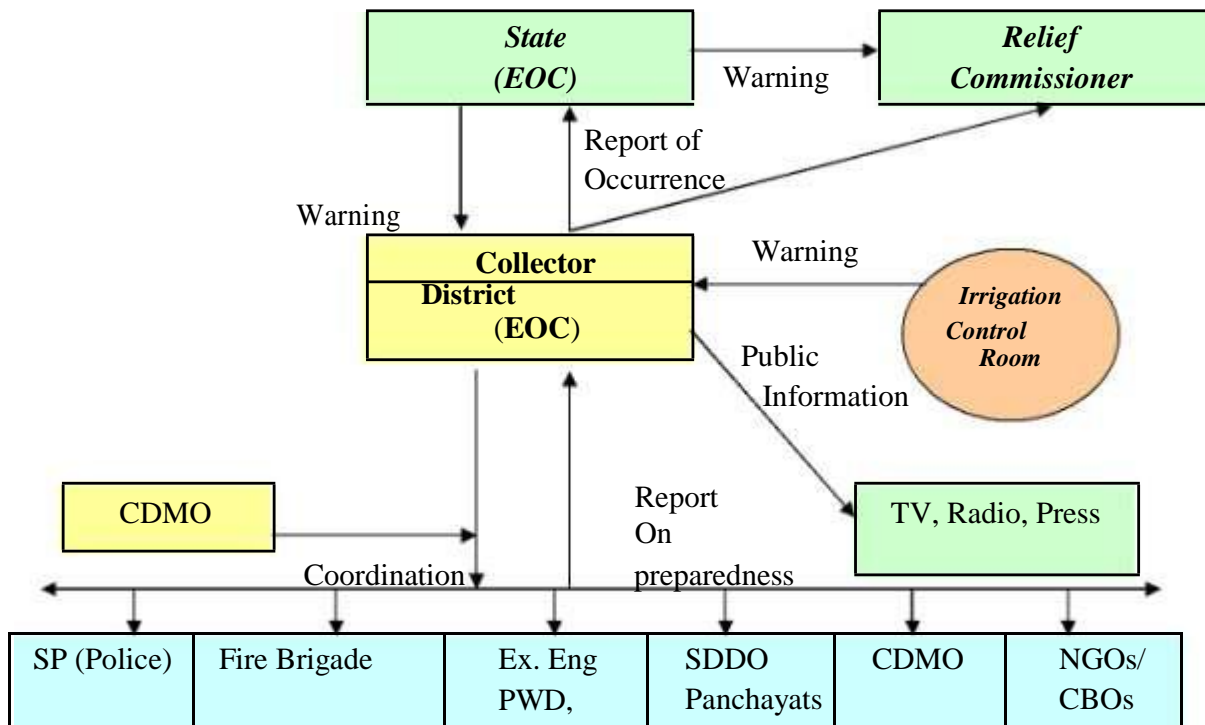
7.3.4 Activity wise Flow of Information Among State Emergency Centre, District Emergency Operating centre and Site



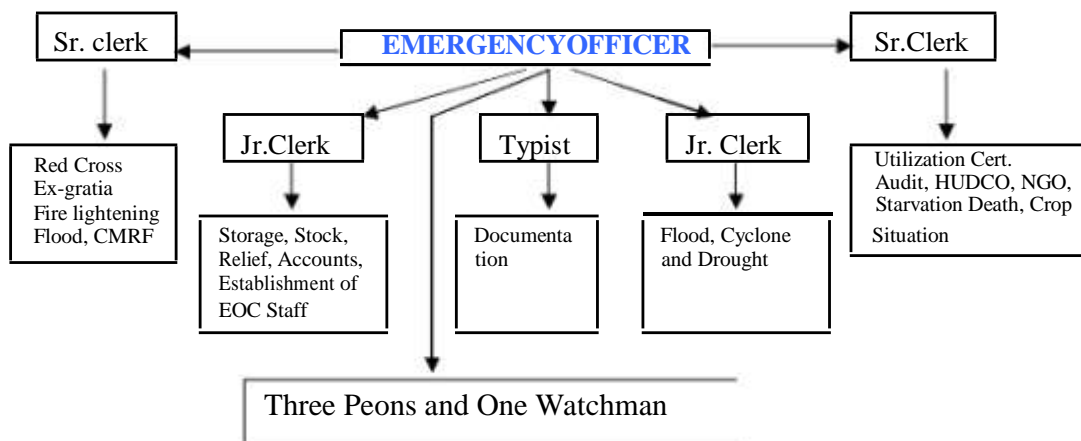
7.3.5 Scope of Work of the District Emergency Operating Centre

Time Frame	Activities
Normal Time	<ul style="list-style-type: none"> • Ensure that all warning and communication systems, instructions are in working condition • Receive information on a routine and regular basis from the departments on the vulnerability of the various Gram panchayats and Villages to disaster • Receive reports on preparedness from the relevant district level departments and other departments, as per as the formats. Based on these reports, the DCR will forward the Preparedness Measures details on behalf of the Collector to the SEOC, Relief Commissioner and SSDMA • Upgrade and update DCP according to changing scenarios in the district update data bank and maintain an inventory of resources. • Update all information in the GIS. • Inform SEOC, Relief Commissioner and SSDMA of any changes including updating of data bank and annexure • Monitor preparedness measures including simulation exercises undertaken by various departments. • Ensure proper dissemination of DCP at the district level, local level and disaster prone areas. • Identify appropriate NGOs/Private Sector Organizations, which can be assigned the task of community level preparedness. • Organize post-disaster evaluation and update DCP accordingly • Prepare reports and documents on district level disaster events and submit the same to SEOC, Relief Commissioner and SSDMA
Disaster Time	<ul style="list-style-type: none"> ▪ Weather tracking and early warning dissemination ▪ To collect and transmit information regarding matter relating to natural calamity. ▪ Mapping of vulnerable areas ▪ Database on volunteers ▪ Flow of information to SEOC in Relief Commissioner's office and SSDMA ▪ District level training of officials and NGOs in emergency response ▪ Men and material management in emergencies with proper inventorization

7.3.6 Early Warning Dissemination



7.3.7 Diagram of Responsibilities of the DCR Staff



7.3.8 Warning or Occurrence of Disaster

The warning or occurrence of disaster will be communicated to:

- Chief Secretary, Relief Commissioner, Emergency Operation Centre
- Office of the District Collector
- All district level officials, DDMC, Municipality Chairman
- The officials of the Central Government located within the district
- Non – officials namely Guardian Minister of the district, *Zilla Parishad* President, MPs and M.L.As from the district or affected area
- Local units of the Defense Services

In the absence of the Collector, ADM or Sub-Collector 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.

7.3.9 Suggested Performa for “In” Message

Date	Time of receipt	In Message Sr. No.	Received From	Addressed To	Message transferred to	Copies to	Mode (WT/Tel/Message of receipt)	Instruction/ Follow up to be done	Remarks

7.3.10 Suggested Performa for “Out” Message

Date	Time of dispatch	Out Message Sr. No.	Related In Message No. If any	Addressed From	Addressed To	Copies to	Mode (WT/Tel/Message of receipt)	Instruction/ Follow up to be done	Remarks

7.3.11 Arrangements in District Emergency Operating Centre

The DEOC is equipped with

- Action Plans
- Vulnerability maps
- List of key contact persons during emergencies
- Database on resources of the district

During disaster provision will be made in the Collectorate for:-

- First aid and other basic medical relief for the staff
- A rest room with adequate facilities and
- A kitchen and lunch room

7.3.12Communication Room

The Communication facility is made in the room of next to the EOC that function as the Communication Room. The existing police VHF system continues to be in contact with the EOC.

In addition, the following facilities are available in the EOC

- Telephones
- Fax
- One PC with modem and printer
- Mechanical typewriter
- Generator
- Thermometer
- Fire Extinguisher
- A soft board to display information
- A hard board to note important information

CHAPTER-VIII

MITIGATION STRATEGIES FOR DIFFERENT HAZARDS

8.1 Short Term Measures

When the disasters are inevitable, the only way is to mitigate its impact. This falls under the Short Term Measures like immediate relief, reducing the response time to avert any losses, provide the vulnerable and affected people with the basic needs, supply of minimum essential items to those who have lost their properties and movables, grant of long/short term loans at a concessional rate.

8.2 Long Term Measures

The Long Term Measures to be followed include maintenance and repair of the embankments of the rivers and canals going through the district, construction of embankments, Protection of walls, Jhora Binding work, Plantations in landslides area, bank protection and watershed management, bio-mass production by the forest/horticulture department.

8.3 Sector wise Vulnerability Reduction Measures (Considering GP Plans)

Type of Sector	Sub Sector	Mitigation Measures	Responsible Deptt.	Time Frame
Infrastructure development	IEC Activities	Walling, posters, rallies, street plays, volunteers training, task force training	NGO selected by the DDMC	
	Road	Repair of vulnerable points identified by the departments	PWD, RD	
	Embankments	<ul style="list-style-type: none"> Receiving the Height of the embankment points identified Repair of Vulnerable points identified 	Irrigation Department	
	Safe Shelters	Ensure maintenance of shelters	RM&D department, DI and CI of Schools	
	Communication	Ensure maintenance and good running condition of communication systems	Telecom and District Administration	
	Drinking water and sanitation	<ul style="list-style-type: none"> Repair of the Damaged standpoints Check the Leakage of overhead tanks and pipes 	RWSS	
Health/Animal Husbandry	IEC Activities	Walling, posters, rallies, street plays, volunteers training, task force training	NGO selected by the district and CDVO	

	Vaccination	Stock piling of vaccines	CDVO & CDMO	Normal time
	Training	Health care, sanitation, first aid	CDVO & CDMO	Normal time
Livelihood	Awareness	Walling, posters, rallies, street plays, volunteers training, task force training	NGO selected by the district and	
	Agriculture	<ul style="list-style-type: none"> ▪ Drought Resistant – short duration paddy ▪ Crop insurance ▪ Coordination with Irrigation Deptt. 	Agriculture and horticulture department	Normal period
	Horticulture	<ul style="list-style-type: none"> ▪ Nursery raising ▪ Insurance 	Horticulture Department	Normal period
<i>Insurance</i>	IEC Activities	posters, rallies, street plays, volunteers training, task force training	NGO selected by the district and	During normal period
	Livelihood	Ensure insurance of livestock, crops, work sheds/workshops etc.	Agriculture, Cooperative Society	During normal period
	Life	Awareness	NGOs	During normal period

8.4Mock Drill

For the DDMP to be successful it is important that a mock drill of the plan be carried out under the in the presence of and under the observation of officer deputed from the other district and the District Collector. The mock drill should be enacted in the pre disaster season, twice a year after the District Meeting is convened. The mock rehearsal should start from the EOC. This will help in finding out the preparedness level of the district level functionaries.

8.5Plan Evaluation

The purpose of evaluation of DDMP is to determine

- The adequacy of resources
- Coordination between various agencies
- Community participation
- Partnership with NGOs

The ease of understanding and using the plan will also be important consideration

The plan will be updated when shortcomings are observed in:-

- Organizational structures
- Available Technologies
- Response mechanism following reports on drills or exercises

8.6 Dissemination of DDMP

The responsibility for dissemination of the plan is vested with EOC at the Collectorate

In order for the DDMP to be effective it must be disseminated at two levels

- To the district authorities, government departments, NGOs and other agencies and institution within the district
- To general public

Effective dissemination of plan requires a well designed and focused training. Training activities are carried out under the guidance and direction of the Collector/ Sikkim State Disaster Mitigation Authority (SSDMA).

8.7 Post- Disaster Evaluation

A Post- disaster evaluation should be done after the withdrawal of relief and rehabilitation activities in order to assess

- The nature of state intervention and support,
- Suitability of the organizational structure,
- Institutional Arrangements,
- Adequacy of Operating Procedures,
- Monitoring mechanism,
- Information tools,
- Equipments,
- Communication System, etc.

The impact studies on the above operations for long term preventive and mitigation efforts are to be undertaken

Evaluation exercises may be undertaken to understand the perceptions about disaster response in terms of

- Adequacy of training
- Alert and warning system,
- EOC functions,
- Communication plans,
- Security,
- Containment,
- Recovery procedures,
- Monitoring.

8.8 Plan Update

The DDMP is a “living document” and the Collector will update it every year before May, according to the format approved by SSDMA taking into consideration

- The resource requirements
- Updates on human resources
- Technology to be used
- Coordination issues

The soft copy of the District Contingency Plan or DDMP will be with the EOC, which will ease the process of updating the DDMP regularly. All the line departments at the district level should have a latest copy of the DDMP with them.

One day training programme on disaster preparedness would be organized by the Collector for the District Disaster Management Committee during the month of April/may every year

During Emergency Period distribution of area is done GP wise for checking shelter, go-down, communication and coordination

CHAPTER-IX
ROLE AND RESPONSIBILITIES IN PLANNING, RESPONSE,
RECOVERY, TRAINING AND AWARENESS

	Planning	Preparedness	Response	Recovery	Training& Awareness
9.1 Zilla Parishad	*Meeting at regular intervals to update/modify the DDMP	* Following all the preparatory measures mentioned in the DDMP	*Helping the rescue team in all aspects	*Coordinating with the district/block/ GP level administration	Carrying out mock drills for the task force Walling posters and disseminating warning using
9.2 NGOs/ CBOs/ Mahila Samities/ SHGs/ Youth Clubs	*Organizing NGOs according to their specialization to form response groups *Review and analyze past disasters *Prepare Community Contingency Plan in their area of operation	*Work closely with the community in identifying the risk population such as elderly and disabled, children, pregnant women, sick single women and people residing on the seashore *Formation of Task Forces by involving their own volunteers and young boys and girls of the (17 to 25 years) village *Capacity building of the Task Forces	*Mobilizing and utilizing the community funds during the time of emergency * Specifying roles and responsibilities of the Task Force *Maintaining transparency in activities	* Coordinating with the District administration and Sub-division/GP level administration	loud speakers, etc. *Equipping the task force with proper training and providing them a contingency manual *Awareness building within the community * Mock drills for finding out the suitability / adequacy of preparedness

9.3 Religious Institutions	* Help the Administration in providing information	*Staying aware of their responsibilities	*Helping the district administration in relief activities	*Coordination with the dist/Sub-division/GP level administration *Carrying out rehabilitation activities *Providing Counselling to morally distressed. *Direct contact with the Control room and the Shelters *Coordinate with district	Creating awareness among the people for preparedness
9.4 Public and private Corporations	*Coordinating with the administration	*Keeping stocks for emergency needs	* <i>Making the stocks available during emergency</i> *Supplying the materials		

9.5 Home Guards/ NCC	*To identify, access escape routes to be followed during emergency so as to ensure passing of vehicles with least inconvenience *To document Traffic control measures to be followed during emergency	*To plan adequate contingency measures for manpower, transport and communication *To assess and plan for augmentation of existing facilities if needed	to the Control Room *To help the response groups in carrying out activities in a organized manner	Administration for rehabilitation *To help the District administration whenever needed	*Mock drills For finding out the suitability / adequacy of preparedness
----------------------------	--	---	--	---	--

CHAPTER-X

INFORMATION, EDUCATION AND COMMUNICATION

10.1 Plan Dissemination and Evaluation

The responsibility of plan dissemination is vested with the EOC, at the Collectorate. In order for the DDMP to be effective it must be disseminated at two levels:

- a. To the district authorities, government departments, NGOs and other agencies and institutions within the district and
- b. To general public

10.2 Dissemination of Other IEC Materials

The DI & PRO at the district level will carry on the dissemination of IEC materials and NGOs at the block and village level during normal time (selected during Post Natural Calamity Committee meeting, presided over by the ADM). The activities of these DI & PRO and NGOs would include

- Walling,
- Posters, Pamphlets and Brochure preparation and distribution
- Rallies
- Street plays,
- Volunteers training,
- Task force training, etc.

10.3 Training and Drills

The training programmes are organized for different levels of functionaries from district level officials, identified NGOs, Private Sector Organizations in order to equip them to extend training facilities to functionaries at blocks and village level as well as organize simulation exercises within the community.

The objective of full scale drill include evaluation of the following

- Practicality of the plan (structure and organization)
- Adequacy of communication and interactions among the agencies and the public
- Emergency equipment effectiveness
- Adequacy of first aid and rescue procedures
- Adequacy of emergency personnel response and training
- Public relation skills
- Evacuation and count procedures
- Coordination with the CBOs / NGOs

10.4 Community Based Disaster Preparedness and Mock Drills

Role of the Community

- First respond to disaster
- Participate in preparedness programme
- Sharing of disaster preparedness cost
- Playing as pressure group / advocacy
- Stockpiling and Coordination
- Supporting communication System

The Community Based Disaster Preparedness should be done as per the following stages

- ⇒ Formation of Sub-Division Disaster Committee
- ⇒ Training of line department and volunteers
- ⇒ Formation of GP level Committee
- ⇒ Developing Community Contingency Plans in the Villages
- ⇒ Training of Task Forces
- ⇒ Periodic mock drills
- ⇒ Updating information

Mock drills are important in normal times as well as during the emergency. The mock drill and preparedness for disaster are considered as a part of police duty. Every six months, there should be a mock drill in all of the police stations of the district to make them alert / fit to cope with any situation. Similarly all police stations should have internal security scheme, based on which they should have mock drills and update it for safety measures as per requirement.

Besides a contingency drill should be enacted during the landslides/Heavy rainfall/Earthquake so that everyone knows what he/she should do and where he/she should go. It is advisable to have a mock drill at night during the rain, by cutting of the electricity in the village/ district (as per the time chosen for the mock drill at each level). This exercise will help learn possible problem that would be faced. These learned lessons could be utilized in preparing the contingency plan in a much-prepared manner.

10.5 Setting Up of Disaster Volunteer Force – Identification and Training

An analysis of the situation of the village community forms the first task for preparedness. After analysis, the villagers would form different groups to carry on the activities for disaster preparedness. The motivated and willing male and female group members have to find out the roles and responsibilities of each group. The groups may be formed for warning, rescue and evacuation, water and sanitation, relief and food, damage assessment, shelter management, etc. This will form the **Disaster Management Teams**. For warning group, members could be young boys and girls of the village who will be trained to understand radio warnings and act fast to spread the warning throughout the village

The members for **Rescue And Evacuation Group** need to be physically strong (both men and women). This team can coordinate with the government to avail the facilities for rescue and evacuation, both in terms of rescue training, rescue infrastructure and equipment and ensuring the alertness of the rescue team of the government.

Both men and women members may look after the **Water And Sanitation** responsibilities at the shelters as well as outdoors

The members of the relief group collect, distribute relief materials such as food supply, utensils, clothes, kerosene, diesel, etc and coordinate all the relief requirements of the other action groups. Both men and women members have to be capable of interacting with the local authorities to ensure adequate supplies reach the village in time.

The members of shelter management group shall have more women members preferably SHG members and Anganwadi Workers (AWW). They will be at the shelters and safe houses looking after the evacuees' food, water and medication requirements. This group can also coordinate with the government authorities to ensure that health and sanitation facilities are available for extra vulnerable like women and children.

There can also be a First Aid and Medical Group, with equal numbers of men and women, those with some knowledge of nursing (such as trained dais and AWW/ ANMs) will be preferable. The members have to go through intensive training and drills for first aid and medical responsibility.

Other such group might be the Patrolling group and the Liaison group.

CHAPTER-XI

FOLLOW UP ACTIONS

11.1 STANDARD OPERATIONS PROCEDURE (SOP)

FOR DISTRICT EMERGENCY EOC, NORTH :03592-234538
TELEPHONE/FAX: 91-03592-234234
COLLECTORATE, NORTH DISTRICT

▶ START IMMEDIATELY ON RECEIVING WARNING OR INFORMATION ABOUT ANY OTHER EMERGENCY

1. **Officer in charge of EOC:** The EOC shall be in overall charge of the Collector. In the absence of Collector, ADM, SDM, SP, CDMO, ADC (Dev), Emergency officer or any other officer or staff on duty at that point of time shall remain in charge of EOC. The person in charge of EOC shall be personally responsible for implementing the SOP. He/She shall take all decisions as outlined below and sign for the Collector on all reports mentioned below. He/She shall not wait for orders from anybody.
2. **Officer and Staff in EOC:** Following staff and officers shall assemble in the EOC on getting any information from any source about any emergency. Apart from these, any other officer or staff who gets the information from any source will reach the EOC.
 - 2.1. Collector, ADM, SDM, SP, CDMO, ADC (Dev.), Emergency Officer, Zilla parishad, DCSO, DIPRO and RTO, CDVO etc
 - 2.2. All staffs of emergency section, representatives of development section, Stenos to Collector & ADMs.
3. **Getting the EOC ready:** Following preparatory steps will be taken up for keeping the EOC functional during emergency.
 - 3.1. Shift two more phone lines to control room.
 - 3.2. Shift the police VHF of Collector's room to Control room.
 - 3.3. Keep a radio with new batteries ready.
 - 3.4. Hire 3 generator sets.
 - 3.5. Stock 2 barrels of Kerosene and Diesel for running the generator sets.
 - 3.6. Charge the battery of VHF set of control room and staff car.
 - 3.7. Charge the battery of inverter.
 - 3.8. Charge the satellite phone and test it.
4. **Alert all field officers:** Field Functionaries, Panchayats, MOs, Police, Industries, Telephone, Agriculture, Forest, RWSS, R&B, ICDS, Irrigation, PHE, Municipality, MLAs, MPs, Station Director, All India Radio. DIPRO shall inform the media. Warning shall be issued in the following format:

Emergency Warning Message No. Dt.
To:
(Space for message)
Collector, North District

5. Call up the officers and ensure that they remain in headquarters.
6. Food and Kerosene:
 - 6.1. Check up availability of food and kerosene at GP Kendra, with storage agents and other inaccessible pockets.
 - 6.2. Direct the go-downs and FCI to remain open on all days, including Sundays and holidays, till situation gets back to normal.
 - 6.3. Start movement of food stock and K. Oil from district headquarters to GP headquarters.
7. **Health sector:** Make a rapid assessment of the following.
 - 7.1. Check up the stock of medicines, bleaching powder, and halogen tablets. If necessary, send immediate requisition.
 - 7.2. Start movement of medicines, bleaching powder, etc. to PHCs/CHCs.
 - 7.3. Ensure that medical officers are in place at the PHCs and CHCs through police stations.
 - 7.4. CDMO shall decide the locations of camps.
 - 7.5. All CDPOs shall be teamed up with the MO of PHC/ CHC with their vehicles and supervisors.
8. **Vehicles:** Requisition 2 small and 2 big vehicles immediately. Further requisition will be made as per need.
9. Close educational institutions after making an assessment of the seriousness of the emergency.
10. **Veterinary measures:** Immediately contact MD, tie up the supply of cattle feed. CDVO shall make assessment of vaccines and fodder availability.
11. **Air Dropping Zones:** Use the lat-long book for identifying the air dropping zones. Make an advance list of villages where air dropping may be needed.
12. Make a thorough assessment of relief items available in stock at different places.

13. **Functional distribution of work:** Following functional distribution of works shall be done. Each team will have staff and resources. The team leader will have full powers to take decisions
- 13.1. Transportation Management Team
 - 13.2. Infrastructure Management Team
 - 13.3. First Aid Management team
 - 13.4. Information / and Office Documentation Team
 - 13.5. Food and other relief items team
 - 13.6. Animal resource management Team
 - 13.7. Search and Rescue Team
14. Message to public over All India radio should be specific. Apart from the warning, it should include the following three points.
- 14.1. Take shelter in nearest pucca building.
 - 14.2. Keep cattle tied in open spaces.
 - 14.3. Keep sufficient dry food.
15. Looking at the onset of emergency and after making quick preparations, convene Emergency meeting of important official and non-official agencies. Give them clear instructions.
16. Make a duty roster. Important officials cannot afford to break down together.

11.2 General Advance Preparedness

11.2.1 Police Department

- Ensure functioning of the warning system.
- Formation of team
- Delegation of areas
- Formation of Zones/Sub-Zones

Early Warning Dissemination	Yes	No
<ul style="list-style-type: none"> • Keeping close contact with EO • Deploy personnel to guard vulnerable embankment points • Alert Police officials to remain at the Head Quarter 		
Evacuation		
<ul style="list-style-type: none"> • Deployment of police staff at risk point • Arrangement for the safety of property of the people • Arrange rescue kits • Support staff and volunteers during evacuation operation • Assist fire brigade personnel in their efforts • Maintain law and order situation 		
Search and Rescue		
<ul style="list-style-type: none"> • Deployment of police staff at risk point • Arrangement for the safety of property of the people. • Arrange rescue kits. • Support GP staff and volunteers during evacuation operation • Assist fire brigade personnel in their efforts • Maintain law and order situation 		
Relief Operation		
<ul style="list-style-type: none"> • Giving escort or guard to the relief items stored or Transported 		

Police Department**During Disaster**

Early Warning Dissemination	Yes	No
<ul style="list-style-type: none"> Collection of vital information Inform EO after getting authentic message 		
Evacuation		
<ul style="list-style-type: none"> Deployment of police staff at risk point Arrangement for the safety of property of the people Arrange rescue kits Support staff and volunteers during evacuation operation Assist fire brigade personnel in their efforts Maintain law and order situation 		
Search and Rescue		
<ul style="list-style-type: none"> Deployment of police staff at risk point Arrangement for the safety of property of the people. Arrange rescue kits. Support GP staff and volunteers during evacuation operation Assist fire brigade personnel in their efforts Maintain law and order situation 		
Shelter Management		
<ul style="list-style-type: none"> Deploy Constables/ Home Guards to different shelters Maintenance of law and order Arrangement of police personnel for the safeguard of the shifted marooned families 		
Relief Operation		
<ul style="list-style-type: none"> Assist district administration in supply and distribution of relief materials. Deploy police personnel near relief go-downs Escort relief carrier vehicle and personnel Maintain Law and order 		

11.2.2 Revenue Department

- Holding of meeting in the month of May and October.
- Joint inspection.
- Formation of Zones/Sub-Zones.
- Review progress
- Provision/arrangement of rescue kit at risk prone area.
- Equipments to be ready
- Formation of team
- Delegation of areas

<u>Early Warning Dissemination</u>	Yes	No
<ul style="list-style-type: none"> • Close contact with EO • Informing all concerned /public through revenue field • Functionaries • Alert revenue officials to remain at the Head Quarter 		
<u>Evacuation</u>		
<ul style="list-style-type: none"> • Propagation for evacuation • Arrangement for the safety of property of the people • Arrange rescue kits 		
<u>Search and Rescue</u>		
<ul style="list-style-type: none"> • Deployment of PRIs and other supporting staffs to assist in rescue operation • Propagation for evacuation • Arrange rescue kits 		

Revenue Department

During Disaster

<u>Early Warning Dissemination</u>	Yes	No
<ul style="list-style-type: none"> • Collection of on the spot inspection report from field functionaries • Dissemination of day to day position about the disaster at all levels GP 		
<u>Evacuation</u>		
<ul style="list-style-type: none"> • Search group go around to rescue the left over people in the risk Areas 		
<u>Search and Rescue</u>		
<ul style="list-style-type: none"> • Search group go around to rescue the left over people in the risk areas • Reporting casualties/ missing persons • Maintenance of law and order being local magistrate 		
<u>Damage Assessment</u>		
<ul style="list-style-type: none"> • Assessment of houses collapsed • Assessment of agricultural land • Assessment of agriculture losses 		

11.2.3 Health Department

- List out the staff with contact address
- Stock position of the sub-centre and PHC
- Prepare the plan and indent for stock
- Train paramedical staff/ ANMs / male health workers / volunteers/task forces/ Anganwadi workers for use and providing minimum health services to the community.
- Arrange for mobile health unit for inaccessible areas
- Health awareness campaign
- Re install telephone connection
- Arrangement of vehicle for uninterrupted mobility
- Repair of Sub Centers buildings
- Registration of Birth /Death and other vital events
- Dis-infections of Drinking water Sources thrice before flood season at least, one month before.

Health Department

Pre Disaster

Early Warning Dissemination	Yes	No
<ul style="list-style-type: none"> • Medical and Paramedical staffs will be directed to join Head Quarter immediately • Settings of a Control Room and will be kept operational for 24 hours • Delegation of duties /Area distribution • Request CDMO and requisition of vehicle • Meeting of Sector MO/Supervisors • Record keeping 		
Evacuation		
<ul style="list-style-type: none"> • Arrangement of medical help for the rescued/ injured persons 		
Search and Rescue		
<ul style="list-style-type: none"> • Arrangement of medical help for the rescued /injured persons 		
Medical Aid		
<ul style="list-style-type: none"> • Deployment of staffs in their respective areas with medicines. • Check the stock and collect the required stock from district office • Arrange emergency room ready with all equipments and staff • Delegation of duty at PHC for 24 hours services • Meeting with the volunteers/ ANM/AWW and distribution of work as per the need 		

Health Department**During Disaster**

Shelter Management	Yes	No
<ul style="list-style-type: none"> Provision of medicine and deployment of paramedical staff Provision of medical help to the needy Provision of chlorine Tablets and use of Disinfectants for the temporary latrines 		
Relief Operation		
<ul style="list-style-type: none"> Stock pilling of medicines /disinfectants in the risk prone areas Maintenance of Stock Register 		
Health and Sanitation		
<ul style="list-style-type: none"> Disinfections of drinking water sources IEC activities regarding safe drinking water, disposal of human and animal wastes Check the stock and collect the required stock from district office Arrange emergency room ready with all equipments and Staff 		
Infrastructure Restoration		
<ul style="list-style-type: none"> Repair sub carter's Buildings if necessary 		

Health Department**During Disaster**

Evacuation	Yes	No
<ul style="list-style-type: none"> Arrangement of medical help for the rescued. Inform to respective paramedical staff regarding evacuated people. 		
Search and Rescue		
<ul style="list-style-type: none"> Arrangement of medical help for the rescued/injured persons 		
Medical Aid		
<ul style="list-style-type: none"> Deployment of staffs in the cut off areas with medicine Check the stock and collect the required stock from district office Delegation of duty at PHC for 24 hours services Meeting with the volunteers and distribution of work as per the need 		
Shelter Management		
<ul style="list-style-type: none"> Provision of medicine and deployment of paramedical staff Provision of medical help to the needy 		
Carcass Disposal		
<ul style="list-style-type: none"> Registration of deaths and issuing of death certificates Distribution of disinfectants to the volunteers to dead bodies 		
Relief Operation		
<ul style="list-style-type: none"> Provision of temporary medical relief centers Distribution of medicines and halogen tablets Treatment of the victims and daily report to PHC control room 		
Health and Sanitation		
<ul style="list-style-type: none"> Disinfections of drinking water sources taking steps to check any possibility of spreading any epidemics in the community 		
Infrastructure Restoration		
<ul style="list-style-type: none"> Report to CDMO of damaged health centers and supply of equipments 		

Health Department**Post Disaster**

Early Warning Dissemination	Yes	No
<ul style="list-style-type: none"> IEC activities regarding health and sanitation 		
Medical aid		

<ul style="list-style-type: none"> Co-ordination deployment of outside medical/ paramedical staff and members of NGOs/ INGOs charitable organizations Check the stock and collect the required from district office. Arrangement of medical help for the needy. 		
Carcass Disposal		
<ul style="list-style-type: none"> Registration of deaths and issuing of death certificates Distribution of disinfectants to the volunteers to dead bodies 		

11.2.4 Water Resources and River Department

- Holding of natural calamity meeting in the month of May and October
- Awareness generation
- Formation of Zones/Sub-zones
- Review progress
- Equipments to be ready
- Formation of team
- Arrangement of vehicle
- Delegation of areas

Water Resource and River Development Department**Pre Disaster**

Early Warning Dissemination	Yes	No
<ul style="list-style-type: none"> Suspension or cancellation of all leaves of instruction to the concerned person to join head quarter immediately. Arrangement of all-important telephone line and number in order Arrangement or requisition of Jeeps/ Trekkers to disseminate received warning information to the population of vulnerable/ weak places. Maintenance of record for information generation and dissemination. Co-ordinate with District Administration Deployment of concerned staff to update information regarding water level and velocity of flowing water in the rivers as well as about possible scorings, piping, seepages etc. Rain recording and submission of report to District Control Room. 		
Infrastructure Restoration		
<ul style="list-style-type: none"> Identification of vulnerable points Repairing of vulnerable roads and embankments 		

Water Resource and River Development Department**During Disaster**

Infrastructure Restoration	Yes	No
<ul style="list-style-type: none"> Guarding vulnerable roads and embankments Repairing piping and seepages found in vulnerable points. Arrangement of materials for repair of roads and breaches in the embankment for post disaster operation 		

Water Resource and River Development Department**Post Disaster**

Early Warning Dissemination	Yes	No
<ul style="list-style-type: none"> Damage assessment Identification of areas for clearance Delegation of team Monitoring of work Proposal to the government for repair and restoration 		

11.2.5 RM&DD, R & B Department

- Identification of weak-points
- Repair of weak roads/structures/canals before hazard season
- Stockpiling of building material
- Arrangement of equipments for road clearance

RD & R & B Department**Pre Disaster**

Early Warning Dissemination	Yes	No
<ul style="list-style-type: none"> Suspension or cancellation of all leaves of instruction to the concerned persons to join head quarter immediately. Arrangement of all-important telephone line and number in order. Maintenance of record for information generation and dissemination Co-ordinate with District Administration Clearance of roadside dead trees posing threat to communication, life and electricity. 		
Infrastructure Restoration		
<ul style="list-style-type: none"> Retrofitting and repairing of weak govt. buildings/structures Repairing of road network 		

RM&DD, R & B Department**Post Disaster**

Infrastructure Restoration	Yes	No
<ul style="list-style-type: none"> Damage assessment and report preparation Repairing of affected/ damaged govt. building structure Clearance of debris to reinstall communication 		

11.2.5 PHE Department

- Site visit and report preparation
- Awareness generation for using bleaching
- Helping BDO during emergency
- Supply of drinking water during emergency
- Site selection and water test
- Collection and storing of K-018H2s test stripe, bottle, bleaching, halogen tablets,
- Area wise deployment of staff, fitter, Mason.

RWS & S Department

Pre Disaster

Early Warning Dissemination	Yes	No
<ul style="list-style-type: none"> • To inform all its staff members to report their respective headquarters • Close contact with BDO • Arrangement of water tankers • Procurement collection of water purifiers • Stockpiling of accessories • Repairing the defunct tube-wells 		
Shelter Management		
<ul style="list-style-type: none"> • Installation of emergency tube-well/tankers near the shelter sites • Bleaching/disinfections of drinking water sources • Supply of halogen tablets 		
Health and Sanitation		
<ul style="list-style-type: none"> • Lab-testing of drinking water if necessary • Bleaching of drinking water sources • Aware community regarding to use safe drinking water 		
Infrastructure Restoration		
<ul style="list-style-type: none"> • Checking, repairing and construction of tube-wells • Stock pilling of accessories 		

PHE Department

During Disaster

Shelter Management	Yes	No
<ul style="list-style-type: none"> • Supply of drinking water • Supply of poly pack containing safe drinking water • Distribution of halogen tablets • Informing community particularly the evacuees regarding use of safe drinking water 		
Health and Sanitation		
<ul style="list-style-type: none"> • Lab-testing of drinking water if necessary • Sticking red and green stickers respectively for the polluted and safe drinking water sources especially tube wells • Bleaching of drinking water sources • Aware community regarding to use safe drinking water 		
Cattle Camps		
Supply of drinking water through installation of temporary provision of water tankers.		

PHE Department**Post Disaster**

Shelter Management	Yes	No
<ul style="list-style-type: none"> • Withdrawal of temporary water pipe installed near shelter sites • Use of bleaching powder 		
Infrastructure Restoration		
<ul style="list-style-type: none"> • Checking/washing/repairing of water pipe to put it back to its normal condition 		
Cattle Camps		
<ul style="list-style-type: none"> • Withdrawal of temporary water pipe • Use of bleaching powder 		

11.2.6 Animal Husbandry & VS Department

- List out staff members with contact address •
- Vaccination of cattle population
- Provision of supply of yearly medicines
- Arrangement of mobile health units in inaccessible areas •
- Health awareness campaign
- Arrangement of vehicle for uninterrupted mobility

AH & VS Department**Pre Disaster**

Early Warning Dissemination	Yes	No
<ul style="list-style-type: none"> • On receipt of warning ask all the staff to join duty immediately • Deployment of staff to the inaccessible areas • Regular maintenance of records • Co ordination with higher authorities 		
Evacuation		
<ul style="list-style-type: none"> • Mobilize community to evacuate cattle population to the nearest elevated places with the help of the LI 		
Search and Rescue		
<ul style="list-style-type: none"> • Support villagers and farmers to help in rescuing trapped cattle • Provide first aid to the injured cattle 		
Health and Sanitation		
<ul style="list-style-type: none"> • Distribution of disinfectants where cattle reside 		

AH & VS Department**During Disaster**

Early Warning Dissemination	Yes	No
<ul style="list-style-type: none"> Record keeping Information dissemination to concerned quarters (Sub-Divisional Vet. Officer) Maintenance of regular flow of information 		
Search and Rescue		
<ul style="list-style-type: none"> Co-ordination with village volunteers and villagers to search and rescue trapped animals 		
Medical Aid		
<ul style="list-style-type: none"> Provide first aid to the affected animals record keeping 		
Cattle camps		
<ul style="list-style-type: none"> Supply of medicines and cattle feed record keeping 		

AH & VS Department**Post Disaster**

Medical Aid	Yes	No
<ul style="list-style-type: none"> Vaccination immediately after the flood/cyclone and treatment to prevent epidemics 		
Carcass Disposal		
<ul style="list-style-type: none"> Collection and disposal of dead bodies Maintenance of record Issuing of certificates against dead animals insure Distribution of disinfectants, the place, where animals were buried or cremated 		
Medical Aid		
<ul style="list-style-type: none"> Provide first aid to the affected animals Record keeping 		
Carcass Disposal		
<ul style="list-style-type: none"> Issuing of death certificate for the insured livestock 		
Health and Sanitation		
<ul style="list-style-type: none"> Provision of vaccination, if possible. Record keeping 		

11.2.7 Energy and Power Department

- Regular identification of faults
- Regular checking and repair of weak points/Transformers
- Stock piling of equipments/accessories
- Skill development training/orientation
- Precautions/protections near high voltage electric equipments installed
- Stopping illegal consumption of electricity

Energy and Power Department**Pre Disaster**

Early Warning Dissemination	Yes	No
<ul style="list-style-type: none"> Alert all staff to get back to their respective head quarters Retrofitting of weak points if found Disconnection of electricity in the event of an emergency Arrangement of alternative energy sources such as generators and fuel for generators 		
Infrastructure Restoration		
<ul style="list-style-type: none"> Replacement of weak electric poles/wires Checking and correcting private connections Stockpiling of necessary equipments and accessories 		

Power Department**During Disaster**

Early Warning Dissemination	Yes	No
<ul style="list-style-type: none"> Disconnection of electricity to the affected areas 		

Energy and Power Department**Post Disaster**

Infrastructure Restoration	Yes	No
<ul style="list-style-type: none"> Uninterrupted power supply to the Medical/GP Office and other Important institutes Damage assessment and transmission of the same to higher authorities Quick installation/repair of damaged infrastructures Early restoration of power supply to the affected areas 		

11.3 Checklist For Different Departments & Officers:**11.3.1 Check List For DISTRICT COLLECTOR & DISTRICT MAGISTRATE:**

<i>PREPARED ACTION TAKEN</i>	Y/N	REMARKS
Ensuring communication establishment of EOC with Sub-division Control Rooms / Line Dept. Control Rooms / Zones / Sub-Zones / Neighbouring District EOC / Police Control Rooms / SSDMA / SEOC / SRC.		
Test checking of receipt & transmission of messages.		
Ensuring Proper functioning of communication equipments or systems.		
Alternate communication arrangements in case of failure of one system.		
Training & Mock drill of officials designated for disseminating a		

disaster warning.		
Flow of information Up & Down as follows 1) EOC --- Sub-division CR --- G.P CR.--- Villages 2) Rev. Deptt. / SRC / ---- Collector / DCR ---- Line Dept C.R./ Police C.R / RTO. / CDMO / CDVO / DIPRO.		
Public address system to be kept ready along with vehicles.		
Highlighting Control Room Phone No's. .		
Preparing a database for Important Tel Nos. & Alternate Tel Nos.		
EOC to operate with shift (24 hours & 365 days).		
Battery/Charging sets to be kept charged with arrangements for stand by Battery sets.		
Detail report of the situation to be displayed for every ones information at DCR.		
Adequate warning mechanism to be ensured for evacuation.		
Officers at different control rooms to be designated as Nodal officer for evacuation.		
Co-ordination between Dist. Administration with NGOs / CBOs etc.		
Mapping of safe shelters serving Vulnerable villages.		
Identification of Mounds & Cattle sheds.		
Army assistance / Special task group to be pre prepared.		
Rescue groups to be Mock drilled.		
Co-ordination with Police force / Police arrangements / Fire brigade staff.		
Contact Person / Address / Telephone No. of different Private / Govt. Vehicle to be kept in advance.		
Organizing vehicles / ambulance for immediate assistance to the affected mass.		
Community assistance in road clearance.		
Passenger carrying buses / transportation etc. to be diverted away from Disaster sites.		
Areas to be identified & cordoned off.		
Public information centers activated.		
Gender / Old age issue must be taken care of.		
Ensuring advance stocking of resource for evacuation equipments like ladders, rope, petromax lights etc.		
Safe route / alternate route charts from / to weak & Vulnerable points.		
Evacuation routes not to be blocked for long time.		
Order of evacuation should be a) Seriously injured & sick b) Children, women, Handicapped, old age c) Able bodied.		
Petrol / Kerosene Oil / Diesel to be kept reserved in advance		
Ensuring supply of Food& Water		
An officer to be appointed as the relief officer.		
Provision for security in a) Relief receiving centers b) Transportation of relief c) Relief stored go-downs d) Distribution of relief e) Relief camps f) Free kitchen centers / Feeding centers g) Relief officials		

h) VIP's dealing with relief distribution		
i) Air dropping zones		
Order in advance for the requirements.		
Storage of materials in advance at the inaccessible pockets.		
Ensuring pre position of medical aids.		
Evaluating the depth of impact of disaster at different locations.		
Prioritizing the disaster sites depending upon the magnitude.		
Uninterrupted supply of relief materials to Relief camps / Multipurpose shelters.		
Provision for free kitchen / distribution of cooked food.		
Provision for transportation.		
Alternate route chart to reach the disaster sites / weak & vulnerable points.		
Arrangements for Trauma counselling facilities		
Initiating helps from local NGOs / CSOs / Anganwadi members		
Keeping an account of the list of private stockiest / Millers etc.		
Family pack should be made in advance.		
Type of relief materials to be finalized for different types of disasters,		
Ensuring MSL (minimum standard limit) at all the fair price shop / Wholesalers etc.		
Packed water to be pre stocked / Drinking water supply		
Public address system / Public information centre activated		
Precautionary measures through Leaf lets / Pamphlets.		
With SRC / SSDMA / RDC / Rev. Dept.		
With S.P. / CDMO / CDVO / DCSO / RTO		
With Irrigation / Line Departments.		
With Army Personnel's NCC / NSS etc.		
With Fire officer		
With Private Resource persons like Doctors / Engineers etc.		
With NGOs / CBOs / CSOs		
With neighbouring district HQ.		
With Student mass		
Road clearance.		
Eviction of Encroachments.		
Arrangements for alternate routes		
Identification of Causalities.		
Preparing reports on UD cases.		
Electricity restoration.		
Transportation / communication restoration.		
Water supply restoration.		
Normalcy restoration.		
Restoration of Educational Institutions.		
Weak & Vulnerable areas.		

11.3.2 Check List For S.P.

PREPARED ACTION TAKEN	Y/N	REMARKS
Ensuring communication establishment of Dist. Police H.Q. with P.S./ O.P.s / DCR/Neighbouring Police H.Q's .		
Test checking of receipt of transmission of messages		
Ensuring Proper functioning of communication equipments or systems.		
Alternate communication arrangements in case of failure of one system.		
Flow of information Up & Down as follows EOC---S.P.----P.S. / O.P's. -----		
Public address system to be kept ready along with vehicles.		
Highlighting EOC Phone No's. & other important PH no's.		
Preparing a database for Important Telephone Numbers.		
Adequate warning mechanism to be ensured for evacuation.		
An officer to be designated as Nodal officer for evacuation.		
Community assistance in organizing emergency transport of seriously injured to the Medical centre.		
Antisocial elements identified and taken care of.		
Community assistance in road clearance.		
Traffic management, Patrolling on State/National High ways and roads leading to disaster sites.		
Roads to be identified to made a) One way b) To be blocked.		
Passenger carrying vehicles etc. to be diverted away from Disaster sites.		
Security provisions in a) Shelters b) Transit camps c) Hospitals & Medical centre.		
Areas to be identified & cordoned off.		
Public information centers activated.		
Co-ordination with Army personnel in rescue and evacuation.		
Ensuring advance stocking of resource for evacuation equipments like ladders, rope, petromax lights etc.		
Alternate route charts for weak & Vulnerable points.		
Provision for security in a) Relief receiving centers b) Transportation of relief c) Relief stored go-downs d) Distribution of relief e) Relief camps f) Free kitchen centers / Feeding centers g) Relief officials h) VIPs' dealing with relief distribution i) Air dropping zones		
Assisting Dist. Authorities for action against Hoarders, Black Marketers etc.		
Safe guarding the weak & Vulnerable points on river embankment.		
Taking the relief poaching to task.		
Safe guarding the public / Govt. properties.		
With EOC / Collector		
With CDMO / CDVO / CSO / RTO		
With Irrigation / Line Departments.		
With Army Personnel's.		
With Fire officer / NCC / NSS etc.		
Road clearance.		
Eviction of Encroachments.		
Arrangements for alternate routes		
Identification of Causalities.		

11.3.3 Check List For ADDITIONAL DISTRICT MAGISTRATE:

<i>PREPARED ACTION TAKEN</i>	Y/N	REMARKS
Ensuring communication establishment of DCR with Sub-division control rooms / Line Dept. Control Rooms Neighbouring district control room / Police control rooms / SSDMA / State EOC / SRC.		
Test checking of receipt & transmission of messages.		
Ensuring Proper functioning of communication equipments or systems.		
Alternate communication arrangements in case of failure of one system.		
Flow of information Up & Down as follows 1) EOC/ADM --- Sub-division CR --- G.P CR.--- Villages 2) Rev. Deptt. / SRC / --- Collector / EOC/ADM ---- Line Dept C.R./ Police C.R / RTO. / CDMO / CDVO / DIPRO.		
Public address system to be kept ready along with vehicles.		
Highlighting Control Room Phone No's.		
Preparing a database for Important Tel Nos. & Alternate Tel Nos.		
EOC to operate with shift (24 hours & 365 days).		
Battery/Charging sets to be kept charged with arrangements for stand by Battery sets.		
Detail report of the situation to be displayed for everyone's information at EOC		
Adequate warning mechanism to be ensured for evacuation.		
Officers at different control rooms to be designated as Nodal officer for evacuation.		
Co-ordination between Dist. Administration with NGOs / CBOs etc.		
Mapping of safe shelters serving Vulnerable villages.		
Identification of Mounds & Cattle sheds.		
Army assistance / Special task group to be pre prepared.		
Rescue groups to be Mock drilled.		
Co-ordination with Police force / Police arrangements / Fire brigade staff.		
Contact Person / Address / Telephone No. of different Private / Govt. Vehicle to be kept in advance.		
Organizing vehicles / ambulance for immediate assistance to the affected mass.		
Community assistance in road clearance.		
Passenger carrying vehicles / transportation etc. to be diverted away from Disaster sites.		
Areas to be identified & cordoned off.		
Public information centers activated.		
Gender / Old age issue must be taken care of.		
Ensuring advance stocking of resource for evacuation equipments like ladders, rope, petromaxlights etc.		
Safe route / alternate route charts from / to weak & Vulnerable points.		
Evacuation routes not to be blocked for long time.		
Order of evacuation should be a) Seriously injured & sick		

b) Children, women, Handicapped, old age c) Able bodied.		
Petrol / Kerosene Oil / Diesel to be kept reserved in advance		
Ensuring supply of Food & Water		
An officer to be appointed as the relief officer.		
Provision for security in a) Relief receiving centers b) Transportation of relief c) Relief stored go-downs d) Distribution of relief e) Relief camps f) Free kitchen centers / Feeding centers g) Relief officials h) VIP's dealing with relief distribution i) Air dropping zones		
Order in advance for the requirements.		
Storage of materials in advance at the inaccessible pockets.		
Ensuring pre position of medical aids.		
Evaluating the depth of impact of disaster at different locations.		
Prioritizing the disaster sites depending upon the magnitude.		
Uninterrupted supply of relief materials to Relief camps / Multipurpose shelters.		
Provision for free kitchen / distribution of cooked food.		
Provision for transportation.		
Alternate route chart to reach the disaster sites / weak & vulnerable points.		
Arrangements for Trauma counselling facilities		
Initiating helps from local NGOs / CSOs / Anganwadi members		
Keeping an account of the list of private stockiest / Millers etc.		
Family pack should be made in advance.		
Type of relief materials to be finalized for different types of disasters,		
Ensuring MSL (minimum standard limit) at all the fair price shop / Wholesalers etc.		
Packed water to be pre stocked / Drinking water supply		
Public address system / Public information centre activated		
Precautionary measures through Leaf lets / Pamphlets.		
With SRC / SSDMA / RDC / Rev. Dept.		
With Different official of the Collectorate.		
With S.P. / CDMO / CDVO / DCSO / RTO		
With Irrigation / Line Departments.		
With Army Personnel's NCC / NSS etc.		
With Fire officer		
With Private Resource persons like Doctors / Engineers etc.		
With NGOs / CBOs		
With neighbouring district HQ.		
With Student mass		
Road clearance.		
Eviction of Encroachments.		
Arrangements for alternate routes		
Identification of Casualities.		
Electricity restoration.		
Transportation / communication restoration.		
Water supply restoration.		
Normalcy restoration.		
Estimation of the loss.		

11.3.4 Check List For C.D.M.O.

<i>PREPARED ACTION TAKEN</i>	Y/N	REMARKS
Ensuring communication establishment with DCR, P.H.C.s, Medical Aid Centres & Sub Centres		
Test checking of receipt & transmission of messages.		
Ensuring Proper functioning of communication equipments or systems.		
Alternate communication arrangements in case of failure of one system.		
Flow of information To & Fro as follows Collector / EOC -----C.D.M.O. ----- M.O., P.H.Cs, C.H.Cs etc. ----- M.O, Sub Centres ----- Medical Aid Centres.		
Public address system to be kept ready along with vehicles.		
Highlighting Medical Control Room Phone No's. .		
Preparing a database for Important Tel Nos. & Alternate Tel Nos.		
Control room to operate with shift Medical officers (24 hours & 365 days).		
Battery/Charging sets to be kept charged with arrangements for stand by Battery sets.		
Detail Precautionary report of the situation to be displayed for everyone's information.		
Ensuring prevention of water born diseases.		
Placement of requirements of medicines etc.		
Adequate warning mechanism to be ensured for evacuation.		
Officers at different control rooms to be designated as Nodal officer for evacuation.		
Functioning of medical Aid Centres in the shelters / weak & Vulnerable areas.		
Adequate supply of Medicines etc required for treatment of people rescued.		
Ambulance to be kept in readiness.		
Formation of Mobile units & Deputing these mobile units with Medicines to accompany the rescue team.		
Preventive measures to stop spread of epidemics in the shelters / relief camps.		
Distribution of Leaf-lets / Pamphlets for Dos & Dont's.		
Special Attention for water sanitation.		
Uninterrupted supply of Medicines to the Relief camps / Sub Centres / Multipurpose shelters.		
An officer to be designated as relief medical officer.		
The following emergency medical equipment are stocked <ul style="list-style-type: none"> • Drugs used for treatment of cut and fractures, such as tetanus toxin, analgesics and antibiotics. • Drugs used for the treatment of diarrheal, water-borne diseases and flu (including oral dehydrating supplies). • Drugs required treating burns and fighting infections. • Drugs needed for detoxification including breathing equipments. 		
Discharge of all ambulatory patients whose release does not pose a health risk to them.		
Non-ambulatory patients relocated within the hospital to safest areas.		
Equipment supplies such as candles, matches, lanterns and extra clothing		

provided for the comfort of the patients.		
Emergency Generator available.		
Adequate supplies of aesthetic gases for surgery cases available.		
The hospital water storage tanks were filled.		
An area of the hospital designated for receiving large number of casualties.		
Emergency admissions <ul style="list-style-type: none"> Procedures developed. Records maintained. Work schedules to ensure availability of adequate staff. 		
In house emergency medical teams to ensure that adequate staff available at all times to handle emergency casualties.		
Emergency accommodations provided for, for medical personnel from outside the area.		
Security arrangements made at hospitals.		
Public address system / Public information centre activated at the hospital.		
Trauma counselling facilities.		
With Collector / EOC, S.P. PHD, RWSS & Line Dept.		
With NGOs / CBOs		
With Health Dept. /Red Cross		
With Private Ambulance / Nursing Homes / Doctors / Specialist.		
Water Sanitation while the normalcy restores.		
Safe Disposal of carcasses.		
More Medical Aid Camps at disaster sites / Rehabilitation sites.		
Protection against epidemics water born diseases & air born diseases.		
Supply of disaster specific medicines.		
Record mentioning the details of casualties.		
Trauma counselling system developed.		

11.3.8 CHECKLIST FOR FIRE OFFICER:

PREPARED ACTION TAKEN	Y/N	REMARKS
Communication established with Police, Dist. Control Room, CDMO office, Emergency operation centre		
Essential fire fighting equipments are stocked Vehicle in good condition, Fuel, Masks, ladders etc.		
Personnel are trained to fight out different fire disaster situation		
Personnel are trained in the evacuation work		
Phone lines are always in order and Community may be informed about the contact points.		
Regular staff assessment for 24 hours to meet emergency		
Fire prone zones identified		
Steps have taken to educate people		
Minimum emergency response time (in minutes)		
Operating procedure –preparedness, during fire and rehabilitation		
Local authority should be kept informed for assistance		
Rescue of life and property		
Aid for Medical services.		
Local bodies should see the fire hazards for water supply points		
Rush to the spot to combat the situation		
Police to control the crowd and to help in giving assistance for relief		
Communication equipments-VHF		
Informed the local bodies for water supply –available sources		
First aid training to all		
Revenue Department coordinate for relief rehabilitation		
Village volunteers should seek the help of GP for water supply		

11.3.9 Checklist For Water Resources and river Development :

PREPARED ACTION TAKEN	Y/N	REMARKS
Radio communications established with Emergency Operations Centre, and Departmental offices within the division		
An officer appointed as “Officer-in-Charge-Irrigation”		
Emergency tool kits for all technical assistants prepared.		
Water level gauges on minor tank structures not having level gauges marked.		
Repairs/under construction activities are well secured.		
Round the clock inspection and repair being carried out of Irrigation channels, Bridges, Culverts, Overflow channels as may be necessary.		
Round the clock inspection and repair being carried out of Pumps, Generators, Motor equipment and Station buildings.		
Level of impounding in the tanks reduced. Coordination of this action with other districts is done.		
Inlet and outlet to tanks are cleared.		

11.3.10 Checklist For AGRICULTURE DEPARTMENTS:

PREPARED ACTION TAKEN	Y/N	REMARKS
Communication link within the division established with District Collector, EOC, Agricultural colleges, Seed banks, Nurseries (private and public).		
The Superintending Agriculture Officer designated as “Officer-in-Charge-Agriculture		
Agricultural equipments, which may be required, stocked.		
Contact established with soil and water testing laboratories.		
Extent of damage assessed for Soil, Crop, Plantation, Micro-irrigation systems and Storage facilities Requirements for salvage or re-plantation assessed		
Information provided to all concerned about the disasters, likely damages to crops and plantations, and information about ways to protect the same.		
Actions coordinated with Irrigation Department		
Organized transport, storage and distribution of Seeds, Fertilizers, Pesticides and Labour		
Cleaning operations carried out to avoid water logging and salinity.		
Surveillance for pests and diseases being carried out.		
Public information centre established.		
NGOs and other relief organizations informed of the resources of the		
Farmers assisted to re-establish their contacts with agriculture produce		
Adequate facilities provided to field teams.		

11.3.11 Checklist For ANIMAL HUSBANDRY DEPARTMENT:

PREPARED ACTION TAKEN	Y/N	REMARKS
Radio Communication link established with District Collector, Emergency Operations Centre, Veterinary aid centers and Hospitals (including private practitioners) within the division.		
The District Animal Husbandry Officer designated as “Officer-in-Charge-Veterinary Services”		
Emergency medical equipments required are stocked.		
All veterinary hospitals and centers staff informed about the disasters, likely damages and effects, and ways to protect life, equipment and property.		
Emergency electrical generator arranged.		
Emergency supplies of anesthetic drugs arranged.		
Hospital water storage tanks filled		
An area of the hospital prepared for receiving large number of livestock		
Emergency admission procedures developed (with adequate record keeping).		
Transfer of seriously injured livestock from villages to veterinary aid centres and hospitals organized.		
Established at disaster sites Cattle camps, Additional veterinary aid centers.		
Adequate sanitary conditions maintained Cleaning operations being carried out Epidemiological surveillance is being undertaken		
Emergency accommodations available for veterinary staff from outside the area.		
Organized for cattle camps Water, Fodder and Animal feed.		
Public information centre established.		
The local police, and rescue groups informed of the resources of each Veterinary aid centers and hospital.		

11.3.12 Checklist For Public Work Department :

PREPARED ACTION TAKEN	Y/N	REMARKS
Radio Communication link established with District Collector, Emergency Operations Centre, Departmental offices within the division.		
An officer appointed as “Officer-in-Charge-PWD”		
Extra transport vehicles dispatched from headquarters		
Work under construction secured		
Heavy equipment, such as front-end loaders, to be secured.		
All work teams issued two-way communication link		
Inspection and emergency repairs, if necessary, carried out for all Roads, Roads bridges, Underwater inspection of foundations and piers, Concrete and steel works.		
Inspection and emergency repairs, if necessary, carried out for all buildings and structures of the state government (including hospital buildings)		
Emergency inspection by mechanical engineer of all plant and equipment in the District workshops carried out.		
Emergency tool kits assembled for each division		
Routes strategic to evacuation and relief marked		
Adequate road signs installed to guide and assist the drivers.		
Priority listing made for which roads to be opened first.		
Essential equipments such as Towing vehicles, Earth moving equipments, Cranes etc. Made available		
Begin clearing roads		
Community assistance mobilized for road clearing		
The following activities were undertaken Cleaning of ditches, Grass cutting, Burning or removal of debris and Cutting of dangerous trees along the roadside in the affected area.		
The following repair works were undertaken for All paved and unpaved road surfaces, Pothole patching and Any failure of surface foundations in the affected areas.		
Construction work undertaken for temporary roads to serve as access to Temporary transit camps, Relief camps and Medical centers.		
Construction work undertaken for temporary structures required for organizing relief work such as Relief camps, Feeding centers, Medical facilities, Cattle camps		
An up-to-date report of all damage and repairs kept in the district office report book.		

11.3.13 Checklist For Public Health Engineer:

PREPARED ACTION TAKEN	Y/N	REMARKS
Radio Communication link established with District Collector, Emergency Operations Centre, Departmental offices within the division.		
One officer appointed as “Officer-in-Charge-Water Supply”		
Ensured that the hospital storage tank is full and the hospital is conserving water.		
Informed people to store emergency supply of drinking water.		
Continuous monitoring carried out for Pumping stations, Buildings above ground, and the treatment plant		
Provision for standby water supply made.		
Procedures were established for the emergency distribution of water if existing supply was disrupted.		
Provisions to acquire tankers and establishing other temporary means of distributing water on an emergency basis carried out.		

Provisions to acquire containers and storage tanks required for storing water on an emergency basis carried out.		
Water distributed to all transit camps, Relief camps, Affected villages & Cattle camps		
Buffer stock of fuel for the motors acquired		
Emergency repairs of damages to water supply systems carried out		
Appropriate sources of potable water identified.		
Unacceptable water sources identified Necessary precautions taken to see that no water is accessed from such sources.		
Alternate water supply arranged in feeding centers, All transit camps, Relief camps, Cattle camps and the affected areas.		
Drinking water supply is disinfected as per the standards and procedures laid down.		
Emergency accommodations for staff from outside the area provided.		

11.4 Schedule for Updating Plans

Plans	Updating Time
District Disasters Management Plan	½ Yearly (MAY & NOV)
Line Departments Disasters Management Plan	½ Yearly (MAY & NOV)

CHAPTER- XII

OPERATIONAL GUIDELINES OF WHAT TO DO DURING DISASTERS

12.1 Operational Guidelines of What to do in the event of a Cyclone

Do's	Don'ts
<p>Listen to the Radio/ TV / Public Addressing System for advance information and advice. Allow considerable margin for safety.</p> <p>A cyclone may change direction, speed or intensity within a few hours, so stay tuned to the radio / TV for updated information. Tape up large windows to prevent from shattering.</p> <p>Move to the nearest shelter or vacate the area if this is ordered by the appropriate government agency.</p> <p>Stay indoors and take shelter in the strongest part of the house / society.</p> <p>Open windows on the sheltered side of the house if the roof begins to lift.</p> <p>Find shelter if you are caught out in the open.</p> <p>If you have to evacuate, do not return until advice.</p>	<p>Do not go outside or into a beach during a lull in the storm.</p> <p>Be away of fallen power lines, damage bridges And structures.</p> <p>Do Not go for side sight seeing</p>

12.2 Operational Guidelines of What to do in the event of a Flood

Do's	Don'ts
<p>Listen to the Radio/ TV/ Public Addressing System for advance information and advice. Disconnect all electrical appliances and move all valuable personal and household goods and clothing out of reach of floodwater, if you are warned or if you suspect that floodwaters may reach the house.</p> <p>Move vehicles, Farm animals and Movable goods to the highest ground nearby.</p> <p>Turn off electricity, gas if you have to leave the house.</p> <p>Lock all outside doors and windows if you have to leave the house.</p> <p>If you have to evacuate, do not return until advice.</p>	<p>Do not enter floodwaters on foot if you can avoid it.</p> <p>Never wander around a flooded area.</p> <p>Do not allow children's to play in, or near, floodwaters.</p> <p>Do not drive into water or unknown death and current.</p> <p>Do not it food or drink water, which is affected by floodwater.</p>

12.3 Operational Guidelines of What to do in the event of a Heat Wave

Do's	Don'ts
Listen to the Radio/ TV/ Public Addressing System for advance information and advice. Finish the work at the morning or leave it to the evening. Drink Sufficient Water & take Food Keep your head away from the direct heat. Use Clothes, Cap, Umbrella or Glasses Keep Stock water with you Wear light dresses.	Avoid standing under direct sun. Avoid Long Drives.

12.4 Operational Guidelines of What to do in the event of a Drought Situation

Do's	Don'ts
Save Water & Stock Water Arrange for alternate cropping Contact Nearest Agriculture Office	Stop disutility of Water

12.5 Operational Guidelines of What to do in the event of a Earthquake

Do's	Don'ts
Listen to the Radio/ TV/ Public Addressing System for advance information and advice. Teach all members of your family how to turn off the electricity, water and gas supply. Protect yourself by staying under the lintel of an inner door, in the corner of a room, under a table or even under a bed. Keep away from Old, Tall or ditched	Do not run and do not wander round the streets. Keep away from buildings, walls, slopes, electricity wires and cables & stay in the vehicle. Do not rush to the doors or exits, never use the lifts keep well away from windows, mirrors, chimneys and furniture. Do not rush to the doors or exists, never

<p>buildings, electricity wires, slopes and walls, which are liable to collapsed.</p> <p>Stop the vehicle away from building, walls, slopes, electricity wires and cables.</p> <p>Live your badly damaged house.</p>	<p>use the lift.</p> <p>Avoid places where there is use electric wires and do not touch any metal object in contact with them.</p> <p>Do not re-enter badly damaged buildings and do not go near damage structures.</p>
<p>Collect water containers, food items and ordinary and facial medicines.</p>	

Conclusion

Humanity has been the victim of natural disaster from its very beginning. It has extracted a heavy toll of deaths and suffering to the human beings. Earthquake, Landslides, floods, cyclones, hurricanes, volcanic eruptions, wild fires and such other natural disasters have claimed millions of lives all over the world and have adversely affected billions of people. Disasters have multiplying effects as one type of disaster ends up in another. To exemplify a few floods may occur with cyclones and earthquakes simultaneously or in a sequential pattern, causing dam failures, landslides, destruction of roads and bridges. The character and extent of the disaster depends upon the nature of the elements involved and on the resistance of a man made environment to these elements.

“Natural Disaster” is a global phenomenon and it does not recognize any national boundary. But the worst sufferers are the developing countries, which are badly equipped to deal with such events. The South Asian countries can be cited as examples, which have economic dependence upon primary production and have primitive and have inadequate technological infrastructure. This results in substantial loss of human life and upheaval in the first instance, and the destruction and disruption of vital production structures and communications in the second. Disasters are thus, a significant obstacle to economic development, especially in lesser-developed parts of the world, India being no exception.

Ever since the dawn of human civilization, man has always been struggling to control nature and environment. In fact, the goal of human destiny is to gain complete mastery over nature. But despite technical advances in the field of structural and non-structural measures, the quantum of loss of life and damage to material assets is increasing. It may not be possible to prevent the occurrence of these natural phenomenon but the disastrous effects they generate can be avoided or at least reduced. In fact, it is not the phenomena themselves but their interaction with human settlements and land use that constitute disasters.

ANNEXTURE

List of important telephone number:

Chief Secretary -	(03592) 202315
Addl. Chief Secretary-	(03592) 202657
Director General of Police-	(03592) 202747
Relief Commissioner-	(03592) 201145, Fax No.- (03592) 201075.
State Control Room-	(03592) 201145
Emergency Operating Centre-	
1. North -	(03592) 234538
2. East-	(03592) 204995
3. West-	(03595) 250633
4. South-	(03595) 264442
Fire Control Room (Mangan)-	(03592) 234266
Mangan District Hospital-	(03592) 234244
Mangan Police Station-	(03592) 234246/ 234276

ANNEXTURE-II***School Building as Safe Shelter***

Sl no	GPU name	Sr. Sec School	Sec. School	JH School
1	Ringhim Nampatam	-	-	Ringhim JHS
2	Singhik sentam	Mangan Sr. Sec School	-	-
3	Toong Naga	-	-	-
4	Shipgyer	-	-	-
5	Chungthang	-	Chungthang Sec, School	-
6	Lachen	-	Lachen Sec. School	-
7	Lachung	-	Lachung Sec. School	-
8	Lingthem lingdem	-	Passingdang Sec. School	-
9	Lingdong barfok	-	Lingdong Sec. School	-
10	Lum gor Sangtok	-	-	Gor JHS
11	Kabi Tingda	-	Kabi Sec. School	-
12	Phensang	-	Phensang Sec. School	-
13	Ramthang Tanyek	-	-	
14	Men Rongong	-	-	Phamtam JHS
15	Rongong-Tumlong	Phudong Sr. Sec. School	-	-
16	Tingchim Mangshilla	-	-	1.Tinchim JHS 2. Mangshilla JHS
17	Namok Soyem	-	Namok Sec. School	Soyem JHS
18	Hee gyathang	Hee-Gyathang Sr. Sec. School	-	
19	Sakyung Pentong	-	-	Linzya JHS
20	Tingvong	-	Tingvong Sec. School	-

ANNEXTURE-III

POLICE STATION along with wireless system:

Name of Police Station	Name of GP (location)	Staff available
Mangan Police Station	Ringhim Napatam GPU	38
Chunghang police Station	Chunghang GPU	09
Phudong Police station	Rongong Tumlong GPU	20
Lachung Police station		09
Lachen Police station		12
Sangkalang OP	Lingdong barfok GPU	04
Rangrang OP	Ringhim Nampatam GPU	09
Bringbong OP	Hee Gyathang	04
Phidang OP	Lum Gor Sangtok GPU	07
Kabi OP	Kabi Tingda GPU	09

ANNEXTURE-IV

List of QRTs under District Collectorate, North

Sl. No.	Name	Home Address	Place of Posting	Contact No.
1	Mr. Karma Hissey Bhutia	Chadey	SDM, Kabi	9733229973
2	Mr. Chozang Bhutia	Rongong	SDM, Kabi	9564522302
3	Mr. Thendup Bhutia	Swayam	DAC, Mangan	7797881588
4	Mr.Karma Tashi Bhutia	Mangshilla	SDM, D'Zongu	--
5	Mr. Lalit Subba	Mangan	SDM, D'Zongu	--
6	Mr. Pea Rinchen Bhutia	Lower Singhik	DAC, Mangan	9735022739
7	Mr. Saran Rai	Rongli	-do-	9832424447
8	Miss. Pema Diki Bhutia	Swayam	-do-	7872892332
9	Mr. Norpa Lepcha	Tingvong	-do-	8348160147
10	Mrs. Kessang Bhutia	Timchim	-do-	9609042956
11	Mr. Dawa Pintso Bhutia	Ambithang	-do-	9734502392
12	Mr. Sonam Tsering Lepcha	Ringhim	-do-	--
13	Mr. Ongdup Lepcha	Chungthang	Chungthang SDM Office	--
14	Miss. Kessang Lepcha	Chungthang	-do-	--
15	Mr. Dupzor lepcha	Chungthang	-do-	--
16	Mr. Sherap Palden Bhutia	Chungthang	-do-	--

ANNEXTURE V-**List of NGOs.**

Name of NGOs/CBO	Area of operation	Sector	Contact No.	Address
MLAS	Dzongu	Social, culture & environmental		Sangkalang/U. Dzongu
Northern's Club	Mangan	Cultural & Sports		Mangan Bazaar
Key-duk-Tsogpa	Namok	Social cultural & rural Development		Namok
Nari Samaj	Mangshilla	Women's Development		Mangshilla
S.C. Welfare Association	Mangshilla	S.C. Development		Mangshilla
Wangdi Faith Mission	Mangan	Orphanage Hostel		Mangan
Sikkim Kalyan Ashram	Lingdong	Educational & moral		Lingdong Busty
Rep-Boum Raumtong Kurmom	Phidang	Social, culture & Environment.		Phidang, Lower Dzongu
NYKS	Mangan			Mangan Bazaar

ANNEXTURE VI-**Traders:**

Type of Traders	Contact person and address	Telephone Office/ Res.	Remarks
House building materials	Srinath Prasad Mangan Bazaar	9614997797	
Groceries	Dipak Thakur Mangan Bazaar	9434235139	
Medicine shop	Mahindra Malu Mangan Old Bazaar	--	
Tents and Tarpaulins		--	
Hardware shops	Binod Chettri Taxi stand, Mangan	--	
Rice mill	Pentok, Phudong	--	
Fuel wood	Manul	--	
Electrical Equipments	Petuk Kazi Mangan Bazar	7602721565	
Restaurants	Suraj Hotel, Lachen valley, Dynasty, Himalayan	--	
Farm inputs			

ANNEXTURE VII-***Financial Institutions:***

SL NO.	NAME OF INSTITUTIONS	ADDRESS	TEL. NO.
1	SBI	SBI branch, Mangan Bazaar, North sikkim	
2	SBS	SBS Branch, Mangan Old Bazaar, N. Sikkim	
3.	SBI Branch, Phudong	Rongong Tumlong GPU	
4.	SBI Branch, Kabi	Kabi Tingda GPU	
5.	IDBI	Mangan Bazaar, North sikkim	
6.	Canara Bank	Mangan Bazaar, North sikkim	
7.	Central bank	Mangan Bazaar, North sikkim	
8.	SISCO	Mangan Bazaar, North sikkim	

ANNEXTURE VIII-**List of Equipments in EOC (North):**

SL. NO.	ITEMS (DC NORTH)	Quantity
1.	Bosch cutter big 400 mm, (mhe 172, 350 mm)	01
2.	Hydraulic jack 0.5T (Mithaico)	01
3.	Aluminium Ladder 44ft.	01
4.	Ascender (Zumar)	10
5.	Brick Hammer	05
6.	Carabineer (plain/Screw)	05
7.	Carbineer 9 (without lock)	05
8.	Chain saw petrol driven	01
9.	Dangree (full rescue suit)	05
10.	Flood light	02
11.	Generator (Honda 3U30) SKV	01
12.	Gloves (rescue/rappelling)	10
13.	Head Light (Battery operated)	10
14.	Helmet	10
15.	Log saw(fully developed & ready to use) AARI	02
16.	Mega phone	01
17.	Mountain climbing rope 10/12 mm	02
18.	Pulley double (heavy duty)	05
19.	QRT	04
20.	Rescue specialist litter (stretchers fibre)	02
21.	Ruck sack (60 to 70 ft)	02
22.	Tower Light	01
23.	Rescue Rope	02
24.	Tent small	01
25.	Rain Coat	05
26.	Radio communication Set	01
27.	Stretcher	05
28.	Nylon Rope (big)	02

ANNEXTURE IX-

S. No.	NO. AND NAME OF GRAM PANCHAYAT UNIT	NO. & NAME OF SCHOOL	
1	1/ KABI-TINGDA	1	Kalzang Gyatso SSS
		2	Gaikhana PS
		3	Gairee PS (SSA)
		4	Bakcha PS (SSA)
		5	Lingchom PS
		6	Tingda PS
		7	Longbu PS
2	2/ PHENSONG	1	Phensong SS
		2	Phamtam JHS
		3	Chawang PS
		4	Labi Rangdem PS
		5	Rarik PS
		6	Shipthang PS (SSA)
3	3/ MEN RONGONG	1	Men Rongong PS
		2	Monlom PS (SSA)
4	4/ RONGONG-TUMLONG	1	Phodong SSS
		2	Tumlong UPS
		3	Phodong Gumpa PS
		4	Tadong PS (SSA)
5	5/ RAMTHANG-TANEK	1	Ramthang PS
		2	Tanek PS
6	6/ NAMOK-SWAYEM	1	Sawyam JHS
		2	Namok JHS
7	7/ MANGSHILLA-TIBUK	1	Mangshilla SSS
		2	U. Mangshilla PS
		3	L. Mangshilla PS
		4	Thibuk JHS
		5	Ralak JHS
8	8/TINGCHIM-CHADEY	1	Tingchim SS
		2	Rang Rang JHS
9	9/ RINGHIM-NAMPATAM	1	Mangan SSS
		2	Ringhim SS
		3	Malling PS
		4	Nampatam PS
10	10/ SINGHIK	1	Singhik SS
		2	Pakshep JHS
11	11/ TOONG-NAGA	1	Manul SS
		2	Naga JHS
		3	Meyong PS (SSA)
		4	Naday PS
12	12/ CHUNGTHANG	1	Tasa Tengay SS
		2	Munsithang PS (SSA)
		3	Bop PS
		4	Pegong PS
13	13/ SHIPGYER	1	Shipgyers PS

		2	Ramom PS
14	14/ LINGTHEM-LINGDEM	1	Lingthem JHS
		2	Lingdhem PS
		3	4th mile PS
		4	LAVEN PS
15	15/ PASSINGDANG-SAFFO	1	Passingdang SS
		2	Saffo-Salim Pakyel JHS
16	16/ TINGVONG	1	Tingvong SS
		2	Namprick UPS
		3	Lingkoo PS
17	17/ SAKYONG PENTONG	1	Lingzya JHS
		2	Pentong PS
18	18/ BARFOK LINGDONG	1	Sona Choda Lepcha Memorial SS
		2	Barfok PS
		3	Noam Panag PS
		4	Mangzing PS (SSA)
19	19/ HEE GYATHANG	1	Hee Gyathang SSS
		2	Gnon-Sangdong JHS
		3	Gnon PS
		4	Bringbong PS (SSA)
20	20/ LUM GOR SANGTOK	1	Gor SS
		2	Sangtok JHS
		3	Lum PS
		4	Tarang PS
		5	Lingtyang PS
		6	Pheedang PS (SSA)
21	21/ LACHEN DZUMSA	1	Lachen SS
		2	Chatten PS
22	22/ LACHUNG DZUMSA	1	Lachung SS
		2	Sarchok JHS
		3	Bitchu PS (SSA)

KABI TINGDA

NO. & NAME OF GRAM PANCHAYAT UNIT	NO. & NAME OF GRAM PANCHAYAT WARD	NAME OF ELECTED PANCHAYAT	NAME OF POST WHICH ELECTED	CONTACT NO.
1	2	3	4	6
1/Kabi Tingda	1/Tingmoo Ghaikhana	Chey Lhamu Sherpa	Member	9593774914
	2/Rongpa	Pintso Tashi Bhutia	Sabhapati	9679917782
	3/Longbu	Tashi Lhendup Bhutia	Sachiva	9679900430
	4/Lingchom	Tshering Sherpa	Member	9472183537
	5/Tingda	Kima Sherpa	Up-Sabhapati	9733521687
	6/Gaiee	Nima Lhamoo Sherpa	Member	9800780679
2/Phensang	1/Upper Panay Phensang	Pema Rinzing Lepcha	Member	8370997739
	2/Lower Panay Phensang	Norjeela Lepcha	Sabhapati	9434407928
	3/Gensol Phensang	Namday Lepcha	Member	9476299232
	4/Safyong	Ugen Lhendup Bhutia	Sachiva	9474352972
	5/Labi	Phurkey Lepcha	Member	9474980774
	6/Sardong	Chuzing Lepcha	Up-Sabhapati	9933458863
	7/ Tingshim	Doma Lepcha	Member	9593285509
3/Men Rongong	1/Men Rongong	Passang Pencho Lepcha	Sachiva	9475011329
	2/Rarik	Doma Yangzom Lepcha	Up-Sabhapati	9679958434
	3/Phamtam	Dawa Doma Lepcha	Sabhapati	9475302616
	4/Upper Chawang/Chawa ng Ani G.	Songmit Lepcha	Member	9800067607
	5/Lower Chawang	Pintso Lepcha	Member	9475078698
	6/Malam	Narim Lepcha	Member	8768439839
4/Rongong Tumlong	1/Tumlong	Zamyong Bhutia	Sachiva	7407184320
	2/Labrang/Labra ng Gumpa	Chomkee Bhutia	Member	9679260672
	3/Upper Phodong	Gaki Bhutia	Sabhapati	7602676535
	4/Lower Phodong/Phodon g K.Gumpa	Chittim Bhutia	Up-Sabhapati	9593269915
	5/Upper Rongong	Dathik Bhutia	Member	7872019641
	6/Lower Rongong	Som Bahadur Subba	Member	8348184094
5/Ramthang Tangyek	1/Ramthang Khyongu	Pem Chuki Bhutia	Sachiva	7407185506
	2/Ramthang Phyagu	Marmit Lepcha	Up-Sabhapati	7872944210
	3/ Ramthang Ghongkha	Denthi Lepcha	Member	9635297516
	4/Tangyek	Pema Doma Lepcha	Member	9593779192
	5/Lungchok Sangam	Karma Gyaltzen Lepcha	Sabhapati	9775440327

Barfok Lingdong	1/Lower Lingdong	Norgay Lepcha	Sachiva	9647851373
	2/Upper Lingdong	Gaymit Lepcha	Up-Sabhapati	9593288249
	3/ Lower Burfok	Lobzang Lepcha	Member	7872895746
	4/Upper Barfok	Chumit Lepcha	Sabhapati	9647872315
	5/Manzing	Phuchung Lepcha	Member	9474840713
19/Hee Gyathang	1/Sudur Bringbong	Tshering Doma Lepcha	Sachiva	9635709336
	2/Bringkatam Ravong	Sonam Gyatso Lepcha	Member	7797881505
	3/Mantyang Tungkyong	Kalzang Dorjee Lepcha	Member	9679742923
	4/Hee Gyathang	Samroo Ugen Palzor Lepcha	Sabhapati	9002463615
	5/Samdong	Lhakit Lepcha	Member	9593288752
	6/Gnon	Jeymoo Lepcha	Up-Sabhapati	9734721541
20/Lum Gor Sangtok	1/Tarang/Gor T.Gompa	Passang Doma Lepcha	Member	8768431521
	2/Gor	Chung Chung Lepcha	Sabhapati	9800065393
	3/Sangtok	Lhamzay Lepcha	Member	9593971968
	4/Shagyong	Topgay Lepcha	Sachiva	9679895296
	5/Lum	Tshering Gyatso Lepcha	Up-Sabhapati	9800215041
21/Lachen Dzumsa	Lachen	Palzor Lachenpa	Pipon-I	8372989038
		Nawang Hissey Lachenpa	Pipon-II	9474840041
22/Lachung Dzumsa	Lachung	Lakpa Lachungpa	Pipon-I	8372868577
		Namgay Ongdi Lachungpa	Pipon-II	9434952297
44/Navey Shotak	1/Pachey	Dawa Doma Lepcha	Sabhapati	9474058632
	2/Navey	Ugen Tsh. Bhutia	Up-Sabhapati	7602025616
	3/Shotak	Kazi Manger	Sachiva	9733176714
	4/Takchi	Paljor Bhutia	Member	9474650056
	5/Penlong	Sonam Tashi Bhutia	Member	9547250804
51/Lingdok-Nampoong	1/Lingdok	Uma Chettri	Sabhapati	7797892207
	2/8th Mile Lingdok	Dorjee Eden Bhutia	Sachiva	8670670126
	3/ Nechu	Khem Lall Sharma	Up- Sabhapati	9593889435
	4/Nampong	Bishnu Bhakta Sharma	Member	7407385075
	5/Ari	Phu Tsh. Lepcha	Member	8371870811
	6/Phangthang	Lakpee Bhutia	Member	7407181373