Chairman
District Disaster Management Authority
Namsai District
Government of Arunachal Pradesh

## **FOREWORD**

District Disaster Management plan is an important document and provides us standard operating practices in an event of any disaster. Disasters strike in every corner of the world, during every season and on different scales throughout the year, Namsai district has been witnessing heavy floods causing tremendous damage and agony to the common people. The flood of 1988, 2014 and 2017 are still in the memory of earth and every citizen of this district

The floods of 2017 were simply devastating but we could survive and minimize the loss of life and property because of excellent work by District Administration, Para- military forces, Army, NDRF, BRO, all state government department, public leaders as well as common public

Natural calamity is often unexpected by their nature, leaving little time, if any, to prepare. That is why it is so important to put time into planning and preparation long before the disaster strikes.

Here, I must mention that everybody has a significant role to play. The disaster Management should not be considered as the job of Govt. or that of District Administration. It is the duty of each and every citizen residing to this area. The Principles and preparedness, quick Response, Networking and to operation should be imbibed by each of us to save the common public from these disasters.

I request all the concerned to study the Disaster Management Plan sincerely and execute meticulously to respond if any disaster strikes. If implemented in true sprit this action plan will prevent these damages and we will be able to reduce the miseries of the common citizens of this area

**R.K Sharma,** DC cum Chairman DDMA Namsai District, Namsai

**District Disaster Management Authority** 

Office of the Deputy Commissioner Namsai

**ACKNOWLEDGEMENT** 

Publishing an updated District Disaster Management plan is a stupendous

task and this plan will be of immune help in preventing and tackling any natural

or man-made eventually/ disaster. In preparing this extensive report the members

of DDMA and DEC extended relentless support for which I will really be

grateful.

I am also deeply indebted to Shri R.K Sharma, Chairman DEC/DDMA

cum Deputy Commissioner of Namsai District whose suggestion, guidance and

inputs Based on his long experience as administrative officer became very handy

in formulating the plan.

I gratefully acknowledge the support, guidance and faith of the Director,

Disaster Management in preparing the plan.

Deep appreciation is owed by the various departments and the Chairman

of Block Level DMS, Circle level DMC & village level DMC for their

continuous support and wealth of insights.

Lastly, I would like to reveal that this DM Plan encompasses every aspect

and cycles of Disaster which will immensely help in preventing and managing

any disaster.

**Emily Tingkhatra** 

District Disaster Management Officer

Namsai District, Namsai

Page - 2

# **CONTENTS**

Chapter.	Main Head	Page No
1	District Profile	4
2	Definition of Disaster and Disaster Management	6
3.	Disaster History of Namsai District	15
4.	Types of Disaster/Hazards in Namsai District	19
5.	Institutional set up for disaster Management in Namsai District	23
6.	Incident Response Mechanism of Namsai District	34
7.	Capacity Analysis	42
8.	Standard Operating Procedure (SOP)	47
9.	Prevention, Mitigation & Preparedness Measures	60
10.	Check list for Disaster Management at Circle Level	66
11.	Department wise of Nodal Officers for Disaster Management	69
12.	Flood Prone Map of Namsai circle	71
13.	Flood Prone Map of Mahadevpur circle	72
14	Flood prone Map of Chongkham circle	73
15	Flood map of Namsai District	74

## **CHAPTER-ONE**

## DISTRICT PROFILE

DISTRICT HQUARTAR : Namsai

GEOGRAPHICAL LOCATION : BETWEEN95 .45 TO 96.20 East

longitude and 27.30 to 27.55

North latitude.

CIRCLES : 5(Five) Circles-Namsai, Chongkham,

Lekang ,Piyong, and Lathao Circle.

AREA : 1587Sq.Km approx

CLIMATE ZONE : Tropical

AVERAGE TEMPERATURE

SEISMIC ZONE

WINTER :  $10^{\circ}\text{C} - 25^{\circ}\text{C}$ SUMMER :  $28^{\circ}\text{C} - 40^{\circ}\text{C}$ 

TOTAL POPULATION (2011 CENSUS) : 95950

TOTAL NO. OF HOUSEHOLD : 19035 RURAL HOUSEHOLD : 15890 URBAN HOUSEHOLD : 3145

PIN CODE : 792103

AGRI& HORTI CROP GROWN : Paddy, Mustard, Ginger, Turmeric,

maize, Potato and Pulses. Black pepper, pineapple, coconut, cinnamon, aromatic citronella, orange, guava, banana & Litchi

LIVESTOCK POPULATIONS 154436 (Cattle, buffalo, Goat, Pig, &poultry)

MAIN RIVERS : Lohit river, Noa-dihing, Kamlang river,

Berrang, Tengapaani&Jengthu.

SMALL TRUBUTARIES : Mortanga, Diraknallah, pudunallah

and pavajannallah.

DISASTER : Flash – Flood, Earthquake,

Cyclone, Cloud-Burst, Hailstorm, Drought, Storm, Fire accident, lightening accidents etc.

: ZONE -V

TRIBES : Khamti,Singpho,Adi.

RELIGION : Hindu, Buddishm, Christian, Donyi

polo.

## CHAPTER-TWO

## **DEFINITION OF DISASTER**

Disaster has been mankind's recurring though inconvenient companion since time immemorial. It is a serious disruption of the normal functioning of society, causing widespread human, material or environmental losses which often exceed the ability of the affected society to cope using its own resources. Natural Disasters continue to strike unabated and without warning and are perceived to be on the increase in their magnitude, complexity, frequency and economic impact. These hazards pose threat to people, structures and economic assets and assume disastrous proportions when they occur in areas of dense human habitations.

The United Nations defines disaster as 'the occurrence of sudden or major misfortune which disrupts the basic fabric and normal functioning of a society (community). It is an event or a series of events which gives rise to casualties or damage or loss of property, infrastructure, essential services or means of livelihood on a scale that is beyond the normal capacity of affected communities to cope unaided'

According to Disaster Management Act - 2005, "disaster means a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or man-made cause, or by accident or negligence which results in substantial loss of life or human suffering or damage to, and destruction of property or damage to or-degradation of environment and it is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area"

## 2.1. INDIAN CLASSIFICATION:

In August, 1999, Government of India established a High Powered Committee with the mandate of preparing national, state (including union territories) and district level disaster management plan. It has identified 30 odd types of disasters both natural and non-natural and has grouped them into 5 broad categories as follows:

## LIST OF DISASTERS IDENTIFIED BY THE HIGH POWER COMMITTEE

#### WATER AND CLIMATE RELATED DISASTERS:

- i) Floods and Drainage Management
- ii) Cyclones
- iii) Tornadoes
- iv) Hailstorms
- v) Cloud Burst
- vi) Thunder and Lightning
- vii) Snow Avalanches
- viii) Heat-wave and Cold-wave
- ix) Sea erosion
- x) Drought

#### GEOLOGICAL RELATED DISASTER:

- i) Earthquake
- ii) Landslides and Mudflows
- iii) Dam bursts
- iv) Mine Fire

- i) Chemical and Industrial disaster
- ii) Nuclear disaster

## **ACCIDENT RELATED DISASTERS**:

- i) Urban fire
- ii) Village fire
- iii) Forest fire
- iv) Electrical disaster fire
- v) Serial bomb blast
- vi) Oil spill
- vii) Festival related disaster
- viii) Air, Road and Rail accidents
- ix) Boat capsizing
- x) Mine flooding
- xi) Major building collapse

## **BIOLOGICAL RELATED DISASTERS:**

- i) Biological disaster and Epidemics
- ii) Pest attacks
- iii) Cattle Epidemics
- iv) Food Poisoning

## **DISASTER MANAGEMENT:**

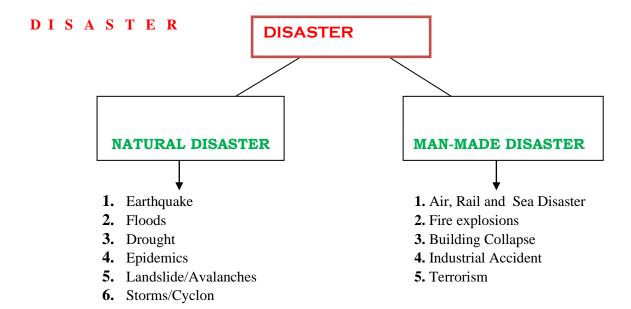
National Disaster Management Act 2005 says "disaster management" means a continuous and integrated process of planning, organizing, coordinating and implementing measures which are necessary or expedient for-

- (i) Prevention of danger or threat of any disaster;
- (ii) Mitigation or reduction of risk of any disaster or its severity or consequences;
- (iii) Capacity-building.
- (iv) Preparedness to deal with any disaster;
- (v) Prompt response to any threatening disaster situation or disaster;
- (vi) Assessing the severity or magnitude of effects of any disaster;
- (vii) Evacuation, rescue and relief;
- (viii) Rehabilitation and reconstruction.

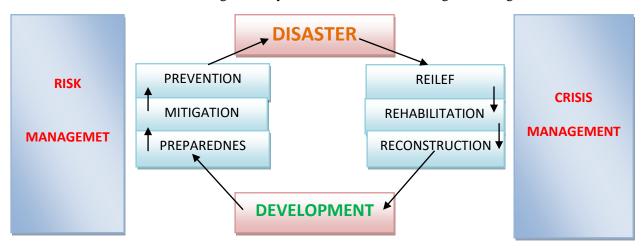
It is the range of activities designed to mitigate the effects of disaster and emergency situations and to provide a framework for helping people at risk to avoid a recover from the impact of the disaster. Managing disasters includes steps to be taken prior to, during and after the disaster and involve preparedness, mitigation, response and recovery.

## TYPES OF DISASTER

Disaster can be broadly divided into 2 (two) types, viz- Natural and Man-made.



The Disaster Management Cycle consists of the following broad stages:



## a) THE DISASTER EVENT:

This refers to the real time event of the hazard occurring and effecting elements at risk. The damage is directly proportional to duration of the event.

### b) RESPONSE AND RELIEF:

This refers to the first stage after the calamity. Relief materials like food, clothing, medicines and other necessities are distributed to bring life to normalcy.

## c) RECOVERY (REHABILITATION AND RECONSTRUCTION):

It is used to describe the activities that encompass the three overlapping phases of emergency relief, rehabilitations and reconstructions.

## d) **DEVELOPMENT**:

It is an ongoing activity for a evolving economy. Long-term prevention/disaster reduction measures like construction of embankments against flooding, increasing plantation for reducing the occurrence of landslide etc. are some of the activities that can be taken up as a part of development plans.

## e) PREVENTION AND MITIGATION:

Reduction of risk in disasters involves activities, which either reduces or modify the scale and intensity of the threat faced or by improving the elements at risk. Mitigation too aims at reducing the physical, economic and social vulnerability to threats and the underlying cause for this vulnerability.

#### f) PREPAREDNESS:

The process embraces measures that enable governments, community and individuals to respond rapidly to disaster situation to cope with them effectively. Preparedness includes the formulation of viable emergency plans, the development of warning systems, the maintenance of inventories and the training of personnel. It may also embrace Search & Rescue measures as well as evacuation plans for areas that may be 'at risk' for a recurring disaster. All preparedness plans needs to be supported by appropriate rules and regulations with clear allocation of responsibilities and budgetary provisions.

## AIMS & OBJECTIVES OF DISASTER MANAGEMENT PLAN

Natural Disaster is a part of our earth so we can neither avoid it nor it is possible to prevent natural disaster altogether. But its effects can be reduced through systematic approach by Disaster Management initiatives. It can be an effective tool for saving vulnerable human lives and mitigation of human misery.

The aim & 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, Goan 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 increasing 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.

## **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.

## PRINCIPLES OF THE DISTRICT DISASTER MANAGEMENT PLAN

The basic planning principles adopted in the development of this District Emergency Management Plan are:-

- 1. <u>PLAN MUST BE CLEAR AND PRACTICAL</u>: Plan must be developed in the language known to the people in clear and precise words stating exactly the procedures to be followed in case of emergency. Goals should be stated for all phases of the anticipated event, preparedness relief, and rehabilitation and recovery. Formalities to be followed for gaining access to resources for the management of the disaster at hand should be for all purposes kept to the minimum.
- 2. <u>GOOD MANAGEMENT INFORMATION SYSTEM (MIS)</u>: A comprehensive collection of facts and data is a pre-requisite for the development of an effective Disaster Management Plan. Contingency plan must also include arrangements for collecting, analyzing, storing and disseminating of information. As such, one of the functions of the District Emergency Control Room (DECR) or District Emergency Operation Centre (DEOC) has been identified as information management.
- 3. <u>MAXIMUM UTILIZATION OF AVAILABLE RESOURCES</u>: This can be done by maintaining proper resource inventory system which should cover the basic needs of the people apart from machineries and conveyance.
- 4. <u>TRAINING AND REGULAR PRACTICE</u>: For any plan to be effective the agencies involved should train and practice regularly (Mock Drill) so that weaknesses in the plan can be detected and rectified.
- 5. <u>CRITICAL EVALUATION</u>: Critical Evaluation of the effectiveness of any disaster management plan should form a part of any such plan.
- 6. Plan must be well organized assigning specific responsibilities and accountabilities to the different agencies government or otherwise. The District Emergency Operation Centre (DEOC) established should: 1) Give timely warning to the people 2) Initiate and supervise activities done at different levels 3) All important information about the District should be available with the District EOC.
- 7. <u>INCORPORATION OF DEPARTMENTAL SUB-PLANS</u>: The main plan should be supported by department plans which are more specific for the concerned organization and makes the response easier in the times of emergency. The departmental sub plans are incorporated to this main plan.
- 8. <u>PLAN MUST BE FLEXIBLE</u>: Plan must be formulated so as to adapt itself to changing situations and varying intensity and magnitude of any disaster. Flexibility of Plan makes it viable and relevant in all aspects of emergency management.

## **NECCESSITY OF DISATER MANAGEMENT PLAN:**

Namsai is experiencing rapid growth in terms of population, urbanization, and infrastructure development etc. These developments have brought with them many problems like floods, deforestation, drought, soil erosion, slope instability, epidemics and landslides. The District falls within Seismic Zone V which is the most vulnerable to earthquakes of high magnitude, i.e five and above on the Richter scale. Besides, flood and Cyclonic storms are also causing a great hazard one or more disaster every year. Landslides also add to the problems of the district during monsoon season. It has claimed many lives in the past few years. It is therefore imperative to have reliable mitigation strategy to check the problem of flood, landslides and other disasters.

In the past, efforts have been made to solve these problems but due to lack of proper management strategy, no tangible results could be achieved. Taking all these into consideration, the need to have effective and practical Sub-Divisional Disaster Management Plan for this district is of urgent and real importance.

## GoI-UNDP DISASTER RISK MANAGEMENT PROGRAMME 2003-2009:

Keeping the past experience - Bhuj earthquake, Orissa super cyclone and Tsunami disasters which claimed many lives - in mind, the Government of India with the support of United Nations Development Programme has inducted a new programme called "Government of India - United Nations Development Programme (Disaster Risk Management Programme) to address the training and preparation need of the people living in the multi-hazard/vulnerable areas in the country. It focused mainly on disaster preparedness and mitigation. It had been introduced in most 17 vulnerable areas on a pilot basis. Arunachal is one of the selected states and it has been implemented in all the 16 districts successfully with countless improvements in the preparedness phase.

## THE PROGRAMME COMPONENTS INCLUDED THE FOLLOWING:

- Awareness generation regarding hazard vulnerabilities, safe building practices as well as other mitigation measures.
- Development of State and District Disaster Management Plans.
- ➤ Development of Natural Disaster Risk Management and Response plans at Village, ward, Block, Urban Local bodies.
- Constitution of Disaster Management Teams and Communities at all levels- village, ward, block and urban local bodies/districts and states.
- Capacity building of Disaster Management Teams at all levels.
- Training and demonstration in cyclone and earthquake resistant/ retro- fitting feature houses in disaster prone districts.
- Integration of disaster management plans with development plans of the local self governments.
- > Techno-Legal regime-training to administrators of ULBs and Engineers in safe construction practice etc

## GoI-UNDP DISASTER RISK REDUCTION PROGRAMME (2009-2012):

Based on the experience gained during the implementation of GoI-UNDP Disaster Risk Management Programme and enactment of Disaster Management Act, 2005, a new Programme, named 'Disaster Risk Reduction' has come up and is being implemented, along with other states in the country, in some districts of Arunachal including the Programme is envisaged to support the Central and State government programmes and initiatives by providing critical inputs that would enhance the efficiency and effectiveness of the efforts in Disaster Risk Reduction.

The Programme is divided into 2 components:

- I. Institutional Strengthening & Capacity Building for Disaster Risk Reduction (to be implemented by the National Disaster Management Authority).
- II. Urban Risk Reduction (to be implemented by the Ministry of Home Affairs).

## National Schools Safety programme (NSSP)

Education, public awareness and proper training for enhancing the capacity is the cornerstone of approaches aimed at reducing vulnerabilities to natural hazards. **The Hyogo Framework for Action 2005-2015:** Building the Resilience of Nations and Communities to Disasters, adopted at the World Conference on Disaster Reduction, highlights knowledge and education as one of the five main priorities of action. Attention should be accorded and support given to efforts targeting school children and youth with the aim of making people more aware of the threat of hazards and of the need and possibility to become better prepared before disasters strike.

Government of India has approved a National School Safety Programme (NSSP)- A Demonstration Project to be Implemented by National Disaster Management Authority (NDMA) in partnership with Ministry of Human Resources Development (MHRD), State/ UT Governments, National and International Agencies in 43 districts of 22 States/ UTs of the country falling in seismic zone IV and V.

The vision of the NSSP is to promote a culture of disaster preparedness in the school with following objectives.

- To initiate policy level changes for ensuring safe school environment.
- To sensitize children and the school community on disaster preparedness and safety measures.
- To motivate direct participation of the key stakeholders in activities that would help building towards a disaster resilient community.
- To promote capacity building of officials, teachers and students.
- To carry out Information, Education and Communication (IEC) activities in schools and associated environment.
- To implement non-structural mitigation measures in selected schools.
- To carryout demonstrative structural retrofitting in selected schools.

The programme will develop a draft National School Safety Policy; build capacity of 200 schools in two districts each in 22 States/ UTs, produce relevant Information Education and Communication materials, introduce non-structural measures, and demonstrate structural retrofitting of one school each in 22 States/ UTs by June 2013 under the leadership of Joint Secretary(Policy and Plan), NDMA. The programme is a 100% centrally sponsored scheme.

Arunachal Pradesh has been identified as one of the above 22 states/ UTs from the country to carry out NSSP. The department of Disaster Management and The Education Dept. will jointly implement the programme in the state. The DM Dept. will be the nodal agency whereas the Education dept. will ensure and monitor the implementation process in all the identified schools in the districts of Lohit and East Siang.

## CHAPTER-THREE

## DISASTER HISTORY OF NAMSAI DISTRICT

Flood is the most inevitable natural calamity that the people of Namsai District are affected by. It damages the cultivation area and other public properties and also hampers the overall development of the District. Although the Namsai district has a long historical past and is one of the oldest administrative divisions in the state; but its developmental momentum has been slowed down by recurrent flood, which is a regular phenomena. Damages made by flood to individuals life and shelter, cultivation area, agricultural and horticultural crops, livestock and public properties like Hydel projects, roads, culverts, Bridges, embankments, porter tracks, Foot Suspension Bridges are untold stories of immense loss of the District. Damages made by flood are of colossal in nature and hence irreparable.

None of the rivers flowing in Namsai district has a definite natural channel. In fact all the rivers change their courses every now and then. Normally all the rivers and Nallah are surging abnormally during the summer. Most of the rivers and Nallahs are snow-fed as well as rain fed. Due to lack of awareness as well as scarcity of clean Drinking water villagers often consume contaminated floodwater and practice unhygienic way of life, which in turn results in outbreak of water born diseases such as epidemic, dysentery etc. Lift water supply and water tankers are used during the flood situation to meet the requirements of the district, which is inadequate to meet the needs of the people hence the locals are forced to consume rainwater and contaminated floodwater.

Namsai district receives the heaviest rain in the state. The problem becomes worse when the rainwater from the highlands of Vijaynagar and Miao area in Changlang district and in Namsai district the Chongkham and Tengapaani receives excessive rainfall .It carries sediments and other debris and within no time all the rivers and Nallah of this District get over flooded, which disrupts not only surface communication but also other essentials supplies such as electricity, telephone, mobile networks, water supply, POL supply, LPG Gas supply, ration items etc

In the year 1950 the great earthquake and the floods of 1988 not only affected the private and public property rather it also changed the river courses of all major rivers specially that of Lohit River towards human settlement areas. As a result the people shifted themselves from the original place of their settlement. The catastrophe has pushed back the development of Namsai to its initial stage. The extent of damage and the psychological effects are so intense that till date people remember that incident as a nightmare, which cannot be forgotten easily.

Heavy storm and floods in the month of June-July and more recent in September 2012 has again pushed back the district into the stage of 5 to 10 years back. Roads, power supply, water supply and others essential services are yet to be restored properly. Individual standing crops, cultivation land, livestock, human life, dwelling houses are lost in the flood.

Due to incessant rainfall since 18th July 2016, all the major rivers and its tributaries flown through Namsai district created hovac. Worst sufferer circle was the Lekang administration Circle due to diversion of water flow of river Noa- Dihing created several several breech points near New Silatoo village. Around 18000 people from 22 villages under Lekeng circle were directly affected in the flood. Around 4000 distressed people was shifted in 26 relief camps set up by the district administration and most of the inmates of the relief camp were women, children and old aged ailing people. Supply of all essential commodities to the relief camps was insured by the District Administration. Precious life of around 210 people had been saved due to prompt action of 12 BN NDRF team stationed at. Considering the alarming flood situation services of Army and CRPF were requisitioned in Lekang circle. Potable water was provided in relief camps and the flood affected villages by the PHED with the assistance of CRPF. Medical team constantly visited to the relief camps and provided necessary medical aid and assistance to the needy people. From the night of 23th July to 24th July plying of vehicle on NH52 between Mahadevpur to Namsai was suspended due to overflowing of flood water on NH52 in 3 different location.NEC roads between Mahadevpur and Bordumsa was also cut off for several days. Around 500 nos of residential houses, 3700 hectors of paddy field, and 115 nos of fish pond were damaged due to flood.

Hundreds of cattle/poultry birds were died. Prompt action of the District Administration with the help of all govt. departments of NGOs has ensured to save all the precious human life during the devastating flood. People of Piyong and Chowkham circle were also affected due to flood water. Huge loss of Govt. and private property incurred by the unprecedented flood. Distressed people of New Silatoo village were accommodation in a relief camp which was run by the district Administration with all basis amenities for almost one year till rehabilitation of the inmates.

Due to the temporary nature of river channel and regular change of river courses, road communication is often disrupted. The major obstacle in the development of this District is lack of proper roads, which have been destroyed by frequent floods and landslides. The irregularity in the course of the river channels makes it difficult to build permanent bridges for proper connectivity. Till date country boats and engine boats are used for transshipment of man and materials within the district as well as with the rest of the country. While doing so every year few boats get drowned by forceful water currents which claim not only materials but human life too.

Namsai district receives the heaviest rainfall in this state. As this District lies in the foothills, flash flood is another unfortunate natural calamity faced by the people of this District every year, which exaggerates the flood situation from bad to worse. It carries sediments and other debris and within no time all the rivers and Nallah of this District get over flooded, which disrupts not only surface communication but also other essentials supplies such as electricity, telephone, mobile networks, water supply, POL supply, LPG Gas supply, ration items etc. The sediments and debris carried from highlands are deposited at the foothills which overlap the cultivation area, Hydel projects, flood protection embankments, roads, culverts and bridges including FSBs, dwelling house, Govt .Buildings, livestock and sometime Human life too. Tribal people, who are dependent on agricultural products for their sustenance, are hit severely by the floods and its repercussions have very often brought the normal life of poor people to the extent of epidemic, famine, destitute and homeless. In other words it deprives the basic needs of human existence during extreme flood. Every year tones of agricultural and horticultural crops, hectares of cultivation land, dwelling house and Govt. buildings are being damaged by flood. Heavy sedimentation over paddy fields has lead to large chunks of uncultivable area in the district.

The past year disasters highlights that, if any major earth quake takes place all rivers will form artificial dams, lakes and forming of new river courses through low lying area. The locations of low lying with flood prone area earmarked in the Circle wise map for reference.

Plate No. I – Lekang Circle

Plate No. II – Namsai, Lathao & Piyong circle

Plate No. III – Chongkham Circle

## AREAS PRONE TO FLOOD

Almost whole of the district is flood prone .Namsai district is located at an altitude, which is less than 200mtrs above the mean sea level hence its geographical landscape is vulnerable to floods, as a consequence the district's low lying areas often gets submerged during the summer floods. As it lies in the foothills flash flood is also another chronic problem, which creates havoc in this region.

The District is cris-crossed by hundreds of rivers and rivulets, which are fed by torrential rainwater during the monsoon, such as Lohit, Kamlang, Noa-Dihing, Digaru, and Jengthu. A peculiar feature of these rivers is that these rivers keep changing their course frequently.

Chongkham Circle is another worst flood affected area in this District. Due to its close proximity to Sea level at 177mtrs, above sea level Chongkham circle and in particular entire Alubari area are at risk.

Mahadevpur and Namsai are other circles where flood creates havoc and damages huge public and private properties. Mahadevpur, which is 140 mtrs above sea level, is prone to floods every year. As a result hundreds of hectares of Agricultural and Horticultural gardens are destroyed, disruption of water supply is immense, power installation (transmission lines) and road communication are disrupted and there is total blackout, threat to human life and livestock always exists. In Namsai, Chongkham,Piyong and Lathao circle also thousands of the people suffer because of heavy floods, changes in river courses and erosion etc.

Torrential rain and storm with lighting every year inflict a heavy damage to human and animal life, private and public assets. Moreover occurrences of fire accidents in regular interval exacerbate the situation from bad to worse.

## **CHAPTER FOUR**

Sl.	Type of Disaster	Period of occurrence	Risk involved	Remarks
1	Floods and Flash flood.	Mid April to mid September	Standing crops, cultivation land, dwelling house, public and private properties, human life and livestock life, epidemics etc.	Worst flood hit district in the state. 1988, 2004 and 2012 disastrous flood proved to be darkest days of Namsai district
2	Fire accident	Whole year	Govt and private buildings, residential buildings, human and livestock life, schools etc.	Fire accident is a regular phenomenon in the district.
4	Cloudburst, lightening and heavy storm	April to August	Human life, forest fire, human and livestock life, dwelling house, electric transmission lines etc.	Human and livestock life loss have been reported in the year 2011 and 2012 as well as dwelling house damage due to lightening. Damage to power HT lines due to heavy storm is a regular phenomenon in the district
5	Earthquake	Whole year	Roads, private and public residential buildings, schools, human and livestock life etc.	1950 earthquake is a major earthquake faced by the people of Namsai district. Since this region falls under seismic zone V. Special impetus has been given during training and awareness campaign to educate to people regarding earthquake and its safety measures.
6	Epidemics	June to August	Human and Livestock life	Heavy flood and consume of contaminated water often leads to epidemic in certain villages of Namsai District. Food and mouth disease is occurred rarely in the district. Necessary instruction has been already given to DMO and DVO Namsai to cope with such situation
7	Drought	June- August	Affects human and livestock normal life	Scarcities of rain leads to drought like situation as mostly agriculture land in Lohit are rainfed.
8	Bamboo flowering			Bamboo is a very essential to people of this region. They construct house with the bamboo. It is also a part time income source. Moreover they use bamboo in many social rituals and public festivals. Till date no report has been received of bamboo flowering.

Sl.N o.	Name of the Circle	Area in sq.km (approx)	Type of area (approx)	Population		Total Population	Literate population
				Male	Female		
1	Namsai Circle	485	Urban	6486	5261	11747	72.82
			Rural	8964	7859	16823	47.85
2	Lekang Circle	97	Rural	12753	11694	24447	43.25
3	Piyong Circle	110	Rural	4785	4270	9055	30.17
4	Chongkham Circle	895	Rural	10766	9320	20086	43.45
6	Lathao Circle						

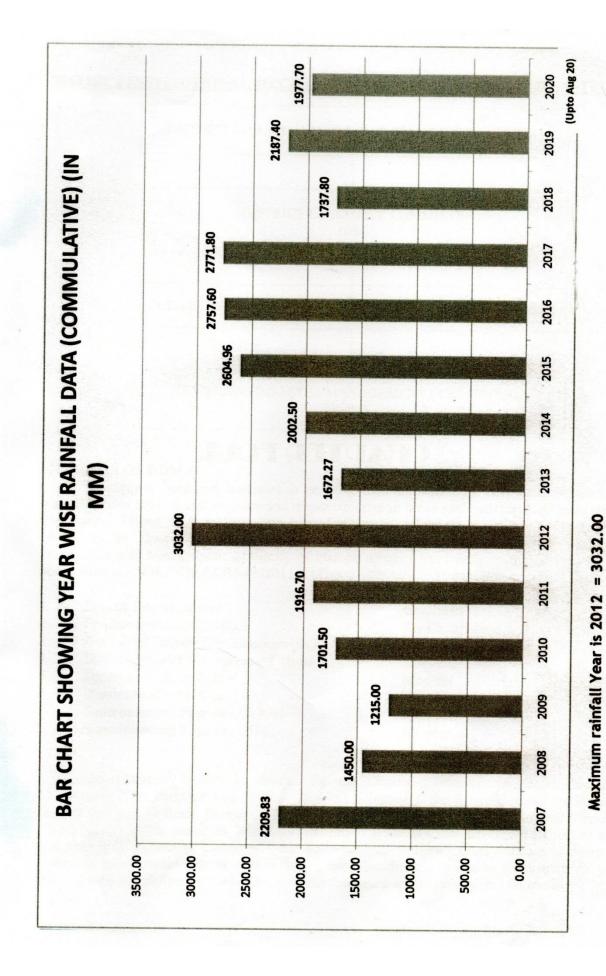
## CIRCLE WISE NOS. OF VILLAGES, DEMOGRAPHIC AND HOUSEHOLD DETAILS.

CINCLE WISE NOS. OF VILLAGES, DEMOGRAFING AND HOUSEHOLD DETAILS					
Name of	No of	Population		Total	No. of Households
Circle	Villages	Male	Female		
Chongkham	43	11716	10279	21995	4411
Namsai	30	14079	12786	26865	5505
Piyong	26	5444	5037	10481	2153
Lekang	56	14264	13955	28109	5329
Lathao		4353	4037	8390	1637
Total				95840	19035

## **BLOCK-WISE CROP AREA & LIVESTOCK DETAILS**

Name	Total crop	area(in Hectare		Remarks		
circle	Agriculture	Horticulture	Livestocks			
Namsai&	5677	436	41854	Agriculture crops consists of mainly		
Piyong 5677		417	16076	Paddy, Maize, oil seeds, pulses, Potato, ginger etc.		
Lekang	5529		62223			
Lathao	2925			Horticulture crops consists of		
Chongkam	4027	196.65	34283	orange, Banana, pineapple, zinger, cardamom etc		
Total	18158		154436			

Source: Deptt of Agriculture, Horticulture, AHV Namsai District as on July 2011.

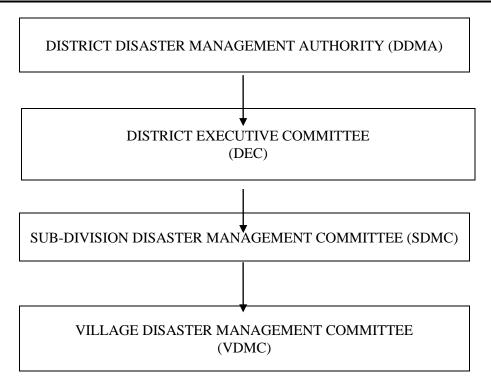


Page - 22

Minimum rainfall year is 2009 = 1215.00

## CHAPTER-FIVE

### DISTRICT INSTITUTIONAL MECHANISM FOR MANAGEMENT OF DISASTERS



#### MEMBERS OF DDMA

District has been and continues to be the pivotal and centre of rural administration in normal time in the country. Its roles and responsibilities in times of disaster as well have great importance. Taking this situation into consideration, the state government has constituted DDMA at the District level to look after disaster management and emergency response. District Disaster Management Authority of Namsai District has been constituted vide Govt. notification no. SOEC-DRR/DM-01/2011-12 Dated 11th July 2011 as follows:

Deputy Commissioner
 Chairman
 Chairperson, ZillaParishad
 Additional Deputy Commissioner(HQ)
 District Disaster Management Officer
 Convener

Superintendent of Police - Member
 District Medical Officer - Member
 Superintending Engineer (WRD) - Member
 Superintending Engineer (HP) - Member

The Authority which is chaired by the Deputy Commissioner, co-chaired by Chairperson Zilla Parishad (for Namsai District) comprising the Superintendent of Police, District Medical Officer, Executive Engineer WRD, HP, DDMO and Additional Deputy Commissioner as the members. The Addl. DC HQ will act as Chief Executive Officer of the Authority and DDMO as Convener. This body has full authority in any sphere of disaster management in normal time as well as during and after disaster strikes in the district. As per the government notification No cited above, the following are its powers and functions:

#### **POWER & FUNCTIONS:**

Subject to the provisions under the Disaster Management Act, 2005 and in accordance with the guidelines laid down by the National Authority and the State Authority, the district disaster management Authority shall act as the planning, coordinating and implementing body for disaster management in the district and shall also be responsible for the following:-

- 1. Prepare a District Disaster Management Plan.
- 2. Coordinate and monitor the implementation of National Policy, State Policy, National Plan, State plan and District Plan.
- 3. Ensure that the areas in the district vulnerable to disaster are identified and Measures for the preventions of disasters and mitigation of its effects are undertaken by all the District Level Government Departments and the local authorities.
- 4. Ensure that the guidelines for prevention of disasters, mitigation of its effects, Preparedness and response measures as laid down by the National Authority and the State Authority are followed by all the district level State Government Departments and the local authorities.
- 5. Give directions to different District level authorities and local authorities to take such other measures for the prevention or mitigation of disaster as may be necessary.
- 6. Monitor the implementation of Disaster Management plan prepared by the District Level Govt. Departments and local authorities.
- 7. Lay down guidelines to be followed by the District Level State Government departments for the purpose of integration of measures for prevention of disaster and mitigation in their development plans and projects and provide necessary technical assistance therefore, and monitoring the implementation of such measures.
- 8. Review the capabilities for responding to any disaster or threatening disaster situation in the Sub-division and give directions to the relevant Departments or authorities at the Sub-divisional level for their up-gradation as may be necessary.
- 9. Review the preparedness measures and give directions to the District level or other concerned authorities, where necessary, for bringing the preparedness measures to the levels required for responding effectively to any disaster or threatening disaster situation.
- 10. Organise and coordinate specialized training programme for different levels of officers, employees and voluntary rescue workers in the District.
- 11. Facilitate Community training and awareness programmes for prevention of disaster or mitigation with the support of local authorities, Governmental and non-governmental organizations.
- 12. Set up, maintain, review and upgrade the mechanism for early warning and dissemination of proper information to the public.
- 13. Prepare, review and upgrade the District level Response Plan and Guidelines.
- 14. Coordinate response to any threatening disaster situation of disaster.
- 15. Ensure that the District Level Government Departments and local authorities prepare their response plans in accordance with the District Response Plan.
- 16. Lay down guideline, or give directions to the concerned district Level State Government Departments or any other authorities within the local limits of the District, to take measures to respond effectively to any threatening disaster or disaster.
- 17. Advise, assist and coordinate the activities of the District Level State Government Departments, statutory bodies and other governmental or non-governmental organizations engaged in disaster management in the District.
- 18. Coordinate with, and give guidance to, local authorities in the district to ensure that measures for the prevention or mitigation or threatening disaster situation or disaster in the District are carried out promptly and effectively.

- 19. Provide necessary technical assistance or give advice to the local authorities in the Subdivision for carrying out their functions effectively.
- 20. Review the developmental plans prepared by the district level State Government Departments, statutory authorities or local authorities with a view to make necessary provisions therein for prevention of disaster or mitigation.
- 21. Examine the construction in any area in the district and, if it is of the opinion that the standards for the prevention of disaster or mitigation laid down for such construction is not being, or has not been followed, may direct the concerned authority to take such actions as may be necessary to secure compliance of such standards.
- 22. Identify buildings and places which could, in the event of any threatening disaster or disaster, be used as relief centers and make arrangements for water supply and sanitation in such buildings and places.
- 23. Establish stock piles of relief and rescue materials or ensure preparedness tomake such materials available at a short notice.
- 24. Provide information to the State Authority relating to different aspects of disaster management.
- 25. Encourage the involvement of NGOs and voluntary social welfare institutions working at the grass root level in the District for disaster management.
- 26. Ensure that communication systems are in order, and disaster management drills are carried out periodically.
- 27. Perform such other functions as the State Government or State Authority may assign to it or as deems necessary for disaster management in the District &Sub-division

## MEASURES TAKEN BY DDMA TO COUNTER DISASTER SITUATION

To counter any type of disaster in the District, a District Level committee was setup under the chairmanship of the Deputy Commissioner, Namsai with its members drawn from all the Heads of various Executing Agencies and other HODs. Usually the Committee adopts pre-duringpost Disaster preparedness measures to ensure maximum safety and minimum loss to human life and property.

Pre-flood preparedness measures: People traditionally connotes occurrence of flood as dissatisfaction of the Almighty or due to some cosmic reasons. But of late the local inhabitants popularly believe that flood is not what they assume rather it is a natural phenomenon, which can be mitigated through proper planning and preparedness. We cannot challenge natural calamities but disaster can be prevented up to certain extent by adopting various disaster management methods.

Before the onset of every monsoon season a disaster preparedness meeting is convened to discuss various aspects of flood preparedness and to evaluate the shortcomings of previous flood management operation launched by DDMA.

All the departments concerned are advised to take all precautionary measures and submit their contingency plan to the Addl. deputy Commissioner cum Chairman DDMA before the monsoon.

Mass awareness Campaigns are launched every year before the onset of monsoon and the local people are sensitized of what to do and what not to do in flood situation.

The rescue team members need to be well equipped with basic equipments like life saving jackets, raincoats, searchlight, tarpaulin, stretcher, and first aid kits etc.

The concerned department must ensure enough supply of life saving drugs and enough supply of food stock. Mock drill will be conduct to test the effectiveness of DM plan and necessary amendments will be ensure to make the plans more realistic and efficient in mitigating losses due to calamities.

During-Flood measures: Flood control rooms at District level and circle levels operate round the clock. All the Disaster Management Committees that is from village to District level activated and alerted. Relief camps are set up in the areas likely to be hit by flood. Nodal officers are appointed to evacuate the marooned people to the relief camps. Security of Human life is given topmost priority. Disaster meetings are convened in a regular interval to coordinate and sensitize the committees of flood management measures. Many other flood operation teams are formed with the help of Medical Deptt, Army, BRO, ITBP, Police, and NGOs such as SAR (search And Rescue Team) team, Flood Warning Team, Mobile Medical Team, Mass Awareness Campaign Team, Shelter Management Team etc. all the Control rooms are inter connected to each other. Hourly Flood situation reports are compiled and forward to State EOC and to other Head offices.

After-flood measures: Once the flood situation is over first and foremost duty of the DDMC or other Disaster Management committee is to replace the evacuated persons to their original places. Extensive medical camp from village to village is launched to check any type of water borne diseases and outbreak of epidemic.

Granting of Immediate Relief Assistance to the flood affected people and immediate restoration of Water supply, Electricity, Road communication and other essential commodities are primary responsibility of DDMA. The entire NDRF/SDRF funds received from state Government are allocated to the Department concern as per recommendation and approval of DEC, Namsai. Damage assessment is the important work carried out by SDDMA for onward submission to State and Central Government and to grant compensation as per Relief Norms.

## **DISTRICT EXECUTIVE COMMITTEE (DEC)**

With a view to supplementing the DDMA, there shall be a District Executive Committee (DEC) to monitor and gear up the preparedness of the district administration as well as different district level functionaries in regard to disaster management in an effective manner. It would be a larger group than that of the DDMA so that necessary follow-up actions of the decisions of DDMA can be taken as deemed appropriate. This Committee will function as a District Working Group. The members of the Committee will be:

1. Deputy Commissioner - Chairman

2. Advisor - Superintending Engineer (WRD)

3. Member secretary - District Disaster Management

Officer, Namsai

4. Superintending Engineer - Hydro power Deptt. Member

5. Executive Engineer - PHED-Member

6. Executive Engineer PWD - Member
7. Block Development officer - Member
8. District Agriculture officer - Member
9. District Horticulture officer - Member
10. District Veterinary officer - Member
11. Asstt. Director of Fisheries - Member.

Guest members :- i) Hon'ble MLA's of the District

ii) All Zilla parisad Members and Anchal Samity Chairperson

iii) Representative of ARMY.

Besides, the chairperson can invite other officer/member to attend the meeting/committee of the DEC as per the need of time, as special invitee.

## THE MAJOR FUNCTIONS OF THIS COMMITTEE WOULD RELATE TO:

- 1. Monitor the activities of Sub-division Disaster Management Committee.
- 2. Ensure follow-up actions by concerned stakeholders of the decisions taken by the DDMA
- 3. Facilitate preparation of Disaster Management Plan and necessary updating in different departments/schools/hospitals
- 4. Lobbying for policy formulation for disaster management
- 5. The group will work for a link between the DDMA and its agencies involved in the Disaster Management activities
- 6. Initiate and monitor mock drills at various levels as per the direction of DDMA.
- 7. Control and supervise the functioning of SDMC.

## **DISTRICT LEVEL TASK FORCES**

1. Technical Team : EE(PWD/RWD/PHED/HPD/WRD/

ELECT/UD&H, All works departments.

Relief Camp and Shelter Committee : BDO, DDSE, and CDPO.
 Health and Hygiene Committee : DMO, DVO, CDPO.

4. Search and Rescue Team : SP, EAC, Army, NDRF, DMO, NCC

5. Essential item Supply Committee : DF&CSO, Bazaar secretary

6. Volunteers Committee : NCC, Scouts, Guides, DDSE, Principal GHSS,

Community Volunteer Committee.

7. VVIP Visit Management Committee : CO, Namsai, EAC, Namsai.

## **DISASTER MANAGEMENT COMMITTEES IN NAMSAI DISTRICT**

1. District Disaster Management Authority headed by Deputy Commissioner.

- 2. Block Level Disaster Management Authority headed by Block Development Officer.
- 3. Circle Level Disaster Management Authority headed by EAC/ Circle Officer.
- 4. Village Level Disaster Management Committee headed by HGB/GB/ASM.
- 5. Department wise Disaster Management Committee headed by concerned HODs.
- 6. College/ School Safety Management Committee headed by concerned Principal/ Headmaster/Teacher In charge

## VILLAGE LEVEL DISASTER MANAGEMENT COMMITTEE:

Each village within Namsai district is advised and directed to set up a committee known as Village Disaster Management Committee under the Chairmanship of GB or ASM. It will comprise members from different walks of life – viz.

- 1) Village elders
- 2) PRI members.
- 3) Prominent Citizens.
- 4) Village level govt. staffs and Teachers.

The committee is responsible for giving awareness to public, making Disaster Management Plan, mitigation plan, undertaking rescue works after disasters and pre-disaster activities. Under its supervision, following village level Task Forces/Disaster Management Teams will be formed and activated.

- 1) First Aid & Medical Team
- 2) Evacuation and Rescue Team.
- 3) Shelter Management Team.
- 4) Relief Co-ordination Team.
- 5) Water & Sanitation Team
- 6) Information & Damage Assessment Team.
- 7) Trauma Counselling Team.

## 1. FIRST AID & MEDICAL TEAM: ACTION BY :- DMO NAMSAI

This team will promptly attend to all the casualties in the event of any disaster. They will be providing with First Aid kits and they will be trained by Health Department.

## 2. EVACUATION & RESCUE TEAM: ACTION BY SP POLICE

This team will also perform evacuation and search and rescue operations. They will undergo training on-

- I. Drowning,
- II. Fire fighting and

III. Search and rescue of collapse building victims.

IV.

## 3. SHELTER MANAGEMENT TEAM: ACTION BY PWD & DISTRICT ADMN

This team will identify building for accommodation of shelter-less people due to disaster.

## 4. RELIEF & CO-ORDINATION TEAM: ACTION BY DDMO NAMSAI

This team will operate collection and distribution of all other relief material except food and water supply.

## 5. WATER & SANITATION TEAM: ACTION BY PHED & URBAN DEVELOPMENT DEPTT

This team will ensure that sufficient food stuff and water is available for emergency response. They will be responsible for fair distribution of food and water during relief works.

### 6. INFORMATION & DAMAGE ASSESSMENT TEAM:

This team will give immediate assessment to the authorities on damage, missing, casualty etc. All relevant information will also be supplied to the government machineries as well as given necessary information to the local people in the disaster period.

## 7. TRAUMA COUNSELLING TEAM:

This team will take immediate steps in connection with counseling to traumatized people. This team will extend their helping hands by counselling the affected families, casualties etc. to reduce their burdensome out of disaster.

## S.O.P FOR VILLAGE TASK FORCES/ TEAMS

### Team 1: FIRST AID & MEDICAL TEAM

#### PRE-DISASTER

- 1. Maintain a list of pregnant women, infants, disabled, sick, old etc.
- 2. Keep First Aid kits ready and ensure that expired drugs are replaced with new ones.
- 3. Distribute basic medicines and demonstrate their use.
- 4. To keep stretchers/local alternative ready to carry injured people.

## ON RECEIPT OF WARNING

- 1. Ensure that contents of all First Aid kits are satisfactory.
- 2. Move into the safe shelter.
- 3. If caught inside, stand with their backs against a strong in door wall (in EQ).
- 4. If outside during the earthquake, run to an open space (in EQ).
- 5. If in a moving vehicle, will stop and stay inside (in EQ).

## POST DISASTER

- 1. Attend to the injured people.
- 2. Counsel the traumatized people.
- 3. Listen to and calm the victims affectionately and patiently.
- 4. Help doctors and paramedics shift the ill and the injured to hospitals.
- 5. Isolate the cases with infectious diseases and prevent them from spreading.
- 6. Provide preventive medication if there is danger of cholera, dysentery.

### **Team 2: EVACUATION & RESCUE TEAM**

#### PRE-DISASTER

- 1. Monitor the infrastructure needs of the Community such as roads, school etc.
- 2. Co-ordinate with the local authority to identify the location for setting relief camps.
- 3. Check for plaster cracks and damp patches in safe shelters that require repairs.
- 4. Stock dry food and other safe food stocks, fuels, etc.
- 5. Ensure that the shelters are easily approachable.
- 6. Ensure that the shelters are cleaned regularly.

#### ON RECEIPT OF WARNING

- 1. Evacuate people from their homes and clear the area as soon as possible. Move stocks of dry food, fuel and medicines to the shelter.
- 2. Setting up for house evacuee families.
- 3. Help the old, disabled, pregnant women, children etc. to settle in the shelter.
- 4. Ensure that strict sanitary practices are adhered to in the shelter.
- 5. Register the evacuees and give them identification slips/cards.

#### **DURING DISASTER**

- 1. If caught inside building/house against a strong indoor wall.
- 2. If outside during disaster, run to an open space away from trees, buildings etc.
- 3. If in a moving vehicle, stop and stay inside.

## **POST-DISASTER**

- 1. To ensure that evacuees are provided shelter and food until the de-warning is received.
- 2. Organise tents and materials for construction of temporary shelters.
- 3. Collect stocks of food, clothing and fuel etc.
- 4. Clean and disinfect the shelter all throughout the stay and before leaving.
- 5. Help NGOs and their engineers in conducting meeting and rehabilitation activity.
- 6. Monitor the rehabilitation and reconstruction process of the community.

### **Team 3: SHELTER MANAGEMENT TEAM**

### **PRE-DISASTER**

- 1. Co-ordinate with the local authority to identify the location for setting relief camps.
- 2. Check for plaster cracks and damp patches in safe shelters that require repairs.
- 3. Stock dry food and other safe food stocks, fuels, etc.
- 4. Ensure that the shelters are easily approachable.
- 5. Ensure that the shelters are cleaned regularly.

## ON RECEIPT OF WARNING

- 1. Setting up for house evacuee families.
- 2. Ensure that strict sanitary practices are adhered to in the shelter.
- 3. Register the evacuees and give them identification slips/cards.

## **POST-DISASTER**

- 1. To ensure that evacuees are provided shelter and food until the de-warnings received.
- 2. Organise tents and materials for construction of temporary shelters.
- 3. Collect stocks of food, clothing and fuel etc.
- 4. Clean and disinfect the shelter all throughout the stay and before leaving.
- 5. Help NGOs and their engineers in conducting meeting and rehabilitation activity.
- 6. Monitor the rehabilitation and reconstruction process of the community.

#### **Team 4: RELIEF & CO-ORDINATION TEAM**

#### PRE-DISASTER

- 1. Familiarize with damage and needs assessment formats.
- 2. Assess the estimated need of relief materials.
- 3. Mobilize stocks of food grains and medicines from government, NGOs, etc.
- 4. Stocks materials like ropes, bamboos, tarpaulin etc. in the safe shelter identified.
- 5. Keep a record of the stock available and maintain and dispatch them as required.
- 6. Always be impartial and sincere to the duty the victims.
- 7. Be transparent in the accounting and stocks by giving timely correct information.

#### ON RECEIPT OF WARNING

- 1. Coordinate with the evacuation and temporary shelter management team to move stocks of food, water and so on to the safe shelter.
- 2. Move to the safe shelter.
- 3. If caught inside, will stand with their backs against a strong indoor wall (in EQ).
- 4. If outside, run to an open space away from trees, buildings and electric lines (in EQ).
- 5. In a moving vehicle, will stop and stay inside (in EQ).

#### POST DISASTER

- 1. Conduct an assessment of complete damage for rehabilitation.
- 2. Based on a preliminary need assessment as follows, communicate preferences to the District Control Room. The size, scope of the relief items required like- duration of the distribution of relief material, the estimated number of people affected local capacity, resources and external help the immediate needs of the victims.
- 3. Communicate the assessment findings to other Task Force groups and local authorities.
- 4. Establish a distribution centre or community kitchen.
- 5. Ensure that food and other materials are distributed in an equitable manner.
- 6. Priorities the elderly persons, pregnant women, children etc.
- 7. Make a physical inventory of stocks when external assistance arrive.
- 8. Work closely with the communication group to keep in touch with control room.
- 9. Organise a meeting to evaluate the experience, internalize learning.
- 10. Keep the undistributed relief material in a safe place/godown and preserve it.

#### **Team 5: WATER & SANITATION TEAM**

### **PRE-DISASTER**

- 1. Ensure sufficient supplies of chlorine tablets etc. for disinfecting drinking water.
- 2. Ensure sufficient stocks of lime powder for disinfecting large water bodies.
- 3. Ensure that sufficient water is stored in proper tanks and jerry cans in safe shelters.
- 4. Ensure that there is list of contact persons at Dist. Com and PHE for assistance.
- 5. Raise awareness amongst the community about how to treat water resources.
- 6. Set a minimum standard in advance for distribution of water in emergency.
- 7. Stock long steel rods, kerosene and fuel wood to dispose corpus and carcasses.
- 8. Help of the local administration to construct temporary sanitary facilities.
- 9. Identify the tractors and labours required for sanitation purposes.
- 10. Contact PHE for assistance in acquiring diesel engines and generators.

#### ON RECEIPT OF WARNING

- 1. Assess the drinking water supply and available water resources.
- 2. Organise for alternate power supply by procuring generators/diesel engines.
- 3. Ensure that the sanitation facilities at the safe shelter are in working order.
- 4. Move into the safe shelter for safety.

#### POST DISASTER

- 1. Make immediate repairs of broken or burst pipes.
- 2. Coordinate with PHE/LAD for procurement of water tankers if required.
- 3. Disinfect large water bodies with lime power.
- 4. Coordinate with the Sanitary Inspectors for taking drinking water samples.
- 5. Ensure that water is distributed in an equitable manner.
- 6. Ensure that sufficient water is available in bathing units and toilets at relief camps.
- 7. Demarcate areas for safe excreta disposal around the relief camp.
- 8. Guide the local authorities to construct latrines away from ground water resources.
- 9. Coordinate with the local authority to construct sufficient bathing cubicles for females.
- 10. Spray bleaching powder and other disinfectants to prevent infectious disease.
- 11. Ensure that solid waste is put in refuse containers or buried in a refuse pit.
- 12. Ensure that there are no medical waste such as needles, drugs etc. lying around.
- 13. Co-ordinate with the first aid team to inoculate people against water borne diseases.
- 14. Construct temporary soak pits for onsite disposal of wastewater.
- 15. Co-ordinate with the search and rescue team for disposal of carcasses.
- 16. Ensure that dead bodies are registered and cremated after legal/religious formalities.

## Team 6: INFORMATION & DAMAGE ASSESSMENT TEAM

#### PRE-DISASTER

- 1. Carry a hazard map demarcating the most vulnerable/safe areas and households.
- 2. Prepare and store sufficient number of assessment formats required.

#### **DURING DISASTER**

- 1. Remain in the safe shelters and provide the evacuees with regular updates.
- 2. Call emergency meeting of the group and assign duties and area of assessment.

### AFTER A DISASTER

- 1. Give immediate assessment to the authorities on damage, missing, casualty etc.
- 2. Give detailed report of assessment to the authority.
- 3. Guide the search and rescue team with geographic information.

#### **Team 7: TRAUMA COUNSELLING TEAM**

### POST DISASTER

- 1. Attend to the injured people.
- 2. Counsel the traumatized people.
- 3. Listen to and calm the victims affectionately and patiently.
- 4. Help doctors and paramedics shift the ill and the injured to hospitals.
- 5. Isolate the cases with infectious diseases and prevent them from spreading.

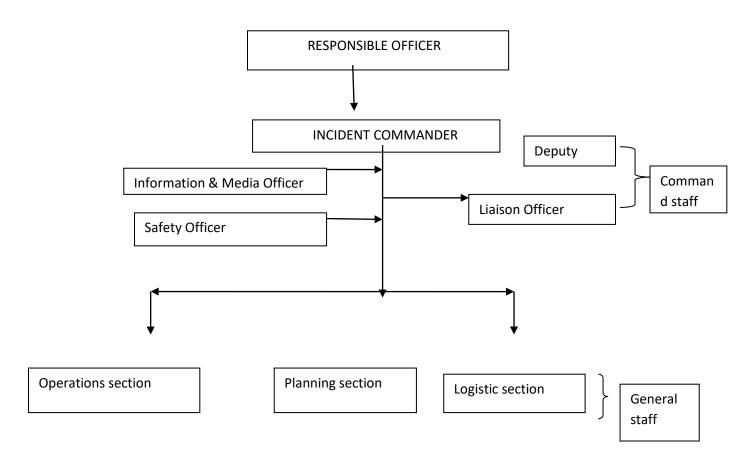
## **CHAPTER SIX**

The incident response system (IRS) is an effective mechanism to reduce scope for ad-hoc measures in response. It incorporates all the duties that may need to be performed in case a management of disaster or event of any kind or scale. It envisages a composite team with various sections to attain all the possible requirements. The idea is to identify and designate officers to perform various duties and get them trained in their respective roles. If IRS is in place, stakeholders trained and made aware of their role, it will greatly help to reduce chaos and confusion during the response phase. Everyone will know what all needs to be done, who will do it? And who is in command? Etc. It would be pertinent to point out here that the IRS is a flexible system and all the sections/branches/units can be activated only on as required basis.

#### **IRS Organization in the District**

The IRS organization will function through Incidence Response Teams (IRTs) in the fields. Keeping in mind our administrative structure, the Deputy Commissioner, Namsai has been designated as the Responsible Officer (RO) at the District level who will be in overall charge of the incident response managements. However the RO may delegate the responsibilities to the Incident commander (IC), who in turn shall manage the incident through various functionaries of the IRS organization.

The IRS has two main components: a) Command staff, b) General staff. The structure is depicted in figure as below:



- 1. Command staff:
- (i) Incident commander.
- (ii) Information officer.
- (iii) Liaison officer.
- (iv) Safety officer.
- 2. General staffs:
- (i) Operation section –Branch, division, Single, resource, strike team and task force.
- (ii) Planning section Resources, situation, documentation and demobilization units.
- (iii) Logistic section- Service, support and finance branches.

Command staff: The command staff will consists of information and media officer, safety officer and liaison officer. They will report directly to the incident commander and may have assistants. The command staff may or may not have supporting organization under them. The main function of the command staff is to assist the IC in his function.

Incident Commander (IC): For every incident, natural or man-made, there will be an incident response team headed by the INCIDENT COMMANDER (IC) to perform vital role of leading the response team. To assist the Incident Commander in discharge of the responsibilities, there is a set of officers collectively called as Command Staff which includes:

- (i) Incident Commander (In charge of Command staff unit).
- (ii) Information and Media Officer.
- (iii) Liaison officer.
- (iv) Safety officer.

Incident Commander is the main functionary who takes directions from the Responsible Officer and will apprise him of the situation continuously to take necessary directions.

General Staff

The General Staff has three Components which are as follows:

Operation Section (OS): The Operation Section (OS) will be responsible for directing the required tactical actions to meet incident objectives.

Planning Sections (PS): The Planning Section (PS) will be responsible for the collection, Evaluation, and display of incident information, maintaining and tracking resources, preparing the Incident Action plan (IAP) and incident —related documentation. They shall assess the requirement of additional resources and keep Incident Commander (IC) informed. This section also prepares demobilisation plan.

Logistic section (LS): The Logistic Section will be responsible for providing facilities, services and material in support of the incident response. The section Chief will participate in development and implementation of the Incident Action Plan. He will activate and supervise assigned Branches/Units. In order to ensure prompt and smooth procurement keeping the financial rules in mind and supply of resources, the finance section has been kept under it.

Each of the above section has their own branches above, divisions and units to perform the required functions.

#### **FEATURES OF IRS:**

Management by objectives: Management by objectives covers four essential steps in IRS. These would be taken in management of every incident regardless of its size or complexity.

- a. Understand government policy and directions.
- b. Establishment of incident objectives.
- c. Selection of appropriate strategy.
- d. Performance of tactical moves (assigning the right resources, and monitoring performance) Chain of Command

Chain of Command will mean that there is an Orderly line of authority within the ranks of the organization with a clear cut chain of reporting structure right from the lowest to the highest level.

Transfer of Command: The command of an incident is initially established by the highest ranking authority at the scene. Transfer of Command at an incident may take place for the following reasons:

- a) A more qualified/Experienced person arrives on the scene.
- b) The incident situation Changes over time, where a jurisdictional or agency change in command is operationally required.
- c) Normal turnover of personnel on long or extended incidents.

The IRS for this purpose will have a complete process of transfer of command.

Organizational flexibility: The IRS organization will be a need based flexible organization. All the components need not be activated simultaneously. It would depend upon the nature and requirement of the incident. Each activated element will have a person in charge to perform its role. In some cases because of lack of personnel, a single Supervisor may be in charge of more than one group.

**Span of Control**: Span of control: Span of control pertains to the number of elements that one supervisor can directly manage effectively. Ideally one supervisor would have five organizational elements under its control.

**Unified command**: Unified command is a team effort that allows all agencies with jurisdictional responsibilities for the incident, either geographical, functional; to manage an incident by establishing common set of incident objectives and strategies under one commander. This is accomplished without losing or abdicating agency authority, responsibility or accountability.

Accountability: Several procedures within IRS will ensure personnel resource accountability.

Through the Check-in procedure, the arrival of all personnel and resources will be accounted for, through a clear cut chain of command. It will ensure that one individual/group is not assigned to more than one supervisor. The assignment list will ensure proper allotment of resources and personnel to given task. The unit log will keep track of all activities and events.

**Integrated communications:** Ability to communicate within the IRS structure is very vital. Provision for a complete communication unit has been made in the logistic section. Several communication networks will be established depending upon the size and completely of the incident. These will include **command net, operational net, logistic net, ground air net.** 

## **Resources management:**

- a) Single Resource: Single Resource includes both personnel and equipment.
- **b) Strike team:** A strike team will be a specified combination of a designated number of the same kind and type of resources with common communications and a leader.
- c) Task Force: A Task Force is any combination of single resource within the ambit of span of control. They are assembled for a particular tactical task, with common communication and a leader.

**The incident Action Plan (IAP):** Management of every incident needs an incident Action Plan. The purpose of IAP is to provide all incident supervisory personnel with appropriate direction for the task in hand. Oral or written form of IAP depends on the <u>scale of incident</u>.

A written IAP shall be considered for use when it is felt essential that all levels of a growing organization require having a clear understanding of the tactical actions associated with the next operational period. A written action plan will be used whenever:

- 1. The incident continues for more than 24 hours.
- 2. There is a partial or full activation of the IRS organization.
- 3. Two or more jurisdictions are involved in the response.

The incident briefing form (IRS 201) will be used to record initial actions and list assigned will available resources.

#### **Constitution of various IRTs**

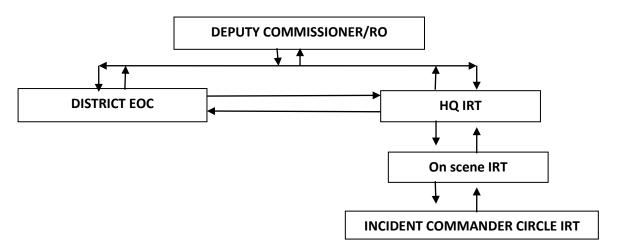


Fig: Sketch map of complete organizational structure at District Level

#### (Structure depicted above will be activated on as requires basis)

Keeping in view the administrative division of the district, there would be three Circle level IRTs. Therefore, the following are the lowest level IRTs:

- 1. Circle level IRT for Namsai circle
- 2. Circle level IRT for Lathao circle.
- 3. Circle level IRT for Piyong circle.
- 4. Circle level IRT for Lekang circle
- 5. Circle level IRT for Chongkham circle

There will be a **Headquarter IRT** of the district which will be activated based upon the intensity, jurisdiction and duration of the incident as per the directions of the RO of the District i.e the Deputy Commissioner.

Also, as per the pressing need of the incident, the lower formation (e.g Circle) of the IRT will be merged with the higher formation (e.g. District) level of IRT in accordance with the directions of the Deputy Commissioner.

When lower formation of IRT will merge with higher formation the role of IC of lower formation of IRT, IC of the lower formation will play the role of Deputy IC or OSC or any other duty that the IC of higher formation assigns. This process shall be applicable at all levels.

## **DISTRICT LEVEL IRT (HEADQUARTER IRT)**

IRS Position	Suitable officers
RESPONSIBLE OFFICER	Deputy Commissioner
INCIDENT COMMANDER	ADC Hq.
Deputy Incident Commander	SE, WRD.
Information & Media Officer	Librarian, SDL,Namsai
Liaison Officer	DFO & DDMO, Namsai.
Safety officer	The Supt of Police, Namsai.
OPERATIONS SECTION CHIEF	Dy. Superintendent of police.
Staging Area Manager	EE, PWD/DDSE, Namsai.
Branch Director	Dy. S.P
Division / Group Supervisor	SDO, Namsai
Task Force/ Strike Team	Personnel of Fire Department/ Personnel of Police/
	Personnel of Electric Department / Personnel of Fire
	Department/ Personnel of Police Department/ Personnel
	of DFO/ personnel of NGOs/ Elected representatives /
	village level resources and its trained operator/ or from
	any other appropriate Line Deptt.
Transportation Branch	DTO (TPT) and EAC (TPT)
Road Group	
Group Supervisor & Vehicle Coordinator	SS, APST, Traffic Police in charge, PS, Namsai and MVI
Load -in - charge/ Un-load-in-charge	DA, TPT and foreman TPT.
<b>Boat Group</b>	
Group Supervisor & Boat Coordinator	EE, WRD, Namsai.

Load-in-charge/ Un-load-in-charge	AE, WRD, Namsai.	
Air Operations Group		
Group Supervisor-Air operations	Deputy Commissioner.	
Helibase/ Helipad-in -charge	DF & CSO, Namsai	
Loading/ un/loading-in-charge	Incharge AAI,Namsai and Supply Inspector, Namsai.	
PLANNING SECTION CHIEF	ADC HQ.	
Resource unit	DPO,DHO, DDA and DMO, Namsai	
Check –in-status Recorder	Supdt Tax and Excise, Namsai.	
Situation unit	EAC/Disaster Management office/OC Police station	
Display Processor	AC (HQ)	
Field Observer	Officials of Ngo/ PRIs.	
Weather Observer	AC(HQ)	
Documentation unit	Librarian,SDL,Nms/DDMO/CIC	
Demobilization unit	EAC/SDPO/DDMO/DTO-Foreman.	
Technical Specialist	Officer of fire deptt. / DFO/EE,WRD,PWD,RWD/DMO/	
	Head of Office of all line department in the District.	
LOGISTICS SECTION CHIEF	ADC,HQ	
Service Branch Director	EAC (Naz.)	
Communication unit	OC, WT station/ SDOT, BSNL.	
Medical unit	DMO,Namsai.	
Food Unit	DF & CSO.	
Support Branch Director	SDO, Namsai.	
Supply Unit	EE,WRD,Namsai.	
Facilities Unit	EE, RWD/AE. Elect. HPD & PHE, Namsai.	
Ground Support Unit	EE, WRD and E & M, Namsai.	
Finance Branch Director	ADC HQ	
Time Unit	EAC (J) and DDMO, Namsai.	
Compensation/ claim unit	DDMO and ECA (J).	
Procurement Unit	FAO and DDMO, Namsai.	

## Circle level IRT

IRS Position	Suitable Officers
INCIDENT COMMANDER	EAC/CO
Deputy IC ,Information & Media Officer,	BDO
liaison officer	
Safety officer	OC,PS.
OPERATIONS SECTION CHIEF	EAC,CO.

Staging Area Manager	ADO/ BEO.	
Branch Director	Suitable position as deemed by IC.	
Division / Group Supervisor	Suitable position as deemed by IC/BD.	
Task Force/ Strike Team	Personnel of Fire Deptt. / Police Deptt. / DFO/EE,	
	PWD/WRD/ Elected representatives/ or from any other	
	appropriate Line Deptt. / Village teams headed by elected	
	representatives.	
Single Resources	Personnel of Fire Deptt. / Police Deptt. / Civil Defence/	
	DFO/ elected representatives/ or from any other	
	appropriate line Department/ village level teams headed	
	by elected representatives.	
PLANNING SECTION CHIEF	EAC/CO.	
Resource unit	EAC/CO.	
Check –in-status Recorder	OC,PS	
Situation unit	Suitable position as deemed by IC.	
Display Processor	Officer of Sub-Division.	
Field Observer	NGO/PRIs.	
Documentation unit	DA of Circle office.	
Demobilization unit	Suitable officer of fire deptt./ suitable officer of forest	
	deptt./ EE,PWD./MO Incharge.	
LOGISTICS SECTION CHIEF	EAC,CO.	
Service Branch Director	As deemed by IC.	
Communication unit	Supporting personnel of I/C Police Wireless/supporting	
	personnel of BSNL.	
Medical unit	MO/VO.	
Food Unit	DA Circle office.	
Support Branch Director	Suitable officer as deemed by the IC/LSC.	
Supply Unit	AE/JE, PWD, WRD.	
Facilities Unit	EAC/CO.	
Ground Support Unit	OC PS.	
Finance Branch Director	EAC/CO	
Time Unit	Supply Inspector.	
Compensation/ claim unit	EAC/CO.	
Procurement unit	EAC/CO.	

## CHAPTER SEVEN

**CAPABILITY ANALYSIS** 

The resources necessary for disaster preparedness during and after disasters are listed below:-

## 1. IDENTIFIED SAFE SHELTERS:-

## PIYONG CIRCLE.

Sl.	Name of the Village	Identifies safe shelter	Capacity	Contact no.
No				
1.	Adi Ningroo	Community Hall	60	GB-8974517333
2.	Pangen	-do-	50	ASM-9402969872
3.	Ningroo Charali	-do-	80	ASM-986221724
4.	Nampong	-do-	60	ASM-9436218373
5.	Piyong Khamti	Govt. Sec. School, Nigroo	80	ASM-9612570507
6.	Piyong Singpho	-do-	80	ASM-8974224367
7	Piyong Kachari	Govt. Pry. School	30	ASM-8974864467
8.	Phaneng	-do-	30	EX-GPC-8730071627
9.	Lekang Khamti & Mengkeng Khamti	Community Hall	30	EX-ASM-8974101846
10.	Wingko	GMS	80	897404553
11.	Jenglai	-do-	60	ASM-8974041318
12.	C/Wingko	-do-	60	8974654466
13.	Nongtaw Khamti & -do- Wingkham Nongtaw		80	ASM-8974936026
14.	Nongtaw Shyam	C/Hall	50	GB-03806202394
15.	Wingseng Nongtaw I & II	School Building	50	ASM-9402893203
16.	Mokrun & Khasankung	C/Hall	30	ASM-87299496332
17.	Wagun-I	-do-	50	GB-8974643615
18.	Wagun-II & IV	School Building	50	GB-8732805135

## LATHAO CIRCLE

Sl.No	Name of the Village	Identified safe shelter	Capacity	Contact number of the responsible
				person
1.	Lathao	School Building	200	9436631638
2.	Solungtoo	School Building	100	9863874723
3.	Solungtoo	Community hall	50	986387473
4	Jona – I	School Building	100	9863365379
5	DadumJona	School Building	50	03806 202046
6	DadumJona	Community Hall	50	03806 202046
7	DadumJona	Anganwadi center	50	897495778
8	Jona – III	School Building	100	7308043647
9	Jona – IV	School Building	200	8974573332
10	Jona – IV	Community Hall	100	8974573332
11	Jona – IV	Buddhist Temple	200	8974573332
12	Jonakacharikuli	School Building	50	9612626787

## CHONGKHAM CIRCLE

Sl.No Name of the Village Identified safe shelter	Capacity	Contact number
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				of the responsible
				person
1	Chongkham	Govt. Higher Secondary	400	9436411239
		School		
2	Chongkham	APVS	400	9436411239

## 2. EMERGENCY SUPPORT FUNCTION

## A) INVENTORY OF MACHINERIES.

Sl.No	Name of the Machinery	HoDs	Nos.	Place of deployment	Contact. No	Remarks
1	Double engine Boat	AE, WRSD, Namsai	1	Nao -dihing Bridge	AE-8732802279 JE-9612570511	Running condition
2	Fighter Boat	do	1	do	do	Running condition
3	Hydraulic excavator (chain system)	do	1	do	do	Off condition
4	Truck	-AE WRSD ci	1	WRD	08732802279	Running
5	Boloro	do	1	AE WRD	08131848981	Running
6	Truck	EE, PHE & WS, namsai	1	Namsai	08131868001	
7	Bolero	do	1	do	09863856262	
8	Gypsy	do	2	Namai & Mahadevpur	262366 08794337488	
9	Tractor Truck Tipper	EE(UD&H)) Namsai	1	Namsai Namsai	08575213599 09856022176	Engage for Sanitation Work
10	Jeep	CDPO, Nms	1	Namsai	09612789861	
11	JEEP	doLekang	1	do	do	
12	Truck	do	1	do	do	
13	DFO(NFD)	Bolero	1	do	09436635664	
14	-do-	do	1	do	-do-	
15	LMV-Tata Sumo Victa	BDO Namsai	1	BDO Office	09862782781	
17	Gypsy	SS. STS, Namsai	1	Namsai	09402047271 09402474920 08730095681	
18	Bus	do	1		do	
19	Bus	d	1		do	
20	Bus	do	1		do	
21	Bus	do	1		do	
22	Bus	do	4		do	
23	Generator	Sen .Medical officer (in charge)	1	DH, Namsai	9436049927	Non-functional
24	Ambulance	do	1	do	09856442380	
25	Gypsy LMV	ADF, Namsai	1	Namsai	08794749403	
26	Pick up Van					

27	Country boat	do	2	Borbeel – I Jona – I	DO	Placed at Fishery farm
20	3.61.1.1	00 1		DG M	0.42.605.4502	Lathao/Borbeel
28	Mini truck	OC, police	1	PS, Namsai	9436054792	
29	Gypsy	do	1	do	do	
30	Scorpio Veh.	SE, Hydro	1	SE, HPD, Namsai	09862250433	
		Power			09402233520	
		Namsai				
31	EstemVeh.	do	1	do	09402281173	
32	Gypsy	DFO,Wastlan	1	DFO, Wasteland	03806 262545	
		d Div.		Div. Namsai		
		Namsai				
33	Tata Truck	EE, PWD,	1	Namsai	07641044954	
		Namsai			09863883304	
34	Tata Truck	do	1	Chongkham	09863883304	
	Turbo					
35	Tata Truck	do	1	Mahadevpur	08131868001	
36	Scorpio	do	1	EE, PWD, Namsai	08132876879	
37	Gypsy	do	2	do	07308176625	
38	Gypsy	do	1	do	07308440113	
39	Gypsy	do	1	EE, PWD,	08132876879	
				Mahadevpur	08974800878	
40	Gypsy	do	1	Kamlang Nagar		

## B) <u>INVENTORY OF MATERIAL, TOOLS & EQUIPMENT'S :</u>

Sl.No	Name of tools	Departments	HoDs	Contact Number
	&equipments			
1	Life jacket	2+ 20	EAC, Mahadevpur, DDMO	8787757540
2	First Aids Box		DMO	8259078723
3	Extension Ladder	4 Nos	DDMO/Fire service	9436226678
4	Rope	5 Nos	do	
5	Generator		Elect/Med Supd/PWD/	
			DDMO	
6	Spades, Shovels.		All exiting village	
	Axe. Dao			
7	Plastic Rope		do	
8	Gunny Bags	do	do	
9	Wooden planks	do	do	
10	Chargeable Torch	do	do	
11	Ferry boat	do	do	

## C) DEPARTMENTAL LMV (LIGHT MOTOR VEHICLE)

S/no	Head of Deptt	Type of Vehicle	Vehicle No.
1	AE (PHED),Namsai	Bolero	AR-01C-7128
2.	ADF (Fishery)	Xenon	AR-20/0092
3.	DFO(LWDD)	Gypy	AR-01-2923
4.	SS,APSTS	Gypsy	ARX-0258
5.	BDO	TATA Sumo	AR-11-6861
6.	DFP,NFD	Bolero	AR-11A/0024
7.	SE,DHPD,Hydro power	Esteem	AR-01-0089
8.	AE,RWD	Gypsy	AR-11-1219
9.	CDPO,ICDS	Jeep	ARL-1241
10.	AE,Elect	Gypsy	AR-11-1360
11.	EE,PWD	Scorpio	AR-11-1858
12.	-do-	Gypsy	ARL-5
13.	-do-	Gypsy	AR-11-0590
14.	AE,WRSD	Boloro	AR-20/0096
15.	SC,WRC	Scorpio	AR-11-1630
16.	-do-	Esteem	AR-01C-0346
17.	GM, APIL	Bolero	
18.	DDA,Agri	Gypsy	AR-01A/0204
19.	AE,PHE	Truck	AR-11-5292
20.	C.F,EWD	Mini Truck	AR-11/8671
21.	DFO,NFD	Tata pick- up	AR-11-6118
22.	AE,Elect.	Bolero pick-up	AR-11-0877
23.	AE,Elect	Truck	ART-817
24.	EE PWD	Truck	ARL-1308
25.	The Commissioner(East)	Gypsy	AR-01/1052
26	DHO	Gypsy	AR-15/0137
27	DPO	Bolero	AR-01K/4285
28	DMO	Force Traveler	AR-21/0091
		Maruti Omne-E	AR-20/0082
29.	CDPO Namsai	Mahindra Jeep	AR-11/1241
30.	CDPO Lekang	Bolero	AR-11/6652
31.	EAC Namsai	Bolero	AR-11A/0011
32.	EAC Chongkham	Gypsy	AR-11/1584
33.	EAC Lekang	Bolero	AR-11A/0010
34.	CO Namsai	Gypsy	AR-01/8449
35.	CO Lathao	Gypsy	AR-11/1294
36.	Dist Panchayat Office	Tractor	AR-20/0087
			AR-20/0088
27	DIRGO	D 1	AR-20/0089
37.	DLRSO	Bolero	AR-20/0093

## 'CHAPTER EIGHT

# STANDARD OPERATING PRACTICES FOR ALL DEPARTMENTS

## **DISTRICT DISASTER MANAGEMENT COMMITTEE**

All heads of the departments and EE-PWD, Representatives of Army, BRO & CRPF, Hon'ble MLAs and other leaders as Guest members

TECHNICAL COMMITTEE

EE (PWD/RWD/Electrical/PHED)
SE (WRD/HDPD)
UPO

SUPPLY COMMITTEE DFC&SO(SUP), ARCS and Bazaar Committee

SEARCH AND RESCUE COMMITTEE SDPO, EAC(Resp. Circles), Army, BRO, NDRF, DMO, CRPF,NCC

HEALTH COMMITTEE DMO, DVO, ICDS, Principal, DDSE

SHELTER COMMITTEE DDSE, BDO, CDPO

**VVIP VISIT MANAGEMENT COMMITTEE CO,Namsai, DPO, Supdt(T&E).** 

VOLUNTEERS COMMITTEE
NYK/NCC/NSS/Scouts/Guide/DDSE/Principal GHSS

NCC/SCOUTS/GUIDE/PRINCIPAL

## **CONTROL ROOMS**

The Control Room is under control of the Deputy Commissioner, which will be operational round the clock and is the nerve center for the following activities

- 1. To monitor, Co-ordinate and Implement the actions/activities for effective disaster responses as well as management of available resources.
- 2. During the occurrence of a Disaster, Control Room will operate under the central authority of the Deputy Commissioner, exercising emergency powers to issue directives to all departments to provide emergency response services.
- 3. The Control Room will co-ordinate with the State disaster response machinery like State Relief Committee, Itanagar for appropriate support and smooth flow of information. EAC (JUD), SDPO and OC WT to be responsible for smooth functioning of the District control room. They will prepare a comprehensive action plan for the same.
- 4. The Concerned Circle Officer and OC, PS to be responsible for smooth functioning of local.
- 5. During the occurrence of disaster, the Control room will co-ordinate with the District administration, send information to the District HQ and to the Directorate of Disaster management.
- 6. During the emergency situation, all the control rooms should be manned round the clock by some responsible official. Prepare a roster duty chart for manning the control room by one senior officer so that one officer is not heavily burdened.
- 7. Train the officers who are nominated for the control room and sensitize them about their role
- 8. Prepare an information database regarding the vulnerable areas and monitor those during the disaster.
- 9. Prepare an information database about resources available in the district in consultation with all the head of departments.
- 10. Prepare database of all available volunteers.
- 11. Keep the contact numbers of all concerned updated.
- 12. Networking with other control rooms and networking with Army/BRTF/ITBP and other districts. This networking is extremely useful for advance warning and quick response.
- 13. Take hourly reports from all other control rooms.
- 14. Strictly monitor the performance of sub-ordinate control rooms.
- 15. Provide all necessary guidance to the teams working in the fields.
- 16. The Control room will be set up within the Deputy Commissioner office, Namsai.
- 17. He shall brief the press and other media in regular frequency.
- 18. The telephone no of Namsai Control Room is 03806-262541.
- 19. The toll free number of the Control room is -1077
- When Disaster strikes' all the DDMA members and Administrative officers will assemble at DC's office Namsai cum control room with quick response for further initiation of necessary steps to mitigate the disaster.

Control room is the nerve centre for disaster management. Performance of the district depends on the effectiveness and promptness of the control room.

## DISASTER MANAGEMENT COMMITTEES AT CIRCLE LEVEL.

1. Chairman: Concerned administrative officer (DC, ADC, EAC, CO.)

2. Advisors: MLA, EX-MLA.

3. Members: All the District officers of line department/OC, Police outpost station

/Forest Rangers/ MO/DVO /CDPO /BDO/ Panchayat members.

## **DUTIES OF CIRCLE OFFICER/EAC/ADC**

(Supported by concerned Branch Officers and Leaders)

- 1. Prepare a database of all the villages within the circle along with the population and other resources available. Note the availability of schools, hospitals and other such institutes located in his jurisdiction. He should also have the list of vehicles with their types, list of elephants, list of country boats and machine boats etc. He should also have list of all important numbers with him.
- 2. The circle officer with the help of concerned OC will open a round the clock control room which will act as a nerve center. The control room should also have a copy of the database prepared as per no 1
- 3. The circle officer will sensitize all the government staff and officers about the duties to be performed by them.
- 4. The circle officer will also sensitize the public leaders and youngsters about their role in disaster management
- 5. The circle officer will prepare a disaster management plan for the circle and train all the concerned for successful implementation of the plan.
- 6. The circle officer will conduct meeting in each village and prepare a village level committees to deal with situations pertaining to the village. He will then help in prepare a village level disaster management plan.
- 7. Prepare a list of volunteers and train them to manage the disastrous situations.
- 8. The action plan should elaborate about the search and rescue operation, relief camps, medical aids, essential supplies, communication and other basic facilities such as water electricity etc and also preventive measures.
- 9. Remain in touch with Hon'ble MLA and other public leaders. In fact they know the area very well and hence their cooperation is extremely important. Provide reports to Hon'ble MLA at regular frequency as he is the chief advisor within your jurisdiction and can influence the state government for providing additional help.

## CIRCLE OFFICER/EAC/ADC

EXTREMELY IMPORTANT OFFICER AND HIS INITIATIVE, PROACTIVENESS, PROPER AND EARLY PREPARATION, QUICK RESPONSE WILL SAVE HIS CIRCLE FROM NATURAL DISASTER OR AT LEAST REDUCE THE DAMAGES.

## **Guest Member: Representatives of CRPF and Army**

- 1. The committee will survey the entire area and identify the vulnerable areas and vulnerable points from which water can enter the habitations. The committee will propose the measures to plug these vulnerable points and take anti-flood measures jointly. This activity is to be undertaken well in advance of onset of monsoon.
- 2. The committee will take necessary steps to prevent the floods to occur despite heavy rainfall. The committee will ensure availability of basic equipments such as gunny bags, steel wires etc well in advance.
- 3. The committee should develop a database on co-ordinate numbers of all vulnerable locations so that in case of air-sorties it can be immediately informed to the pilots. The data should be ready by 7<sup>th</sup> of May.
- 4. The committee will pull all the resources available including the labour force in the Deptt. to take preventive measures. In fact the committee is fully empowered to call any kind of help from any government or non-governmental organization or person.
- 5. The committee will take necessary action to ensure availability of all basic services such as drinking water, electricity, surface communication and tele-communication.
- 6. The SC, WRD will call the meeting frequently and will receive all kind of help from all the works departments for flood control.
- 7. The concerned Heads will pass necessary instructions to all of their juniors to extend all help to the circle officer on the line similar to district technical committees.
- 8. Also the concerned Heads of the departments will train their juniors in dealing with the disastrous situations.

#### PREPAREDNESS WILL SAVE US FROM DISASTERS

- All Heads of the Departments and their team should prepare their own contingency plans to manage the emergency situation. They should ensure that the services, which their departments are providing, should continue to be provided to the society during emergency times also. Hence they should have their plans well developed to provide their services during the emergency times also.
- 2. They should submit their contingency plans to District Disaster Management cell before 15<sup>th</sup> of May positively.
- 3. All the Heads of departments are required to provide all necessary help in the form of men, equipment and time to the administration to manage the emergency situations.
- 4. All the Heads of departments are required to appoint one nodal officer who will liaison with District Disaster Management cell. They should submit the names of the nodal officer to the District Disaster Management cell before 7<sup>th</sup> May positively.
- 5. All the Heads are required to ensure their availability at respective headquarters during the monsoon period. In case the head is proceeding on tour/leave kindly ensure that the juniors are well informed so that all available resources are with your department can be used without any hindrances during emergencies.
- 6. In case of emergencies everybody is required to extend all possible help to the disaster management cell. Whenever they are called to extend the service they should be prompt in delivering such services. It is legally binding on each and every department.
- 7. In fact all the HODs are ex-officio members of District Disaster Management Committee.

## TOGETHER WE CAN FIGHT WITH ANY DISASTER DISASTER DIFFICULTIES

- 1. He shall take personal care in ensuring that the essential commodities like rice, salt, kerosene should be stored in adequate quantity before the monsoon season. He should ensure availability of all these essential commodities during emergencies.
- 2. He shall personally ensure that the POL (Petrol, Diesel, Kerosene, Mobile etc) and LPG are stocked in sufficient quantity before the monsoon. During emergencies he should closely monitor the stock on daily basis. He should keep strict control on the POL and LPG dealers to ensure that at any case black marketing or artificial scarcity is not developed. Strict instructions should be given to the dealers that they should ensure maximum stocking before the monsoon and whenever the stock reduces than the base line they will immediately inform DF&CSO. In fact it is desirable that they should report the daily stock report without fail to DF&CSO.
- 3. **Bazaar Committee** Shall conduct regular checking in the bazaar. It is to be strictly ensured that at any case black marketing or artificial scarcity is not developed. He is empowered to seize the stock of all essential commodities in the open market if situation warrants.
- 4. He will liaison with the Air Force and Pawanhans for casualty evacuation or for emergency sorties of any kind. He should ensure that co-ordinate numbers of all vulnerable locations are ready with him and also record on availability of any suitable landing ground at various locations. He shall direct all Circle Officer to give feedback before 7th May.
- 5. He will liaison with Station Superintendent Transport Officer to ensure that sufficient vehicles are made available to transport the essential commodities to remotest of the areas. He should also ensure availability of labour for carrying essential commodities.
- 6. He should ensure availability of transit go-downs at various locations including helipads.
- 7. He will liaison with ARCS to ensure that all FPS in cooperative are working with fullest efficiency.
- 8. He should also liaison with other heads such as DMO etc for carrying essential medicines or other such equipments.

MAINTAIN SUPPLY: SERVICE TO THE COMMUNITY

## DISTRICT MEDICAL OFFICER

(Supported by a committee of DVO, CDPO-ICDS)

- 1. He is having most crucial and important assignment before, during and after the disasters.
- 2. He should keep all his health units such as Hospital, DH, CHC, PHC, Sub centers along with Doctors and Paramedical staff ready to deal with any kind of emergencies.
- 3. He should ensure availability of Doctors and paramedical staff. The leaves/tour etc of all doctors needs to be planned meticulously so that at any given point sufficient doctors should be made available within short notice.
- 4. He shall open on site medical units in case of emergencies. He shall also establish mobile units which will visit the villages and all relief camps.
- 5. He shall prepare an Army of health volunteers who will support the Medical department for various works such as casualty evacuation, first aid etc
- 6. He shall liaison with CRPF, NDRF and Army for their support in extending Medical facilities to the needy.
- 7. DMO and his team should take all preventive and precautionary measures to control the outbreak of any epidemic and also take necessary steps to control epidemic if any.
- 8. DMO should take stock of all necessary equipments and drugs which are likely to be most needed after the disaster. He should ensure early stocking of the same before the monsoon.
- 9. He should take necessary steps to arrange awareness camps in villages and towns to create awareness about preventive measures.
- 10. He should keep all the ambulances ready and in running condition. He should liaison with SS, Transport Officer for any additional vehicles. Sufficient stock of POL items may be ensured before the monsoon.
- 11. The principle of **QUICK RESPONSE** should be embedded in the system and within 20 minutes of the call the emergency medical teams should be ready to move.

WE MAY NOT AVOID DISASTERS BUT WE CAN PREVENT EPIDEMICS

## **EXECUTIVE ENGINEER (PHED)**

(Supported by the Technical Committee)

- 1. Water supply is the most important and essential service, which needs to be maintained at any given cost. Generally in Arunachal Pradesh all our water supply schemes are very close to river courses and hence are extremely prone to natural disasters and hence are the early victims of floods. Hence the department needs to be extremely vigilant and should have alternate delivery mechanism in place much before the monsoon.
- 2. Availability of safe drinking water is most important and hence PHE Department should have their contingency plan ready much before the monsoon period. They should submit their contingency plan to District Disaster Management cell by 7<sup>th</sup> May without fail.
- 3. The PHE department should prepare a plan for alternate water supply system such as tankers etc
- 4. They should prepare plan to ensure that the drinking water is not contaminated and is safe for drinking. Unsafe drinking water is main cause of spread of epidemics.
- 5. PHE department should conduct village to village level awareness camps on importance of safe drinking water.
- 6. They should coordinate with the Health department and administration to prevent outbreak of any epidemic because of unsafe drinking water.
- 7. For any kind of technical help they may approach the Technical Committee of which they are also a member.

WATER SUPPLY: LIFE OF THE COMMUNITY

## **EXECUTIVE ENGINEER (POWER & HDPD)**

## (Supported by the Technical Committee)

- 1. Electricity supply plays an important role in day to day life. Especially during disaster, the efficiency of fighting with disaster depends upon availability of electricity.
- 2. In Arunachal Pradesh most of the micro-hydel and transmission lines are prone to the damage because of floods and hence the department should be ready to deal with such situations.
- 3. Take preventive measures to safe guard power installation including the transmission lines during the disasters.
- 4. Take necessary action along with EE Hydropower to protect or restore the Hydel power plants.
- 5. Arrangement of electric supply at the rehabilitation camps, search and rescue sites, hospitals, water supply, telephone exchange, police station, control rooms and other vital installations on top priority.
- 6. Prepare a contingency plan for alternate arrangement for providing electricity and submit the same before 7<sup>th</sup> May. They should also have a war footing restoration plan in case the some damages occur.
- 7. Keep sufficient stock of HSD and other POL items for generators.
- 8. To take help of the technical committee of which EE POWER is also a member.

## **DIVISIONAL FOREST OFFICER**

- 1. DFO is required to play an important role by virtue of being head of one of the most prominent departments. Illegal timbering and sawmill, hand mill has to be stopped and regular checking of forest area has to be done.
- 2. He shall provide all necessary manpower such as RFO, Forest guards etc to the district disaster management cell whenever called for.
- 3. He will have list of elephant owners ready with him and keep on updating at regular interval.
- 4. DFO will be completely empowered to requisition elephants from any private individual during the emergencies.
- 5. He shall provide services of forest guards etc for the search and rescue operations as well as for guarding important establishments. He shall give the list of forest guards available to the Sub-divisional disaster management cell and to SDPO Namsai on priority.
- 6. DFO has got a significant role as far as early warning is concerned. Since most of the forest guards are stationed deep in the jungles they can see the behavior of the river and giver early warnings.
- 7. DFO shall prepare a team of forest guards who will survey the river courses to check whether any unnatural dam has been formed or not because of landslides. This activity is very important and hence sincere guards are to be chosen for this activity.
- 8. Further DFO should take up the task of massive plantation at various locations in consultation with Panchayat leaders and GB. It will prevent the rivers from eroding their banks.

## EDUCATION DEPARTMENT

(Committee of Principal HSS, Headmasters)

- 1. Since students are most vulnerable to disasters and epidemics, the role of education department is extremely crucial.
- 2. Principals/Headmasters should get in touch with Sub-Divisional Disaster Management cell and DMO to prevent from disaster and epidemic and their needs will be addressed on priority basis.
- 3. The education department can provide an Army of volunteers in the form of NCC/NSS/Scouts or other students and teachers. Kindly keep these units ready and train them on the basic principles of disaster management.
- 4. The students are most vibrant messengers in the society. Hence their services can be effectively utilized for awareness generation on various issues such as health, hygiene, disaster and epidemic prevention etc.
- 5. The teachers are also important members of the society. In fact at many locations they are the only government officials available in the villages. The relation between the villagers and teachers is of mutual respect and hence their services can be very effectively used during the emergencies.
- 6. Principal/Headmasters are required to sensitize all the teachers about their role in disaster prevention and emergency management. In fact they can provide early warning and keep on updating about condition of the villagers.
- 7. Their role in protecting the students from the disaster and epidemic is immense and hence they should be properly trained to deal with these situations. The education department should not forget the Kumbhakonam incidence. To start with carry out training cum sensitization programme in each of the schools once academic session starts.
- 8. Hence role of BEO'S/Principal/Head Masters/ NCC, NSS, Scouts and Guide in-charges is very significant in emergency management.
- 9. Incorporate Disaster risk reduction into education curriculum, so that students would know the impact and take appropriate action to make their society safe.
- 10. All school building constructed under SSA should have earthquake designs.
- 11. Each school, colleges and **educational institutions should have school safety plans, teachers and students should be trained** on search and rescue operation and first aids. Each institution should have mock drills to practices the safety plans and update it regularly.

#### SR. STATION SUPERINTENDENT (ARUNACHAL PRADESH STATE TRANSPORT)

- 1. Prepare a database on all Governmental/Semi governmental/Private vehicles available in the district with the particulars such as owners/ type of vehicle/suitability etc.
- 2. The above-mentioned database is required to be provided to control room also.
- 3. The SS. Transport Officer is fully empowered to requisition any kind of vehicle government or private. He will requisition the vehicles rotationally and on equitable basis. He shall also requisition services of all private garages.
- 4. In fact during emergencies he will ensure that sufficient vehicles are requisitioned well in advance and parked at RWD workshop. He will then get the vehicles inspected by the Foremen.

- 5. He will also ensure availability of sufficient drivers also and keep a database of all government and private drivers.
- 6. He will coordinate with other officers regarding their needs for vehicles such as SMO, Search and rescue teams etc.
- 7. In case of scarcity he will ensure sufficient stock of POL items. At least 1000ltrs of Petrol and Diesel need to be stored for emergency purpose.

## **DD (URBAN DEVELOPMENT)**

(Supported by the Technical Committee)

- 1. He shall ensure that the drainages of the town are cleaned well before the monsoon. He shall do this activity before 15<sup>th</sup> May. He will ensure that at no locations the drainages are choked and flooded
- 2. During emergencies he is required to monitor the town area and keep vigil on flood prone areas. He will also divide the township in various segments and make one volunteer in charge of each section.
- 3. The waste disposal mechanism requires being more elaborate during floods as failure to dispose the waste may create problems related to Public Health.
- 4. UPO should remember that cleaned drainage will reduce the chances of flooding in the township. He should also remember that the quick waste disposal is extremely important.

## DD (ICDS)/CDPO

- 1. They will look after the needs of the children and women during the disaster in collaboration with Medical Department and Administration.
- 2. They will make the services of Anganwadi workers available during emergencies.

## Maintenance and Restoration Roads and Bridges.

- 1. EE PWD/RWD and BRO are responsible for the maintenance and restoration of the roads and bridges including foot suspension bridges and porter tracks.
- 2. Road communication is the lifeline to manage any type of disaster may it be flood, fire accident or outbreak of epidemic etc. hence the all the department related to the construction of roads and bridges should formulate a disaster management contingency plan of the department specific and submit to the office of the Deputy Commissioner &Addl. Deputy Commissioner, Namsai.
- 3. The Technical Committee will also assist these departments. These departments will submit a report regarding road communication on daily basis during monsoon season.

## **AGRICULTURE & HORTICULTURE**

- Every year thousands of acres of agricultural/horticultural lands were damaged due to flood, landslide, drought etc. Hence it is the responsibility of the DDA and DHO to undertake extension measures relating to the latest result of research available from different sources or already released varieties including flood tolerant varieties and other traditional cropping pattern/practices for agriculture in the generally flood affected areas.
- 2. Advice the farmers regarding the dates after which sowing/transplanting should be undertaken and also advise on the suitable cropping patterns keeping in consideration the soil fertility and climatic condition of the local region. The DDA/DHO will visit the areas generally affected by natural calamity along with LM staffs and his field staffs to make an assessment of the acreage under crops and number of cultivators' are likely to be affected well in advance say before the onset of monsoon season.
- 3. Assess the requirement of and assist the Deputy Commissioner in arranging seeds, seedlings, manures, pesticides, **agricultural loans** (in cash and kind) and **crop insurances** etc.
- 4. The department should arrange distribution of agricultural inputs under various **Centrally sponsored, NEC** and **State schemes**, in consultation with the Deputy Commissioner. Render technical guidance to the needy cultivators for salvage and protection of surviving crops and rising of such varieties of crops as may be suitable during the season or next crop season.
- 5. The Department should liaison with the **WRD** for removal of debris deposited in the agricultural fields due to flood, landslide etc. and also for flood protection works of agricultural/horticultural lands.
- 6. DDA and DHO will verify the crop loss reports due to natural calamity and forward the genuine cases of crop damage report as per Performa with photographs to the Chairman DEC for relief grants.
- 7. Promote local crop contingency plan as per the changing weather or climatic variations. Promote effective crop diversification including the hazard resistance crops to deal with shift in climate patters.
- 8. Ensure sustainable livelihoods in the areas, where recurrent climate risk i.e. recurrent drought, flood and cyclone prone areas) by promoting alternative income generating activities from farm to non-farm sectors such as promoting livestock and promotion of handicrafts or small scale cottage industries etc.

## MONITORING AND RELIEF REPORTING

1. The District Administration will actively monitor whole process of relief operation. Information gathered through the Outpost Administrative Officers and Control Rooms will be compiled and consolidated to facilitate easy and ready information/data on actual position of the disaster. Preliminary report on flood or other natural calamity situation will be put forward to the government for information.

- 2. All the resources available in the District will be mobilized properly and well directed to the cause. The Administration will also re-enforce on all fronts of arrangement to ensure that the relief works are carried out without any let up and reach to the victims promptly.
- 3. Losses sustained in respect of crop damage, damage of properties, public assets, livestock, human life, dwelling houses etc during the flood will be assessed and spot verified through the Circle Level Relief Committee/Circle Level Disaster Management Committee (CLRC/CLDMC) concern.
- 4. **Citizen Information Center** will be established in the District Control Room for providing all sorts of information to common citizen.

## **DISBURSEMENT OF RELIEF**

- 1. The **DEC** will sit to examine all the cases for grant of relief to the flood affected people.
- 2. Relief assistance in cash and kind will be rendered to the actual victims on the basis of loss assessment reports submitted by the **CLRC** concern.
- 3. The village authorities and Panchayat leaders will also be involved in the disbursement of relief.
- 4. All the persons, the departments or agencies and **NGO**s. will be commended suitably for their active and unflinching support or help at the time of need.

## CHAPTER-NINE

## PREVENTION, MITIGATION AND PREPAREDNESS MEASURES

Pre-disaster planning consists of activities such as disaster mitigation and disaster preparedness. Disaster mitigation focuses on the hazard that causes the disaster and tries to eliminate or considerably reduce its direct effects. The best example of mitigation is the construction of embankments and construction of proper drainage system in flood prone areas to avoid floods. The other example includes retrofitting of weak buildings to make them earthquake resistant.

And preparedness focuses on plans to respond to a disaster threat or occurrence. It takes into account an estimation of emergency needs and identifies the resources to meet the needs. The first objective of the preparedness is to reduce the disaster impact through appropriate actions and improve the capacity of those who are likely to be affected most. The second is to ensure that ongoing development continues to improve the capacities and capabilities of the system to strengthen preparedness efforts at community level. Finally it guides reconstruction so as to ensure reduction in vulnerability. The best example of preparedness activities are the development of community awareness and sensitization system through community education and administrative preparedness by way of stockpiling of supplies, developing emergency plans for rescue and relief.

## **SPECIFIC DISASTER MITIGATION MEASURES**

## **EARTHQUAKES**

NAMSAI district falls under earthquake zone-V the most vulnerable area in case of any earthquake occurrence, so following mitigation measures should be taken to reduced the impact of earthquake

- Adoption of building codes for new construction in various areas.
- Public utility buildings must be located in stable areas or in stiff soil.
- > Retrofitting of weak structures.
- Relocation of people settled in the steep slope areas and near the river bank.
- > Demolition of unsafe structure in populated areas.

#### FLOOD MITIGATION

Flood mitigation refers to the measures aimed at prevention and preparedness. It reduces the actual or probable impact of floods on the people and their environment.

Floods are very common in Namsai district. The main causes of floods in Tirap District may be

- Destruction in drainage system due to heavy rainfall.
- Increase in siltation in riverbeds due to erosion in the catchment areas.
- Change of river course because of poor natural drainage system.

The mitigation measures should be oriented to take proper care of these problems and thus will automatically reduce the impact of flood in the district. The various measures adopted for flood mitigation may be categorized in two groups structural and non-structural.

## **STRUCTURAL**

- ➤ Construction of embankments / floodwalls along the river bank and improvement of the channel (by WRD).
- Construction of drainage system in the Namsai town and other parts of the district (by PWD/UD).
- ➤ Careful location of new facilities, particularly community facilities such as schools, hostels, hospitals and other important infrastructure away from flood prone areas.

#### **NON-STRUCTURAL**

- > Collection of daily rainfall data (by WRD).
- Flood forecasting and warning (by WRD & General Administration).
- ➤ Prepare detailed floodplain map of the district, based on extent of land submerged and assessment of damages. Analyze how the pattern of flooding has changed over a period of time (by WRD & GA).
- ➤ Plantation in the catchment areas and landslide zone to check soil erosion (by forest dept).
- ➤ Preparation of DDMP and awareness programme through IEC (information, education & communication by GA).

## **CYCLONIC STORM**

Cyclonic storm is annual feature in Namsai District during pre-monsoon season (March-May) causing damages to the crop and other properties. The main mitigation strategies for storm hazards are a well informed public and an effective warning system. The following mitigation measures can be adopted to reduce the impact of cyclonic storm: -

- ➤ Location of key facilities in leeward sides of hill/ less vulnerable areas (by District Administration and Land Management).
- Planting windbreaks in the most vulnerable locations (by DFO (T)).
- ➤ Construction of strong, wind safe public buildings which can be used for community shelter (by UD & PWD).
- ➤ Crops can be protected by introducing agricultural practices and cultivation of those crops which are more resistant to high winds (Agriculture & Horticulture Dept.).
- ➤ Compilation of meteorological data for forecasting of storm (By Dept concerned).
- ➤ Public dissemination of information through mass media, poster campaigns and village meetings (by District Administration/IPR).

## **LANDSLIDE**

Landslide is not very common in Namsai District. The chief mitigation measures to be adopted in the district are: -

- Correction of drainage systems in the landslide prone areas by maintenance of natural drainage channels both micro and macro in vulnerable slopes (by BRO/PWD/UD/RWD).
- Regulation of land use pattern (Land Management/GA).
- ➤ Afforestation of areas occupied by degraded vegetation (by DFO (T)).
- ➤ Re-location of settlements that are in the landslide prone areas (by GA).
- Construction of gabion structure in important areas (by WRD/PWD/UD).
- > Creation of awareness among local people (by GA/IPR).
- Regular observation of rainfall pattern (by WRD).

## FIRE ACCIDENT

Fire accident is the most common mishap in Namsai District causing regular threat to the people and their properties. The compact settlements and the wooden, bamboo and thatch roof houses is the main cause of fire accident. Illegal / faulty electric connection is also the cause of fire accident in urban areas. The following mitigation measures may be taken up to contain fire accident: -

- Modernization of fire-fighting equipments and strengthening infrastructure.
- ➤ Identification of pockets, industry etc. which is highly susceptible to fire accidents or areas, events which might lead to fires, building collapse etc. and educate people to adopt safety measures.
- ➤ Building awareness in use of various fire protection and preventive systems.

- Conduct training and mock drill to the communities to handle fire emergencies more effectively.
- > Training of masons & engineers in fireproof techniques.
- Installation of fire extinguisher cylinders in all institutions (by concerned institute).
- Construction of fire hydrant in fire prone areas (by PHED/Police/GA).
- ➤ Installation of fire warning systems in community facilities such as in school, hostels and hospitals (by concerned institute).
- Attachment of thatch houses in government buildings should be prohibited (by GA).
- Awareness about the causes of fire accident in rural areas and motivate the villagers to construct their houses at sufficient distance from one another (by GA/PRI).

## **FOREST FIRE**

Occasional forest fire also takes place in Namsai District causing widespread damage to flora and fauna in the area especially in dry season. Following measures should be adopted to deal with this calamity: -

- ➤ Deployment of forest watcher in strategic locations with wireless set (by Forest Dept.).
- Awareness to the local people about forest fire and importance of flora and fauna.

## **BIOLOGICAL DISASTER**

All major outbreaks of diseases, man-made or natural, if not detected early and contained, spread and soon go beyond the coping ability of the district administration, requiring support from the state/ centre. The primary health care system shall play a crucial role in detecting the early warning signs. The village health functionaries [ASHA/Anganwadi worker/ANM/VFA) will report the public health events to the peripheral public health services outlets such as sub-centre, PHCs and CHCs as soon as possible. Public health support shall be provided by the DMO and other officers related to public health work such as the DRCHO, immunization officer and district officers for TB and malaria. The network of PHCs and the network of sub-centre are the backbone of the public health system through which the public health measures are instituted—be it event-based, house-to-house surveillance, provision of safe drinking water through chlorination, vector control measures, mass chemoprophylaxis, sanitation measures, home care or referral of critical patients. The DMO will mobilize medical officers from the PHCs, CHCs and Dist. Hospital supported by health workers from the sub-centre for field work. Reinforcements if required will be arranged by the state governments and district administration from other districts, medical colleges and from central government institutions.

#### MEDICAL PREPAREDNESS

Medical preparedness will be based on the assessment of bio threat and the capabilities to handle detect and characterize the microorganism. Specific preparedness will include pre- immunization of hospital staff and first responders who may come in contact with those exposed to anthrax, smallpox or other agents. It further relates to activities for management of diseases caused by biological agents, EMR, quick evacuation of casualties, well-rehearsed hospital DM plans, training of doctors and paramedics and up gradation of medical infrastructure at various levels which will reduce morbidity and mortality. Identification of supply chain of medicine and medical equipment for protection, detection and medical management. Stockpiling of drugs, equipment and consumables including vaccines.

## **MITIGATION**

The essential protection against natural and artificial outbreaks of disease (bioterrorism) will include the development of mechanisms for prompt detection of incipient outbreaks, isolation of the infected persons and the people they have been in contact with and mobilization of investigational and therapeutic countermeasures. In the case of deliberately generated outbreaks (bioterrorism) the spectrum of possible pathogens is narrow, while natural outbreaks can have a wide range of organisms. The mechanism required however, to face both can be similar if the service providers are adequately sensitized. The Health Department &Veterinary Department is the nodal agency responsible for monitoring and control of epidemics.

#### **PREVENTION**

- > Strengthening of integrated surveillance systems based on epidemiological surveys; detection and investigation of any disease outbreak.
- Establishment of Early Warning System (EWS).
- ➤ Coordination between public health, medical care and intelligence agencies to prevent bioterrorism.
- ➤ Rapid health assessment and provision of laboratory support.
- ➤ Institution of public health measures to deal with secondary emergencies as an outcome of biological disasters.
- > Immunization of first responders and adequate stockpiling of necessary vaccines.
- Regular flow of data from both government establishment and NGOs run hospitals (by DA).

#### **PREPAREDNESS**

- ➤ Identification of areas prone to certain epidemics must be updated to access field requirements (by DMO & DVO).
- ➤ Equipping Medical First Responders (MFRs)/Quick Reaction Medical Teams (QRMTs) with all material logistics and backup support.
- > Testing laboratories in district hospital must be well equipped and updated (by DMO).
- ➤ Communication and networking system with appropriate intra-hospital and interlinkages with state ambulance/transport services, state police departments and other emergency services.
- Laying down minimum standards for water, food, shelter, sanitation and hygiene.
- ➤ Proper education and training of personnel, with the aid of information networking systems and conducting continuing medical education programmes and workshops at regular intervals.
- Awareness campaign to the PRI members, students and the villagers about basic of biological disaster /various kinds of disease and their causes that are prevalent in the area (by DMO/DVO/DA).

#### ROAD ACCIDENTS

Many lives were lost and causalities were reported annually due to road accident, which is cause due to reckless driving and poor road conditions. The following measures may be adopted to mitigate road accidents: -

- Strict implementation of motor vehicle Act (by Police).
- ➤ Installation of traffic sign boards, breakers and traffic signal in accident prone locations (by Police/BRTF/PWD/RWD).
- ➤ Carry of First Aid Box in every vehicle must be made mandatory (by Police/DTO (transport).
- Insurance of all vehicles must be updated (by Police).
- Awareness about traffic rules should be imparted to all drivers and commuters through IEC (by police/DTO (Transport)).

## **TRAINING OF FUNCTIONARIES**

The district administration should arrange periodical training programmes for all concerned departments. The programmes may be organized at district headquarters or at Block Headquarters and select officials may be deputed at state/ national training centers. These trained officials should be entrusted to train other lower level officials and panchayat representatives. Training camps may be organized at district level in which experts may be invited from reputed institutes.

## SIMULATION EXERCISES/ MOCK DRILL

Periodic simulation exercises may be carried out to test the preparedness of all concerned role players. Drills may be carried out at various sites, Hospital, Offices, Schools, Markets etc. The shortcomings and weaknesses observed during this must be identified and eradicated with proper and timely action.

## **DISSEMINATION OF DDMP**

The responsibility for dissemination of the plan is vested with District Control Room under DC's supervision. 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 institutions within the district
- To general public.

## CHAPTER-TEN

## CHECKLIST FOR DISASTER MANAGEMENTAT CIRCLE LEVEL

## Name of the Circle:

#### **BEFORE DISASTER**

- 1. Updating of Disaster Management Committees at Circle level as well as Village Level.
- 2. Ensure timely updates of Disaster Management Plan of Circle and all the Villages of that particular Circle.
- 3. Identification of flood prone Villages or areas under the Circle.
- 4. Identification of sites for opening/ setting up of Relief Camps.
- 5. Setting up of Control room at Circle Headquarter as well as those Villages vulnerable to Disaster.
- 6. Identification of emergency landing grounds or for air dropping.
- 7. Stocking of essential commodities such as rations items, emergency medicines, POL and LPG.
- 8. Mass awareness campaigns regarding preventive measures of flood, water-borne diseases, earthquake, fire accident and other natural calamities.
- 9. Submission of Disaster Management plan of Circle and Villages to District Disaster Management Authority.

## **DURING DISASTER**

- 1. Evacuation of marooned people to a safer place/ relief camps.
- 2. Setting up of relief camps for evacuated persons.
- 3. Operation of Control room round the clock.
- 4. Submission of hourly/ daily calamity situation report to District Disaster Management Cell as per Performa annexed at 'A'.
- 5. Conducting of Co-ordination meeting of Circle level officials, public leaders, NGOs etc. to mitigate the disaster.

## AFTER DISASTER

- 1. Conducting of Physical verification/ survey of losses/ damages of public as well as individual property due to natural calamity by Circle Level Damage Assessment Team.
- 2. Submission of Damage report along with photograph proof to DEC for scrutiny and consideration.
- 3. Remarks

## Performa - A

## SITUATION REPORT AS ON.....

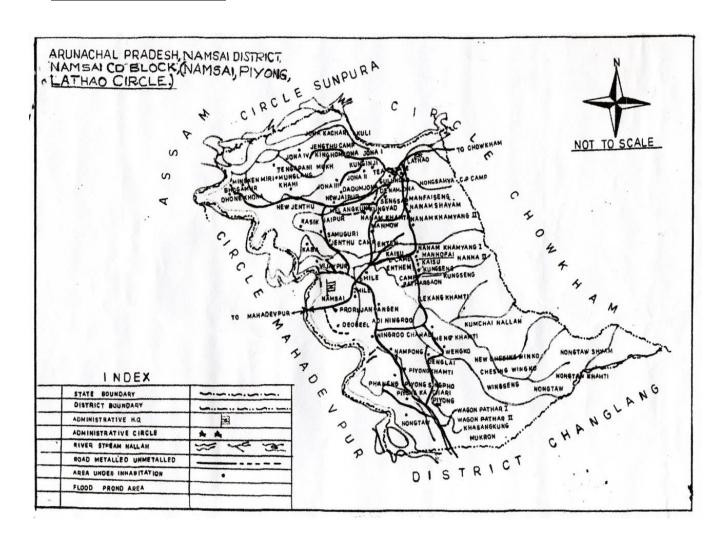
1.	Name of the Circle	:
2.	Amount of rainfall with date	:
3.	Name of the rivers flooded	:
4.	Name & number of villages submerged	:
5.	Number of house damaged	:
6.	Number of relief & rescue sorties carried out	:
7.	Date of occurrence	:
8.	Number of population affected	:
9.	Number of relief camps opened	:
10.	Number of human lives lost	:
11.	Number of livestock lost	:
12.	Cultivation area damaged (in hect.)	:
13.	Approximate value of crops damaged	:
14.	Name of road cut off due to landslide with location	:
15.	Period of road blocks	:
16.	Electricity problem, if any	:
17.	Drinking water Problem, if any	:
18.	Action taken by Circle administrative Centre	:
19.	Expenditures incurred, if any	:

## CHAPTER-ELEVEN

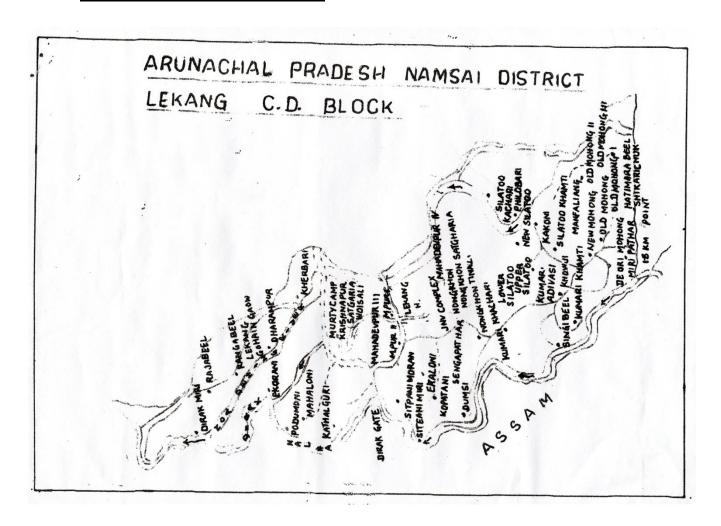
# DEPARTMENT WISE LIST OF NODEL OFFICERS FOR DISASTER MANAGEMENT

Sl.	Name & Designation	Address	Contact nos.	Mobile
no				
1	R.K Sharma, DC Namsai	Administration	262228(o) 262333(R)	9436049444
2	S.Mining, ADC,Namsai	-do-		9402024536
3	E.Tingkhatra	DDMO		8787757540
4.	CD Manchey, DF&CSO	Civil supply		8974149072
5.	J.Goswami, Manager	Namsai LAMPS		9435336936
6.	T. Jamoh ,AMDO	Dept of Geology & mining		9402422801
7.	Mining guard	Dept of Geology & Mining		9402244000
8.	Dr. N.S. Namchoom	DMO,Nms distt.		8259078723
9.	Dr.A Wailong, Medl. Supdt.	Dist. Hospital Namsai		9436049709
10.	Dr.C.N Mantaw SMO	Dist Hospital, Namsai		9436630364
11	Dr.K.Sarmah, DAH&VO	Vety Deptt,Namsai	262345(O)	9101256516
12	Dr.J.Mungkhung SVO	Vety deptt,Lekang	244452(O)	9436259877
13	Dr.Monalisha Luingkeing SVO	Vety deptt, Chongkham	222030(o)222110(R)	9436049429
14	U.J Talukdar Stockman	Vety Mobile unit,Nms		9436054864
15	Er. Radhe Raja, E E	PHE Department	262382(O)262383(R)	9436837800
16	Er.B Khamyang,AE	PHE Department		7085159699
17.	Er C.J Mannow,EE	WR Department		8731983532
18.	Er. C.S Namshum, EE	PW Department		9402700724
19.	Er. A.K. Paul, EE	Power Department		8792280117
20	Sri L.Dai, ADO	Agriculture Deptt		8415845237
21	Er.T .Wangsu, A.E	WRD,Namsai		9378132424
22	ErK.Manyu A.E	PWD		9436049259

## **NAMSAI CIRCLE**



## MAHADEVPUR CIRCLE



## **CHONGKHAM CIRCLE**

