SERCHHIP DISTRICT DISASTER MANAGEMENT PLAN

2023



Prepared by
District Disaster Management
Authority, Serchhip District

CHAPTER 1

INTRODUCTION

Serchhip District Disaster Management Plan 2023 is prepared to be activated in times of Disaster throughout the District.

Disaster has been mankind's constant companion since time immemorial which causes widespread ecological, physical as well as psychological loss which severely affects the community. It is an unforeseen calamity which causes massive harm to lives as well as properties. Therefore, it is crucial to have a Plan which encompasses measures for prevention, mitigation, preparedness, response and recovery to reduce the risk as well as manage and take necessary action to restore the damages.

The District Disaster Management Plan contains reliable and up to date information about the topography and socio-economic and climatic condition of the region which helps in identifying areas having various kinds of natural and man-made problems and thus will be of great help in times of occurrence of possible future disaster and its subsequent proper management to minimize its severe effects.

1.1 Aims and Objectives of the District Disaster Management Plan (DDMP):

Section 31 of Disaster Management Act 2005 (DM Act), makes it mandatory

to have a disaster management plan for every district. DDMP shall include Hazard Vulnerability Capacity and Risk Assessment (HVCRA), prevention, mitigation, preparedness measures, response plan and procedures. An indicative list with possible plan objectives is given below:

- i. To identify the areas vulnerable to major types of the hazards in the district.
- ii. To adopt proactive measures at district level by all the govt. departments to prevent disaster and mitigate its effects.
- iii. To define and assign the different tasks and responsibilities to stakeholders during the pre-disaster and post-disaster phases of the disaster.
- iv. To enhance disaster resilience of the people in the district by way of capacity building.
- v. Reduce the loss of public and private property, especially critical facilities and infrastructure, through proper planning.
- vi. Manage future development to mitigate the effect of natural hazards in the district.
- vii. To set up an Emergency Operations Centre at the District level to function effectively in search, rescue, response.
- viii. To develop the standardized mechanism to respond to disaster situations to manage the disaster efficiently.

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- ix. To set up an early warning system so as to prepare the community to deal with the disaster and responsive communication system based upon fail-proof proven technology.
- x. To prepare a response plan based upon the guidelines issued in the State Disaster Management Plan so as to provide prompt relief, rescue and search support in the disaster affected areas.
- xi. To adopt disaster resilient construction mechanism in the district by way of using Information, Education and Communication for making the community aware of the need of disaster resilient future development.
- xii. To make the use of media in disaster management.
- xiii. Rehabilitation plan of the affected people and reconstruction measures to be taken by different govt. departments at district level and local authority.

The District Disaster Management Plan (DDMP) is the guide for achieving the objective i.e. mitigation, preparedness, response and recovery. This Plan needs to be prepared to respond to disasters with sense of urgency in a planned way to minimize human, property and environmental loss.

1.2 Authority for DDMP:

Under Disaster Management Act 2005(DM Act) Section 31

"There shall be a plan for disaster management for every district of the state"

- (1) The District Plan shall be prepared by the District Authority, after consultation with the local authorities and having regards to the National Plan and the State Plan, to be approved by the State Authority.
- (2) The District plan shall include-
- (a) Identify the areas in the district vulnerable to different forms of disasters.
- (b) The measures to be taken, for prevention and mitigation of disaster, by the Departments of the Government at the district level and the local authorities in the district.
- (c) Capacity-building and preparedness measures require to be taken by the Departments of the Government at the district level and the local authorities in the district to respond to any threatening disaster situation or disaster.
- (d) response plans and procedures, in the event of disaster, providing for;
- allocation of responsibilities to the Departments of the Government at the district level and the local authorities in the district;
- prompt response to disaster and relief thereof;
- procurement of essential resources;
- establishment of communication links, and
- the dissemination of information to the public;
- (e) Such other matters as may be required by the State Authority.
- (3) The District Plan shall be reviewed and updated annually.

- (4) The copies of the District plan referred to in sub-section (2) and (4) shall be made available to the Departments of the Government in the district.
- (5) The District Authority shall send a copy of the District Plan to the State Authority which shall forward it to the State Government.
- (6) The District Authority shall, review from time to time, the implementation of the Plan and issue such instructions to different departments of the Government in the district as it may deem necessary for the implementation thereof.

Section 32 in the Disaster Management Act, 2005

- 32 Plans by different authorities at district level and their imple-mentation. —Every office of the Government of India and of the State Government at the district level and the local authorities shall, subject to the supervision of the District Authority,—
 - (a) prepare a disaster management plan setting out the following, namely:—

 (i) provisions for prevention and mitigation measures as provided for in the District Plan and as is assigned to the department or agency concerned;
 (ii) provisions for taking measures relating to capacity-building and preparedness as laid down in the District Plan;
 (iii) the response plans and procedures, in the event of, any threatening disaster situation or disaster;
 - (b) coordinate the preparation and the implementation of its plan with those of the other organisations at the district level including local authority, communities and other stakeholders:
 - (c) regularly review and update the plan; and
 - (d) submit a copy of its disaster management plan, and of any amendment thereto, to the District Authority.

1.3 Evolution of DDMP:

Stakeholders and their responsibilities: Serchhip District is one of the most disaster prone districts of Mizoram which falls under zone V of Earthquake. It experiences landslides, hailstorm, cyclones, cloudburst, forest and urban fire and road accidents. The need for Disaster Plan and Disaster Response plan arises from the fact that communities which have effectively applied the DDMP process are better able to cope with the impact of disaster, with effective DDMP human and other resources can be mobilized better to deal with impending as well as aftermath of disasters.

1.4 Stakeholders and their responsibilities:

At the State level, the State Disaster Management Authority and the Office of the Commissioner of Relief (CoR), Revenue Department, are the major institutions in the State that deal with all the phases of disaster management. All the major line departments of the State Government and the emergency support function agencies converge into SEOC during disasters. At the District level, District Disaster Management Authority, with the District Collector designated as Response Officer (RO), and other line

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departments at district HQ are responsible to deal with all phases of disaster management within district. Other technical institutions, community at large, local self-governments, NGOs etc. are also stakeholders of the District Disaster Management Pan. The role of the stakeholders has been prepared with the sole objective of making the concerned organizations understand their duties and responsibilities regarding disaster managementa all levels and accomplishing them.

The District Collector has the following duties:

- i. To facilitate and coordinate with local Government bodies to ensure that pre and post disaster management activities in the district are carried out.
- ii. To assist community training, awareness programmes and the installation of emergency facilities with the support of local administration, non-governmental organizations and the private sector.
- iii. To function as a leader of the team and take appropriate actions to smoothen the response and relief activities to minimize the adverse impact of disaster.
- iv. To recommend the Commissioner of Relief (CoR) and State Government for declaration of disaster.

Local Authorities have the following duties:

- i. To provide assistance to the District Collector in disaster management activities.
- ii. To ensure training of its officers and employees and maintenance of resources so as to be readily available for use, in the event of a disaster.
- iii. To undertake capacity building measures and awareness and sensitization of the community i.e. To ensure that all construction projects under it conform to the standards and specifications laid down.
- iv. Each department of the Government in a district shall prepare a disaster management plan for the district.
- v. The local authorities need to ensure that relief, rehabilitation and reconstruction activities in the affected area, within the district, are carried out
- vi. Trust / Organisations managing Places of Worships & Congregation a. Each establishment / organisation identified as —critical infrastructure and key resourcel,
 - b. Including places of congregation in a district shall prepare —on-site and —off-site
 - c. Disaster management plan. Carry out mitigation, response, relief, rehabilitation and
 - d. Reconstruction activities.

Private Sector:

- i. The private sector should be encouraged to ensure their active participation in the predisaster activities in alignment with the overall plan developed by the DDMA or the Collector.
- ii. They should adhere to the relevant rules regarding prevention of disasters, as may be stipulated by relevant local authorities.

iii. As a part of CSR, undertake DRR projects in consultation with district collector for enhancing district's resilience.

Community Groups and Volunteer Agencies:

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

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

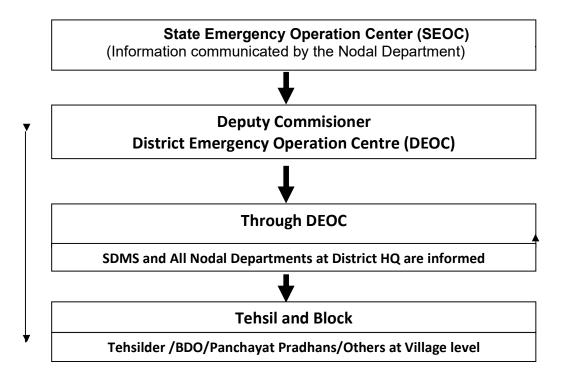
- 1.5 How to use the Plan: Section 31 of DM Act 2005 makes it mandatory for every district
 - i) to prepare a disaster management plan, for the protection of life and property from the effects of hazardous events within the district.
 - ii) In significant emergencies or disasters, District Magistrate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

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- the State EOC. If state resources have been exhausted, the state will arrange to provide the needed resources through central assistance.
- xiii) The District EOC will coordinate with the State EOC, Agencies of the Govt. of India like IMD / CWC to maintain upto-date information concerning potential flooding, cyclones etc. As appropriate, such information will be provided to the citizens of the affected areas in the district.
- **xiv)** Upon receipt of potential problems in these areas, DEOC / designated officials will appropriately issue alert and notify action to be taken by the residents.
- **xv)** Disaster occurrence could result in disruption of government functions and, therefore, all levels of local government and their departments should develop and maintain procedures to ensure continuity of Government action. It is necessary that for suo-moto activation of the agencies involved in the disaster management, the institutional trigger mechanism should be there so that every agency takes its assigned role at the time of such disaster.

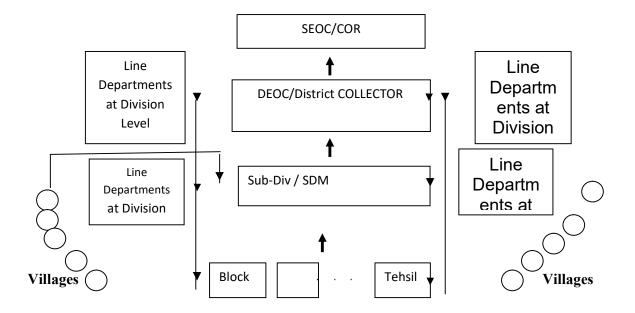
There will be three types of Trigger mechanism that will be set up depending upon the warning signals availability as mentioned below:

Warning Signal Available: In such case the Govt. of India / State Govt. has authorized agencies generating such early warning signals; in case the matter is very urgent needing action at Block/Tehsil/Village levels, the alerts and action points will go directly to all concerned. Arrangements need to be in place to ensure prompt receipt of these signals and action thereon. After such warning/advisory received by the State Govt., the SEOC will communicate it to the DEOC urgently. The DEOC will communicate such warning to the departments at the district level. The information flow in such cases will be as follows:



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

- i. The concerned village will report to the Panchayat, block, police station/SDM/DM and the information will be sent to the Deputy Commissioner.
- ii. DDMA will assess the information and assess the disaster to be of the level L0, L1, L2 or L3.
- iii. DEOC will be activated and if required the SEOC will be kept at alert if assistance needed; otherwise information of the incident will be passed on to SEOC.
- iv. DDMA will convene the meeting of DEOC and plan the management of the disaster as Incident Response Plan. v. The respective Incident response teams will be rushed to the site for effective management.



Without Warning – Information, generally, should flow from Bottom side – up but it is a crisscross scenario The disaster response structure will be activated on the receipt of a disaster warning or on the occurrence of a disaster by the competent authority. The occurrence of a disaster may be reported by the concerned monitoring authority to the Commissioner of Relief/SDMA by the fastest means. The SDMA/SEC will activate all departments for emergency response including the State EOC, District EOC, police personnels and ERCs. In addition, they will issue instructions to include the following details: i. Exact quantum of resources (in terms of manpower, equipments and essential items from key departments/stakeholders) that is required. ii. The type of assistance to be provided. iii. The time limit within which assistance is needed. iv. Details of other Task/Response Forces through which coordination should take place. v. The State EOC, ERCs and other control rooms at the State level as well as district control rooms should be activated with full strength.

1.6 Approval Mechanism of the Plan:

As defined in Section 30 of DM Act 2005, DDMA shall act as the district planning; coordinating and implementing body for disaster management and take all measures for the purpose of disaster management in the district in accordance with the guidelines laid down by the National Authority and the State Authority. Accordingly, the District DM plan shall be prepared by the District Authority, after consultation with the local authorities and having regard to the National DM Plan and the State DM Plan.

1.7 Plan review and updation periodicity:

Training- After developing a plan, it must be disseminated and managers must be required to train their personnel so that they have the knowledge, skills and abilities needed to perform the tasks identified in the plan. Personnel should also be trained on the organization-specific procedures necessary to support those plan tasks.

Exercise the Plan - Evaluating the effectiveness of plan involves a combination of training events, exercises and real-world incidents to determine whether the goals, objectives, decisions, actions and timing outlined in the plan led to a successful response. The purpose of an exercise is to promote preparedness by testing policies plans and training personnel.

Revise and Maintain - Planning teams should establish a process for reviewing and revising the plan. Reviews should be a recurring activity. Review on an annual basis is considered minimum. It should be mandatory to consider reviewing and updating the plan after the following events:

- v. A major incident.
- vi. A change in operational resources (e.g., policy, personnel, organizational structures, Management processes, facilities, equipment).
- vii. A formal update of planning guidance or standards.
- viii. Each activation.
- ix. Major exercises.
- x. A change in the district's demographics or hazard or threat profile.
- xi. The enactment of new or amended laws or ordinances.

The responsibility for the coordination of the development and revision of the basic plan, annexes, appendices and implementing instructions must be assigned to the appropriate person(s).

It is recommended that a DDMP be **internally reviewed on a yearly** basis and either be updated or reaffirmed. The updates or reaffirmed document may also be used to summarize the accomplishments of the past year and help the administration to prioritize mitigation goals for the next year.

CHAPTER - 2

HAZARD, VULNERABILITY, CAPACITY AND RISK ASSESSMENT

This chapter is dynamic and hence, would enhance common understanding amongst stakeholders on priority sector areas that need attention for risk reduction and sustaining development gains. The depth of HVCRA will depend on the availability of resources. Therefore, analysis of existing information should form the basis of the DDMP and this section should be updated annually and relevant action points in the document should be suitably modified to address the new analytical findings.

Serchhip District is vulnerable to all types of disasters like earthquake, landslide, fire, house fire, cyclone, cloudburst, mudslide, hailstorm, etc. Due to improper plan of the town, routes to different villages and other means of inter village communications and conditions of the people based on the District profile makes it mandatory to prepare District Disaster Management Plan to tackle disaster at the occurrence of it.

Serchhip District lies in the Zone V of the earthquake zonation map. It is also highly vulnerable to Landslide due to its soil type. It has experiences all types of man made disasters like motor accidents, house fire, etc. 50% of the total population lives and rural areas and are Below Poverty Line. Their main source of income is agriculture, few are engaged to Government jobs and other few are oriented in trading economy.

Hazards like cyclone, flood, hailstorm, cloudburst, house fire and mudslide occurs every year. The whole District is vulnerable to the above mentioned hazard but cyclone is the most destructive hazard of the District which destroys almost every village every year. Flood is one hazard which also causes damage to agricultural crops two Important Towns like Serchhip and Thenzawl. Mudslide since recently cause loss of lives and property during rainy season at the north side of the District. Most of all, Earthquake will be highly destructive for the District as connectivity of all villages within the District is vulnerable to Landslide as roads will be block and landlocked villages will be facing all kinds of difficulties if Earthquake of 7 magnitude occurs in the District.

2.1.1 Socio Economic Profile of the District:

Location:

Serchhip district is the smallest district in the state. Serchhip district falls at the heart of the state of Mizoram. Its headquarters is at Serchhip. Serchhip District occupies the central part of Mizoram, extending more to the extreme side; 112 km from Aizawl along NH 54 between Aizawl and Lunglei, elevated at 1281 meters above mean sea level, it lies between 23°35'58'82" and 23°00'20'84" N latitudes and 92°41'06'00" and 92°40'39'63" E longitudes.

Total Geographical Area:

The total area is 1421.60 sq.km, which is approximately 14% of the state of Mizoram.

Boundary: East : Champhai District.

North & North West : Aizawl District.

South : Hnahthial District.

It shared international border with Myanmar in the south-east.



Administrative Sub-Division: Serchhip Sub-Division, Thenzawl Sub-Division & North Vanlaiphai Sub-Division.

Rural Development Block: Serchhip R.D Block and East Lungdar R.D Block.

Administrative units:

In Serchhip district there are three assembly constituencies' viz., 26-Serchhip, 28-Hrangturzo (formerly N.Vanlaiphai) and 27-Tuikum (earlier Lungpho). For the purpose of developmental and general administration, the district has been divided into three subdivisions, viz., Serchhip, N.Vanlaiphai and Thenzawl sub-divisions. Serchhip district has 44 villages having their own village councils.

Geographical area (in hectare) : 142160

Geomorphic Units: High: 169720

 Medium
 :
 56865

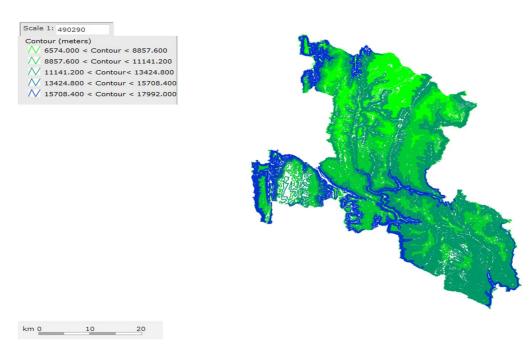
 Low
 :
 64092

 Valley
 :
 3362

 Flood Plain
 :
 869

 Total
 :
 142160

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Topographical details

Geology and geomorphology: The geology of the district represents a monotonous sequence of argillaceous and arenous rocks, which are classified by Geological Survey of India into four formations viz., Lower, Middle and Upper Bhubha, and BokaBil Formations. The formations are folded into almost N-S trending.

The Area is mainly characterised by several main ridgelines and intervening valleys and less prominent ridges. Tlawng River forms the western boundary of the district, which flows for a short distance of about 16.30 km. It flows along a relatively broad valley and rather smooth terrain and has a few food plains.

Rock types:

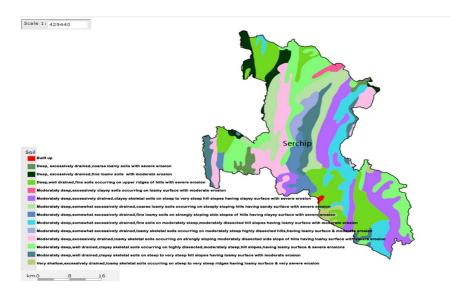
Sand Stones : 703.66 sq.km

Siltstone and Shales : 674.94 sq.km

Clayey Sand : 33.71 sq.km

Gravel, Sand & Silt : 9.29sq.km

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Demography (according to census 2011):

Population

 Total Population
 : 64,875

 Male
 : 32,824

 Female
 : 32,051

Density : 46

Literacy Rate in Percentage

Literacy Percentage of the District : 97.91

Literacy Percentage of Male : 99.24

Literacy Percentage of Female : 98.28

Household Details

Serchhip Block : 8653 E.Lungdar Block : 3596

Type of Workers

Cultivators : 18035 Agricultural Labourers : 575 Industrial Labourers : 655 Others Workers : 5518

Others in o	110015		7510				
	Percentage (%) of Main Workers						
DISTRICT	Cultivators	Agricultural	Workers in	Other Workers			
		Labourer	Household				
			Industries				
Serchhip	73.07	4.30	3.10	28.10			

Climate:

Month-wise highest and lowest temperature recorded in the district

Sl.No	Month	Maximum Temperature (in centigrade)	Minimum Temperature (in centigrade)
1	January	23.11	11.20
2	February	26.31	14.60
3	March	26.78	15.39
4	April	28.57	17.78
5	May	26.68	16.26
6	June	27.87	19.37
7	July	27.61	18.64
8	August	25.76	18.60
9	September	28.19	19.28
10	October	27.21	17.57
11	November	26.52	14.48
12	December	25	12.89

Rainfall Data: 2022-2023

Rainfall (in mm)2021	Rainfall (in mm)2022
Nil	13.4
Nil	11.20
6.00	25.30
Nil	50.20
24.9	284.5
414.5	772
356.4	446.3
418.6	262.7
331.4	246.1
234.8	270.7
166.60	-
105.2	-
	Nil Nil 6.00 Nil 24.9 414.5 356.4 418.6 331.4 234.8 166.60

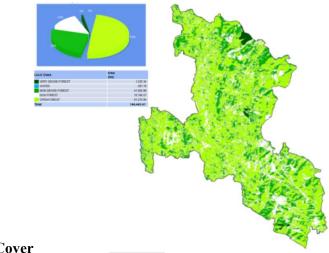
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Total No of rain recording station in the district : 01

Location of rain recording station : DAO's Office

Address : Kikawn, Serchhip.

Contact No : 03838-222539



Forest Cover

Land use pattern:

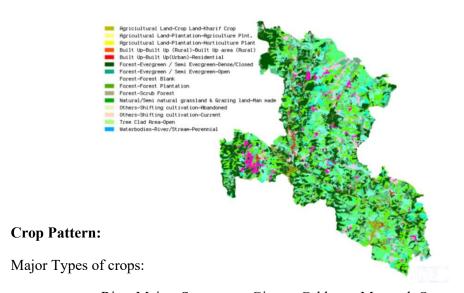
Dense Forest Area : 183.54 sq.km

Medium Dense Area : 170.53 sq.km

Less Dense Area : 1989.14 sq.km

Shifting cultivation Area : 66.60sq.km

Abandoned Shifting Cultivation Area : 217.79sq.km



Rice, Maize, Sugarcane, Ginger, Cabbage, Mustard, Orange, Banana etc.

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Drinking water sources (2011 Census)

Springs 8 Tuikhur (waterholes) 130 Hand Pumps 25 PHE Stands 540

Rivers and creeks

S/n	Name of the River/Creek	Tributaries	South Flowing / North Flowing
1	Tuichang	Tuikum, Varhva, Tuiphal, Tuisang, Maicham, Nghalrawh, Tuikau, Kharzawl, Kawlkulh, Chekawn	South Flowing
2	Tuipui	Zawngtah, Arsi, Lengthuam	South Flowing
3	Zuva	Dilkawn, Saisiak, Sehung, Mauhak	South Flowing
4	Mat	Hmawngawn, Tuichar, Lumtui, Matvate, Darnam	South Flowing
5	Tlawng	Liklui, Tuihnial	North Flowing
6	Tuirial		North Flowing
7	Tuirini		North Flowing
8	Tuivawl		North Flowing



Irrigation system and dams:

S/n	Name of the Project	Area (in hectare)
1	Lumtui	120
2	Mualvawm	30
3	Sihpuk	15
4	Zehtet	30
5	Thuhruk	45
6	Zuangleng	75
7	Tuikhiang	45
8	Tuisen	70
9	Lungzawl	60
10	Sertawk	40
11	Kaihthlak	30
12	Tuirum	45

Infrastructure and services:

Road network (in kilometers)

S/n	Types of Roads	Surfaced	Un-surfaced	Total
1	State Highway	72.8	Nil	72.8
2	Major District Road	Nil	154.45	154.45
3	Other District Road	18	51	69
4	Town Road	79.67	40.69	120.36
5	Village Road	1.13	2.55	3.68
6	National Highway (BRO)	68	Nil	68
7	Total	239.6	248.69	488.29

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Alternate route structure

S/n	Vulnerable Areas	Main Route	Alternate Route
1	Tlungvel Quarries	NH – 54	Thenzawl to Aizawl New Road
2	Stone Quarry near Keitum village	NH – 54	Thenzawl to Lunglei New Road

Transportation facilities

Sl.No	Number of Maxi Cab	No.of Bus	No. of Truck
1	39	2	23

Financial institution

S/n	Name of The Institution	Address	Telephone Number	
1	State Bank of India	Serchhip	222217	
2	Mizoram Rural Bank	Serchhip	222449	
3	Mizoram Rural Bank	New Serchhip	222893	
5	Mizoram Cooperative Apex Bank	Serchhip	222214	
6	Punjab National Bank	Serchhip	9862363807	

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Shelter

Flood/Cyclone

Flood/ Cyclone shelter has not been constructed in the district but the following halls has been identifies for the purpose of emergency shelters during disasters.

See ANNEXURE-VI

Serchhip district has an area of 1421.60sq.km. It has three administrative subdivisions namely Serchhip, Thenzawl and North Vanlaiphai, and there are two Rural Development Blocks. Serchhip district occupies the central part of Mizoram, extending more to the extreme side; 112 km from Aizawl along NH 54 between Aizawl and Lunglei, elevated at 1281 meters above mean sea level, it lies between 23°35′58′82" and 23°00′20′84" N latitudes and 92°41′06′00" and 92°40′39′63" E longitudes. It shared international border with Myanmar in the south-east.

Serchhip town is the headquarters of the district. District officers of various departments are located in Serchhip town. In Serchhip district, there is 1 Civil Hospital, 1 Assam Rifle owned Hospital, 3 Public Distribution System outlets, 2 post office, 3 police station/outpost, 2 CHC, 7 PHC, 18 Sub-centers at Serchhip R D Block, 11 Sub-centers at E. Lungdar R D Block, 7 Go-down, 126 small and cottage industries, 97 Primary Schools, 77 Middle Schools, 29 High Schools and 1 College.

Occupation/Economics

Serchhip is one of the poorest districts of Mizoram. Rural poverty is high where more than 50% of the total population live in rural areas and are below the poverty line. Main source of income of the total populations is agriculture. Only a few people hold Government jobs oriented to cash economy. Few people are oriented in trading economy.

2.1.2 Matrix of Past disasters in the district

2.1.2.1

MOTO	MOTOR ACCIDENT RECORDED AT SERCHHIP POLICE STATION								
	(2022 -2023)								
Date/Month	No.of	Place of accident	Type of vehicle	Fat	Injured				
/Year	accident			al					
April 2021	3	1)Thuhruk Kawi, Serchhip	1) Bolero	1) 1	1)Nil				
			2) Maruti		2)Nil				
	2) Tuizem kawn, Serchhip 800&Bike								
			Truck&Bike						
		3) Khawlailung		3) 1	3)Nil				

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May 2021	1	Kanghmun Village	Car(Toyota)	1	1
June 2021	Nil	Nil			
Aug 2021	Nil	Nil			
Sept 2021	Nil	Nil			
Oct 2021	Nil	Nil	407	3	5
Nov 2021	Nil	Nil	Car	1	Nil
Dec 2021	2	1)Khumtung	1)Scooty	1)1	1)Nil
		2)Zaizawh Tlang, N Vanlaiphai	2)LPK 909(Truck)	2)1	2)Nil
Jan 2022	Nil	Nil	Nil	Nil	Nil
Feb 2022	1	Chhingchhip	Self-Loading Mixer	1	1
Mar 2022	1	Midum Kham, Serchhip- Keitum	Tank Lory	2	2

2.1.2.2 Report of Natural Calamities (2022 – 2023)

Sl	Type of	No. of	No. of				Agricult	ure damaged
No	Calamity	villages affected		house d	amaged			
			Partially	Severely	Fully	Financial relief (in Rs)	Crop Area (inlakh ha)	Estimated crop loss (in Rs)
1	Landslide	15	38200	101900	340200	480300	0.4	9000
2	Fire	10	-	-	240000	240000	2	16200
3	Flood	5	-	-	-	-	84.15	769680
4	Hailstorm	8	-	-	-	-	9ha	76500
5	Cyclone	-	-	-	-	-	-	<u>-</u>
6	Earthquake	-	-	-	-	-	-	-

Number of Villages affected by Disasters during 2022–2023:

The whole District is affected by different Disasters like Cyclone, Fire, Landslide, Flood.

2.1.2.3 Life and Cattle loss during 2022-2023

There is 600 Cattle loss recorded during 2022-2023 due to African Swine Fever and 600 pigs has been reported death due to natural disaster.

2.1.2.4 Damage to Infrastructure during 2022-23

132Kv Line Restoration of Hum Pipe were done.

2.1.2.5 Economic Losses during 2022-23: Due to Flood, 84.15 h.a ie.10,160 and due to Fire 2ha. has been recorded in Agricultural/Crop area.

2.1.2.6 Environmental Degradation, Livelihood Restoration and Livestock Management:

Environment Degradation: Due to Disasters like Forest fire, Jhum Cultivation, Draught, Floods, Mudslide, etc. Forests and other plantation areas are being damaged which is also a threat to the environment. Department of Forest, Horticulture Department and Agricultural Department are responsible for reforestation or to tackle with other means of environmental degradation in the district.

Livestock Management during Disasters:

Dept of Animal Health & Veterinary Serchhip District Prepared Livestock Management during Disasters. Detail flow chart of response strategy of life stock management during disasters or AH & Vety Department plan of livestock management is seen in the annexure. Following preparations are essential for management of animals during disasters:

Development of flood, cyclone and other natural calamity warning systems. In principle, an EWS would make it possible to avoid many adverse economic and human costs that arise due to the destruction of livestock resources every year. Reliable forecasting would also allow state governments to undertake more efficient relief interventions. Other tools that may provide early warning signals include field monitoring and remote sensing systems. Ideally, field monitoring should provide monthly flows of information on the availability of water and the general state of crop and livestock production. Useful production parameters include marketing trends, particularly the balance of trade between livestock and grain foods, and anthropomorphic measures such as the mean arm circumference of children under five.

Remote sensing, which relies on imagery satellites, is a valuable tool when used in conjunction with field monitoring. These tools will be integrated to develop an effective EWS. The Dispensary of Serchhip would act as the warning mechanism to all villages Dispensaries and VFAs.

- ii) Establishment of fodder banks at the village level for storage of fodder in the form of bales and blocks for feeding animals during drought and other natural calamities is an integral part of disaster mitigation. The fodder bank must be established at a secure highland that may not be easily affected by a natural calamity. A few fodder banks will be developed as closed facilities to prevent them from getting contaminated.
- supply of feed ingredients at nominal cost from the Food Corporation of India: Most grain rations for cattle and sheep provide enough protein to maintain a satisfactory 10–12% level. But when we feed livestock in emergency situations—mostly low-protein materials such as ground ear corn, grain straws or grass straws—a protein supplement is needed. Adequate reserves as per the availability of resources will be developed.
- iv) Conservation of monsoon grasses in the form of hay and silage during the flush season greatly help in supplementing shortage of fodder during emergencies such as drought or flood. The objective is to preserve forage resources for the dry season (hot regions) or for winter (temperate regions) in order to ensure continuous, regular feed for livestock. It is an important disaster mitigation strategy.
- v) Development of existing degraded grazing lands by perennial grasses and legumes. As a majority of the population in drought prone areas depends on land-based activities like crop farming and animal husbandry, the core task for development will be to promote rational utilization of land for supplementing fodder requirements during emergencies.
- vi) Provision of free movement of animals for grazing from affected states to the unaffected reduces pressure on pastures and also facilitates early rehabilitation of the affected livestock. In emergency situations, the presence of livestock can exacerbate conflict when refugees with animals compete for reduced forage and water resources. To prevent this, what is technically known as emergency destocking programme, will be instituted. This programme provides for the intentional removal of animals from a region before they die.
- vii) Treatment and vaccination of animals against contagious diseases in flood affected areas. Routine prophylactic vaccination of livestock in flood-prone area significantly reduces the severity of the diseases. Since animals affected by floods are prone to pick up infectious diseases, vaccination and veterinary camps will be set up to treat and immunise livestock against various diseases. The creation of a community based animal health car delivery system may significantly reduce livestock deaths in a region. Vaccination programmes and primary animal health care will prevent some of the drastic losses associated with the onset of rains.
- viii) Provision of compensation on account of distressed sale of animals and economic losses to farmers due to death or injury of livestock. Compensation for animals and

other property affected by an emergency due to an animal disease outbreak is an integral part of the strategy for eradicating or controlling disease.

A legislation that provides the power to destroy livestock and property, and ultimately determines the process by which compensation is to be paid, will be enacted and implemented by the respective legislative bodies.

Disposal of Dead animals during Disasters.

Carcasses can be a hazard to the environment and other animals and require special handling. To minimize soil or water contamination and the risk of spreading diseases, guidelines for proper carcass disposal must be followed.

Disposal options include calling a licensed collector to remove dead stock burial in an approved animal disposal pit. Alternatives include incineration and burial. Burial avoids air contamination associated with burning carcasses and is economical. Since the heat in the pile eliminates most pathogens, burial can also improve the biosecurity of farming operations. A plan for the disposal of dead livestock should address selection of the most appropriate site in each village or cluster of villages for burial or burning, disinfection process, provision of costs for burial or burning, material and equipment required for burial and burning.

Strategy for Emergency Management

- i) There will be efforts to prevent an emergency, reduce the likelihood of its occurrence or reduce the damaging effects of unavoidable hazards long before an emergency occurs. Flood and fire insurance policies for farms are important mitigation activities.
- ii) It is pertinent to develop plans regarding what to do, where to go, or who to call for help before an event occurs—actions that will improve chances of successfully dealing with an emergency. These include preparedness measures such as posting emergency telephone numbers, holding disaster drills and installing warning systems.
- iii) Efforts need to be made to respond safely to an emergency by converting preparedness plans into action. Seeking shelter from a cyclone or moving out of the buildings during an earthquake are both response activities. The GoI Action Plan for management of the outbreak of bird flu is an example of the effective handling of an outbreak of livestock disaster in the country.
- iv) Safety is an important aspect of a response plan and every action plan will enumerate different responding activities to be undertaken for the effective management of livestock disasters. The response plan will be rehearsed to remove the plausible anomalies in actions.

Steps for Prevention, Mitigation and Preparedness

DM plans at all levels will include the following important measures:

i) Public awareness about natural disasters that different regions and the country are most likely to experience and their consequences on the livestock sector.

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- ii) Provisions to establish adequate facilities to predict and warn about the disasters periodically, including forecasting disease outbreaks. This could only be achieved by a well networked surveillance mechanism that proactively monitors emerging infections and epidemics.
- iii) Development and implementation of relevant policies, procedures and legislation for management of disasters in the animal husbandry sector. The livestock health infrastructure in India, modelled to provide routine veterinary cover, needs reorganisation in view of emerging epidemics/challenges. The existing animal husbandry policies will be revisited and if required, modified to cater to changing realities.
- iv) Mobilise the necessary resources, e.g., access to feed, water, health care, sanitation and shelter, which are all short-term measures. In the long term, resettlement programmes, psycho-social, economic and legal needs (e.g., counselling, documentation, insurance) are required to be undertaken.
- v) Another long-term strategy is required to readjust the livestock production system in the country from a biosecurity point of view so that in the event of the entry of any new, dangerous pathogen, the losses could be minimised by segregation.
- vi) Initiation of PPP in livestock emergency management, especially in the field of vaccine production, will go a long way in combating animal health emergencies of infectious origin. Similar partnership in feed manufacturing as well as livestock production will minimise the losses due to other livestock emergencies.
- vii) Commissioning of risk assessments on high-priority disease threats and subsequent identification of those diseases whose occurrence would constitute a national emergency.
- viii) Appointment of drafting teams for the preparation, monitoring and approval of contingency plans. Implementation of simulation exercises to test and modify animal health emergency plans and preparedness are also necessary.
- ix) Assessment of resource needs and planning for their provision during animal health emergencies.
- x) Central/state governments will develop/ establish an adequate number of R&D and bio safety laboratories in a phased manner for dealing with animal pathogens.
- xi) A dedicated establishment, preferably under DADF, may be entrusted with the overall monitoring of the national state of preparedness for animal health emergencies.
- xii) Development of active disease surveillance and epidemiological analysis capabilities and emergency reporting systems.
- xiii) A computer-based national grid of surveillance and disease reporting should be developed for timely detection and containment of any emergent epidemic. xiv) An intelligence cell—Central Bureau of Health Intelligence under DGHS should be raised to assist the proposed National Animal Disaster Emergency Planning Committee (NADEPC).
- xv) Immunisation of all persons who are likely to handle diseased animals such as anthrax infected cattle and animals.

Research

The need for strategic research to mitigate risks of biological disasters in livestock a vital component of the human food chain—is in no way different from risks to humans. The world is slowly moving towards the 'one health: animal health and public health' concept, as it has been seen that most newly emerging human epidemics in the last decade in various parts of the world had originated in livestock or other animals and birds. Therefore, the requirements of R&D efforts for livestock DM are similar these discussed in Chapter 4. Research institutions of ICAR, defence organisations, ICMR, DBT and CSIR will identify areas of potential threat and disasters in livestock and fisheries and readjust their research priorities to address these concerns to be in readiness for any eventuality.

2.1.3 Hazard Risk Vulneribilty Assessment (HVCRA):

`Vulnerability Analysis – Historical Data

S.No	Vulnerability Analysis	Answers	
1	2	3	
	Result of hazard Analysis		
	What single or multiple hazards is the community faced with? Which are most significant? Referring to occurrence, frequency/return period, intensity and duration as well as exposure of affected families, how do these hazards compare?	Cyclone and Landslide is the most hazard faced by the District. It occurs every year and affected the whole district almost every year	
	Is there evidence of changing trends in the hazards, or new hazards emerging?	Mudslide is emerging as a new hazard in the District since 2016 due to heavy Rain	
2	Results of Vulnerability Analysis	Cyclone, Hailstorm, Landslide	
	What are the top five vulnerability of the community?	Cyclone, Fire, Earthquake, Landslide and Flood	
	Explain the vulnerabilities in relation to the identified hazards affecting the community, and how these make the community susceptible to those hazards.	Communities are vulnerable to Landslides, Flood which affected the Houses and other property, crop area and forest area in the District.	
3	Results of Capacity Analysis	District disaster Response Force, SDRF, Awareness generation through media and Training help the community in their awareness	

	What are the top five capacities available in the	against Disasters, Much concern for Disaster before building new Houses, retrofittings etc.are seen as the result.
	community?	District Plan, Medical /Hospital Plan, Police Plan.
	Explain their relationship and how they increase the resilience of the community.	
	Identify the top five weaknesses and discuss them as part of another paragraph under vulnerabilities.	Absence of Building regulations in the District, Bad Connectivity within the District, No mitigation Fund in the District, Unavailability of Town or Village Plan.
4	Recommendations to Mitigate. Prepare for. and Respond to Disaster Impacts	Building Regulations, Retrofitting of Weak Buildings, Proper Roads and Connectivity, More awareness to Public/Community throughout the District.
	Given the Hazard Vulnerability Capacity Assessments identify the most pressing assistance needed to reduce the vulnerabilities and increase the capacities of the community.	

RISK ASSESSMENT RESULTS

S.NO	Severity of consequences	Likelihood of Occurrence			
1	2	3			
		Frequent	Likely	Occasinal / Possible	Unlikely
		(a)	(b)	(c)	(d)
Earthquake	Catastrophic		Highest Priority		

Landslide	Critical / Serious	yes		
Flood	Limited		yes	
Mudslide	Negligible		yes	

2.1.3.1 Authority/Agency that carried out HVCRA

The HVCRA of Serchhip District has not been conducted. Mizoram Remote Sensing Agency is conducting HVRA of Serchhip Town. The DM&R Department is entrusted to carry out HVCRA by the NDMA.

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CHAPTER - 3

INSTITUTIONAL ARRANGEMENTS FOR DISASTER MANAGEMENT (DM)

3.3.1 DM organizational structure at the national level

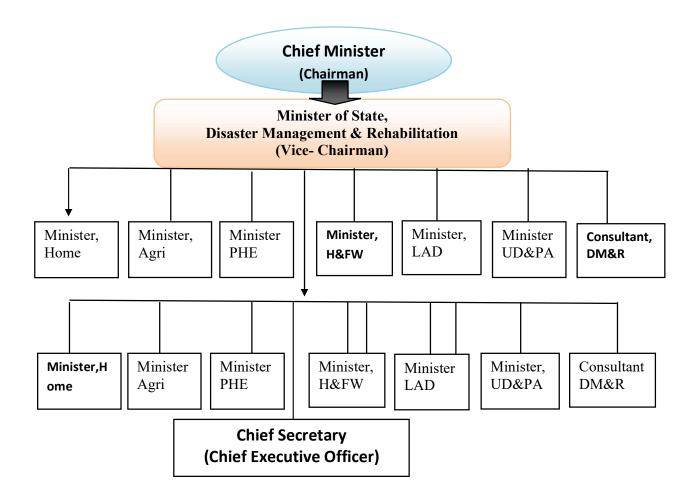
The NDMA, as the apex body for disaster management, is headed by the Prime Minister and has the responsibility for laying down policies, plans and guidelines for DM and coordinating their enforcement and implementation for ensuring timely and effective response to disasters.

3.3.1.1 National Executive Committee

The NEC is the executive committee of the NDMA, and is mandated to assist the NDMA in the discharge of its functions and also ensure compliance of the directions issued by the Central Government. The NEC comprises the Union Home Secretary as Chairperson, and the Secretaries to the GoI in the Ministries/Departments of Agriculture, Atomic Energy, Defense, Drinking Water Supply, Environment and Forest, Finance (Expenditure), Health, Power, Rural Development, Science & Technology, Space, Telecommunications, Urban Development, Water Resources and the Chief of the Integrated Defense Staff of the Chiefs of Staff Committee as members. Secretaries in the Ministry of External Affairs, Earth Sciences, Human Resource Development, Mines, Shipping, Road Transport & Highways, and the Secretary, NDMA will be special invitees to the meeting of NEC.

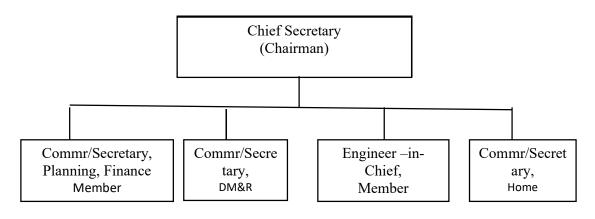
3.3.2 DM organizational structure at the state level including IRS in the state

The Govt. of Mizoram has constituted and notified the State Disaster Management uthority as per the National Disaster Management Act 2005 with the Chief Minister as the Chairman. There are also other 8 ministers amongst the members along with the Chief Secretary as Chief Executive Officer. This is the highest body for policy formulation and taking appropriate decision in regards to disaster reduction activities in the State. The organization diagram of the SDMA, Mizoram is as follows



3.3.2.1 State Executive Committee

The State Executive Committee is headed by the Chief Secretary. It is the highest working group in the State for Disaster Management. It has been set up in order to assist the State Disaster Management Authority for the effective functions and to co-ordinate actions in accordance with the guidelines by the State Disaster Management Authority. Composition of the members is as follows:



3.3.2.2 IRS Positions and suitable officers at the State Level

IRS POSITION	SUITABLE OFFICER		
RESPONSIBLE OFFICER	Chief Secretary, Govt. of Mizoram		
INCIDENT COMMANDER	Principal Secretary, DM&R Department		
DEPUTY IC	Director, DM&R Department		
Information and Media Officer	Director, I&PR Department		
Liaison officer	State Protocol Officer		
Safety Officer	Secretary, Health & Family Welfare Dept.		
OPERATION SECTION CHIEF	Director General of Police		
Staging Area Manager	Addl. Director General of Police		
Response Branch Director	Inspector General of Police(Law & Order)		
Division Supervisor/	Dy. Inspector General(Range)		
Group in charge			
Task Force/ Strike Team	MAP/MRP/IR(1st-5thBn) MRHG, SDRF		
Single Resources	Deputy Commissioner(IRT), Medical Superintendent(Civil Hospital), Engineer in Chief(PHE, PWD, P&E), Director(F&ES)		
Transportation Branch	Director, transport Dept.		
	ROAD GROUP		
Group-in-Charge	Superintendent of Police(Traffic)		
Vehicle Coordinator	Jt. Director, Transport Dept.		
Loading-in-charge/	Addl. Superintendent of Police		
Unloading-in-charge			
	RAIL GROUP		
Group-in-Charge	Superintendent, Railway Out Agency		
Coordinator	UDC, Railway Out Agency		
Loading-in-Charge/	LDC, Railway Out Agency		
Unloading-in-Charge			

WATER GROUP				
Group-in-Charge	Engineer in Chief, PHE			
Coordinator	Chief Engineer, PHE			
Loading-in-Charge/	Superintending Engineer, PHE			
Unloading-in-Charge				
AIR OPERATION GROUP				
Group-in-Charge	Principal Consultant, Civil Aviation			
Air operation				
Helibase/Helipad-in-Charge	Dy. Controller, Civil Aviation			
Loading-in-Charge/	Executive Engineer, PWD(Road Division)			
Unloading-in-Charge				
PLANNING SECTION CHIEF	Principal Secretary, Planning Department			
Resource Unit	Dy. Advisor, Planning Dept.			
Check-in-status Recorder	Sr. Research Officer, Planning Dept.			
Situation Unit	Research Officer, Planning Dept.			
Display & Publicity Unit	Joint Secretary ,GAD			
Field Observer	President, Central YMA			
Weather Observer	Chief Scientific Officer, Science & Tech. Dept.			
Documentation unit	Director, Economics & Statistics Dept.			
Demobilization Unit	Inspector General of Police			
Technical Specialist	Principal Scientific Officer, Science & Tech. Dept.			
LOGISTIC SECTION CHIEF	Commissioner & Secretary, GAD			
Service Branch Director	Dy. Secretary GAD			
Communication Unit	Superintendent of Police(Wireless)			
Medical Unit	Director, Health & Family Welfare Dept.			
Food Unit	Director, FCS&CA Dept.			
Support Branch Director	Asst. Inspector General of Police-I			

Resource Provisioning Unit	Director, FCS&CA Dept.
Facilities Unit	Dy. Secretary, DM&R
Ground Support Unit	Director, F&ES Dept.
Finance Branch Director	Commissioner/Secretary, Finance Dept.
Time Unit	Director, DM&R
Compensation/Claim Unit	Director, DM&R
Procurement Unit	Director, DM&R
Cost Unit	Director, DM&R

3.3.3 DM organizational structure at the district level

Disaster Management Authority is the only authority regarding Disaster Management in the District.

3.3.3.1 District Disaster Management Authority (DDMA)

The District Disaster Management Authority (DDMA) will act as the district planning; coordinating and monitoring body in accordance with the guidelines laid down by the State Authority. As per Section 25 of the DM Act 2005, ADDMA for Serchhip district has also been constituted, consisting of the following members:

S.No.	Officials	Designation
1.	Chairperson	Deputy Commissioner
2	Co- Chairman	PD, DRDA, Co-Chairman.
3	Chief Executive Officer	Addl. Deputy Commissioner.
4	Member	Superintendent of Police.
5	Member	ChiefMedical Officer.
6	Member	Executive Engineer(PWD).
7	Member	ExecutiveEngineer(PHE).

3.3.3.2 District Crisis Management Group (CMG)

Crisis Management Group, Quick Response Team and DM Teams has been formed for Serchhip District. They will function as a first verification and response team on behalf of the DDMA, Serchhip in the event of any disaster. The names of the following officials are the QRT for Serchhip District.

Nodal department for various disasters

SL.NO	TYPE OF DISASTERS	NODAL DEPARTMENT
1	Forest Fire	D.C., Environment & Forest Department
2	Biological Disaster	Health & Family Welfare Department, PHE
3	Breakdown of Law & Order	D.C., Police
4	Major Road Accidents	Transport Department, D.C., Police
5	Large scale Refugees from any Neighboring country/State	D.C., Police, FCS&CA
6	Collapse Structure	PWD, P&E, Police
7	Drought	Agriculture Department, Horticulture Department
8	Earthquake, Cyclones, Floods etc	D.C., Police, PWD, P&E

Authorities responsible for sending information

SL.NO	TYPE OF DISASTERS	NODAL DEPARTMENT			
1	Natural Disasters	Deputy Commissioner/ District EOC			
2	Chemical/ Biological	Deputy Commissioner/ District EOC/ H&FW			
3	Forest fires	DFO/DCF and D.C			
4	Terrorist Outrages	Deputy Commissioner/ SP			
5	Epidemic	Deputy Commissioner/ District CMO/ H&FW			
6	Law & Order	Deputy Commissioner/SP			

ESF	FUNCTION	NODAL AGENCY	SUPPORTING AGENCIES
ESF-1	Communication	BSNL	I&PR/NIC/MPRO
ESF-2	Evacuation	D.C	POLICE/HOME GUARD/NCC
ESF-3	Search & Rescue	MAP	POLICE/NCC/Health Deptt./F&ES/14 A.R
ESF-4	Law & Order	POLICE	HOME GUARD
ESF-5	Medical Response & Trauma Counseling	Health Deptt.	NSS/MHIP/MUP/SWD
ESF-6	Water Supply	PHE	LAD
ESF-7	Relief	FC&CA	NGOs
ESF-8	Debris & Road Clearance	PWD	LAD
ESF-9	Help lines, Warning dissemination	D.C	MPRO/NIC/NGOs/I&PR
ESF-10	Electricity	P&E	NGOs
ESF-11	Transport	Transport Deptt.	PWD

Emergency Support Functions

District Quick Response Team

Chairman : James Lalnithanga MCS

Additional Deputy Commissioner.

Member Secretary : Lalhruailiana Zote,MCS

Sub-Deputy Commissioner (DM&R).

Members : 1) Er R.Zirsangliana

Executive Engineer, PWD.
2) Er Isaac Lalchhuanmawia
Executive Engineer, PHE.

3) Laldawngliana

Executive Engineer, P& E.

4) Kawlthuama

President, Sub-Hqrs YMA Serchhip.

First Aid Team

Chairman : Dr LP.Malsawma

Chief Medical & Health Officer, Serchhip.

Secretary : Dr ZD LalmuanawmaDMS& HO.

SEARCH & RESCUE TEAM

Chairman : Ms.Dawngkima

Superintendent of Police, Serchhip.

Secretary : Lalbiaksanga

O/C F&ES.

SHELTER MANAGEMENT TEAM

Chairman : R. Zirsangliana

Executive Engineer, PWD, Serchhip.

Secretary : Ngurdingliana

Asst. Commissioner of Excise.

FOOD & WATER MANAGEMENT TEAM

Chairman : Vanlalhriata

District Civil Supply Officer, Serchhip.

Secretary : Er Isaac Lalchhuanmawia

Executive Engineer, PHE.

RELIEF COORDINATION TEAM.

Chairman : HD.Lalpekmawia MCS

Project Director, DRDA, Serchhip.

Secretary : Lalchharliana

District Agriculture Officer.

INFORMATION AND DAMAGE ASSESSMENT TEAM

Chairman : Lalthangmawia

District Research Officer, Serchhip.

Secretary : K. Saitluanga

Information and Public Relation Officer.

TRAUMA COUNSELING TEAM

Chairman : Gaston Vanlalhriatpuia

Assistant Settlement Officer, Serchhip.

Secretary : Pi Hmingpuii

President, Sub-Hqrs MHIP.

3.3.3.3 District Disaster Management Committee (DDMC) and Task Forces

In case of disaster in the district, response management will be the responsibility of the DistrictDisasterManagement Advisory Committee(s) with the following members:

S/n	Designations	Post	Ph	Phone Number		
S/II	Designations	Fost	Office	Residence		
1	Lalhruailiana Zote, SDC, Nodal Officer	Member Secretary		8974196381		
2	Rebecca Laldinmawii Hrahsel	Member	222285	8974736278		
2	MCS, SDO (Sadar)	Member	222438	8974730278		
3	Ms.Dawngkima, S.P.	Member	222389	8974052604		
3	Wis.Dawligkilla, S.I .	Wiemoer	222371	07/4032004		
4	Tlangtimawia, D.A.O	Member	222539	9436350209		
5	R.Lalrintluanga, D.H.O	Member	222588	9436155405		
6	Laldadawngliana, E.E., P&E	Member	225289	9436146174		
7	Lalhruailiana Zote,DUDO	Member	222493	8974196381		
8	Pc.Biakrikhuma,D.T.O	Member	222296	8014365595		
9	Rebecca Laldinmawii Hrahsel, BDO, Serchhip	Member	222233	8974736278		
10	Dr Lalmakthanga, D.V.O	Member	222104	9612003040		
11	Kawlthuama, President Sub- Hqtr.YMA	Member	9436146136			
12	Hmingpuii, President, Sub Hqrts.MHIP	Member	9485082797			
13	C. Lalhminghlua, President,MJA	Member	8	131985989		
14	President, Sub-Hqrts.MUP	Member	94	436771548		
15	GovindaKar, SDE(G)-BSNL	Member	222322	9437066088		
16	Lawmawma, D.E.O	Member	222182	8416847583		
17	K Laldinpuii.Principal, Gov't	Member	222252	8258089388		
1 /	Serchhip College	Wichidel	222153	8238089388		
18	Colonel Brijendra Singh, Commandant 10 AR	Member	222465 8729809665			
19	St, I/C, F&ES	Member	222135	9089912070		
20	Gaston Vanlalhriatpuia, ASO	Member	222840	8974834840		
21	Lalthangmawia,D.R.O	Member		7085529098		
22	Lalnunmawii,I&PRO	Member	226217	8575180289		

23	Vanlalhriata, DCSO	Member	225152	8131989127
24	Alvina Ramdinthari, T.O	Member	222518	7005174160

Designated meeting venue

In the event of any major disaster occurring in the district and if communication lines are disrupted, all members of the DDMA/DDMC will assemble at the DC's office/DEOC automatically within one hour for initiating the district response plan.

If holding of such a meeting is not possible due to damage to the building of DC Office or the road to DC Office being blocked by the debris, alternatives venues in order of priority is as under:

- 1. S.P Office, Serchhip.
- 2. P.D. Office, DRDA, Serchhip.
- 3. D.C Bungalow, Serchhip.
- 4. P.D, DRDA Bungalow, Serchhip.

If the chairman is unable to preside over the meeting for any reason, P.D., DRDA or Addl. DC will take the chair. If both are not present S.P, Serchhip will take the chair. If none of these officers are present, senior most members will take the chair. There will be no quorum.

Block disaster management committee

The Block Disaster Management Committee shall consist of the following members:

Chairperson - BDO.

Member Secretary - SDM/CEO/Headmaster of Local High School.

Member - SDPO.

Member - Medical Officer.

Member - EE/SDO, PWD/PHE/P&E

Member - CEO (Edn.)

Member - Representatives of MHIP, MUP, YMA.

Member - Representatives of local churches.

Member - President, V.C.

Any other member co-opted by the Chairman.

Village disaster management committee

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The village disaster management committee shall consist of the following:

Chairman - President, Village Council

Vice Chairman - Vice President, Village Council

Member Secretary - President, Branch YMA

Member - Post commander, Security post or his representatives.

Member - O.C, Police Station/Outpost (if any)

Member - VFA if posted in the area.

Member - Health assistant/Pharmacist/Nurse/Midwife if posted in the

area.

Member - Section Officer/Section Assistant, PWD (if any)

Member - Secretary, Branch YMA

Member - Head Teacher, Primary School, Middle School, High

School.

Member - Representatives of local churches.

Member - Any other member co-opted by the chairman.

3.3.3.4 Incident Response System in the District

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

IRS Positions and suitable officers in Serchhip District

IRS POSITION	SUITABLE OFFICER		
COMMAND STAFF			
RESPONSIBLE OFFICER	David Lalthantluanga, IAS		
	Deputy Commissioner		
INCIDENT COMMANDER	James Lalnithanga		
	Addl. Deputy Commissioner		
DEPUTY IC	Ms.Dawngkima		
	Superintendent of Police		

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Information and Media Officer	Lalnunmawii District Information & Public Relation Officer			
Liaison officer	Rebecca Laldinmawii Hrahsel,SDO Sadar			
Safety Officer	Lalhruailiana Zote SDC, i/c DM&R			
OPERATIONS SECTION				
OPERATION SECTION CHIEF	Saidingliana Sailo			
	Addl. Superintendent of Police			
Staging Area Manager	Beitlotha Nohro			
	SDO(Civil) North. Vanlaiphai			
RESP	ONSE BRANCH			
Response Branch Director	Lalhruailiana Zote			
	SDC(in charge DM&R)			
Division Supervisor/	Saidingliana Sailo			
Group in charge	Dy. Superintendent of Police(Hq)			
Task Force/ Strike Team	Commander/Leaders of SDRF, MAP, MRP, IR,F&ES,MRHG,YMA			
Single Resources	1)Lp.Malsawma			
	SMO-H & FW Dept.,			
	2) Lalnunpuia			
	SDO-PWD			
	3) Lalhruaitluanga			
	SDO P&E,			
	4) Lalruatliana			
	Leading Fireman			

TRANSPORT BRANCH				
Transportation Branch Director Pc.Biakrikhuma				
	District Transport Officer			
ROAD GROUP				

Group-in-Charge	PB.Singh	
Group-In-Charge	PB.Siligii	
	SDPO(District Capital)	
Vehicle Coordinator	Pc.Biakrikhuma	
	District Transport Officer	
Loading-in-charge/	Lalrohlua	
Unloading-in-charge	MVI, Transport Dept.	
I	RAIL GROUP	
Group-in-Charge	Not relevant in District Level in Mizoram	
Coordinator	Not relevant in District Level in Mizoram	
Loading-in-Charge/	Not relevant in District Level in Mizoram	
Unloading-in-Charge		
W	ATER GROUP	
Group-in-Charge	Isaac Lalchhuanmawia	
	Executive Engineer, PHE	
Coordinator	Samuel LR Ralte	
	SDO, PHE	
Loading-in-Charge/	Vanlaltluangi	
Unloading-in-Charge	J.E, PHE	
AIR OI	PERATION GROUP	
Group-in-Charge Air operation	District Aviation/Helipad	
Helibase/Helipad-in-Charge	R. Zirsangliana Executive Engineer, PWD	
Loading-in-Charge/	Malsawmkima	
Unloading-in-Charge	Asst Commissioner of Excise & Narcotics	
PLANNING SECTION		
PLANNING SECTION CHIEF	David Lalthantluanga, IAS	
	Deputy Commissioner	
Resource Unit	Commandant, MRHG	

Check-in-status Recorder	Lalbiakchama Chawngthu		
	DFO, E&F Dept.		
Situation Unit	PB.Singh		
	Sub-Divisional Police Officer		
Display & Publicity Unit	Lalnunmawii		
	District Information & Public Relation Officer		
Field Observer	Kawlthuama		
	Representatives of Sub-Hqrts YMA		
Weather Observer	Tlangtimawia		
	DAO, Agriculture Dept.		
Documentation unit	Lawmawma		
	DEO, Education Dept.		
Demobilization Unit	Ms.Dawngkima		
	Superintendent of Police		
Technical Specialist	Laldawngliana		
	Executive Engineer, P&E Dept.		
LOGI	STIC SECTION		
LOGISTIC SECTION CHIEF	Ms.Dawngkima		
	Superintendent of Police		
SERV	VICE BRANCH		
Service Branch Director	Lalhruailiana Zote		
	District Local Administrative Officer		
Communication Unit	Inspector Wireless, Police Dept.		
Medical Unit	LP.Malsawma		
	CMO, H&FW Dept.		
Food Unit	Vanlalhriata		

	DCSO, FCS&CA Dept.				
SUI	SUPPORT BRANCH				
Support Branch Director	Lalhruailiana Zote				
	District Local Administrative Officer				
Resource Provisioning Unit	Vanlalhriata				
	DCSO, FCS&CA Dept.				
Facilities Unit	Lalzarzova				
	Dy Commissioner of State Tax				
Ground Support Unit	R. Zirsangliana				
	Executive Engineer, PWD				
FIN	ANCE BRANCH				
Finance Branch Director	Alvina Ramdinthari				
	District Treasury Officer, Treasury Dept.				
Time Unit	Lalthangmawia				
	DRO, Economics & Statistics Dept.				
Compensation/Claim Unit	Asst. Settlement Officer, LR&S Dept.				
Procurement Unit	David Lalthantluanga				
Cost Unit	Deputy Commissioner				
Cost Omt	David Lalthantluanga				
	Deputy Commissioner				
WASTE MANAGEMENT BRANCH					
Waste Management Director	Lalhruailiana Zote				
	DUDO, UD&PA				

3.3.3.5 DISTRICT EMERGENCY OPERATIONS CENTRE(DEOC) SET UP AND FACILITIES AVAILABLE IN THE DISTRICT

The District Emergency operation centre (DEOC) will be the hub of activity in a disaster situation in the district. This is. However not to underestimate its normal time activities. The EOC should have the flexibility to expand when demand increases and contract when the situation comes to normal. The DEOC is connected with State EOC in the upstream (which further connect to National EOC) and other EOC(s) in the downstream including other field offices during emergencies.

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DEOC located at the Deputy Commissioner Office will be operational; it will function automatically from preparedness mode to Emergency mode and will be suitably upgraded.

EQUIPMENTS OF DEOC

1	2	3	4	5
Sl.No	Name of Items	No. Of Items	Condition	Remarks
1	Computer and its	1Set	Serviceable	
	accessories			
2	Megaphones	3	Serviceable	
3	Printer (HP)	1	Not Serviceable	
4	Generator Honda	2	Serviceable	
5	Figure of 8	4	Serviceable	
6	Rappelling Mitten	1	Serviceable	
7	AscenderJummer	2	Serviceable	
8	Digital Camera	1	Serviceable	
9	Photo Copier	1	Serviceable	
10	Aluminium Ladder	1	Serviceable	
11	Climbing Rope 8mm	2	Serviceable	
12	Tape Artier	5	Serviceable	
13	Body Harness	4	Serviceable	
14	Sit Harness	1	Serviceable	
15	Climbing Helmet	98	Serviceable	
16	Carabineer Screw	1	Serviceable	
17	Pulley	2	Serviceable	
18	Stretcher	5	Serviceable	
19	Sledge Hammer	1	Serviceable	
20	Petromax	1	Serviceable	
21	Head Lamb	1	Serviceable	
22	Laptop	1	Serviceable	
23	Emergengy Light	1	Serviceable	
24	Portable Inflatable	1	Serviceable	
	Lighting System (ASKA)			
25	Rope 20mm	1	Serviceable	
26	Search Light	1	Serviceable	
27	Life Jacket	4	Serviceable	
28	Multipurpose diamond	1	Serviceable	
	saw concrete metal with			
	diamond wheel			
29	Diamond blade for	1	Serviceable	
	multipurpose diamond			
	saw			
30	Angle Cutter 14"dia	1	Serviceable	
31	Traffic Cone	5	Serviceable	
32	Spade with Steel handle	1	Serviceable	

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33	Fire Fytinguisher 2kg	1	Comicooblo	
-	Fire Extinguisher 2kg		Serviceable	
34	LED Pelican 9410L	1	Serviceable	
35	Chainsaw	2	Serviceable	
36	Chainsaw Blade	2	Serviceable	
37	Rope Ladder	1	Serviceable	
38	Four fold Stretcher	1	Serviceable	
39	W/T Sets	1	Serviceable	
40	First Aid Box	3	Serviceable	
41	Drone (Phantom-IV)	1	Serviceable	
43	Steel Almirah	2	Serviceable	
44	Hand Saw	1	Serviceable	
45	Search Light	1	Serviceable	
46	Projector	1	Serviceable	
47	Projector Screen	1	Serviceable	
48	Cervical collar	2	Serviceable	
49	Scoop Stretcher	2	Serviceable	
50	Nylon Rope 20mm	3	Serviceable	
51	Chain Saw Carbide tipped	1	Serviceable	
	(Stihl GS 461)			
52	Chain Saw (Stihl MS 382)	1	Serviceable	
53	Diamond Saw Blade 14	1	Serviceable	
	inch			
54	Honda Generator (Small) (3000W)	1	Serviceable	
55	Rope 20mm (50m)	20	Serviceable	
56	Kernmental Rope 10mm (50m)	2	Serviceable	
57	Kernmental Rope 8mm	2	Serviceable	
3,	(50)	_	Serviceasie	
58	Rope Ladder	1	Serviceable	
59	Scoope Stretcher	2	Serviceable	
60	Angle Grinder (Dewalt	1	Serviceable	
	DW 810)		6	
61	Extension Cord Heavy	1	Serviceable	
62	duty (50m)		6	
62	Demolition Hammer (JCB	1	Serviceable	
62	DH 1700-EM)		Complete	
63	Reciprocating Saw	1	Serviceable	
C 4	Cordless (18V Makita)	2	Comingable	
64	Mitten	2	Serviceable	
65	Pulley	2	Serviceable	
66	Cordoning Tape	2	Serviceable	
67	Carrabiner D Shape	2	Serviceable	
68	Carrabiner Oval Shape	2	Serviceable	
69	Safety goggle	5	Serviceable	

70	Rescue Helmet (Yellow)	5	Serviceable	
71	Head Torch (Groz led	5	Serviceable	
	230)			
72	Safety reflective vest	10	Serviceable	
	Orange			
73	Gazebo tent	1	Serviceable	
74	Tent Men	1	Serviceable	
75	Telescopic ladder 20.5 ft	1	Serviceable	
76	Generator 1kva Honda EP	1	Serviceable	
	1000			
77	First Aid	58	Serviceable	

NON-DISASTER TIME ACTIVITIES OF THE EOC

- Ensure through appropriate statutory instruments that the Disaster Management Plan is operational.
- Encourage departments to prepare their respective disaster Management plans.
- Identify and interact with research institutions to evolve mitigation strategies.
- Prepare personnel and organizational directories as well as resource inventories and keep them updated.
- Ensures all equipmentare in working conditions.
- Monitor training imparted to government officials and NGOs.
- Monitor public awareness campaigns on disaster mitigation and preparedness.
- Ensure that warning and communication systems and EOC infrastructure are in working condition.

DURING DISASTER TIME ACTIVITIES OF EOC

- On receipt of a disaster warning or a FIR, the Deputy Commissioner, after verification that the situation merits declaration of a Disaster, alert all members of DDMA and will convene a meeting of the District Disaster Management Committee.
- Based on the ratification of the Committee, the Deputy Commissioner will declare an emergency.
- Alert and informed all concerned line departments to post their representatives at the EOC on a round the clock with immediate effect.
- Alert and activate all Emergency Support Functions.
- Alert EOC of the neighboring districts and state EOC.

Site Operation Center

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Site Operation Center, a complementary unit to the EOC, would operate close to the site. This will be directly linked with the EOC. It will have an Incident Command Post with one Site Incident Commander. Site Operation Center will coordinate various activities of evacuation, rescue and relief operations.

If SOC has not been set up on the first visit of the site, the officers so deputed from the District Administration viz. SDO, BDO or other officer's conveniently available near the site will see to it that the SOC is set up without delay. In order to make SOC more effective and cohesive, the local leadership should be associated in such a way that maximum participation in terms of manpower and authority is ensured.

3.3.6 Alternate EOC and Location

E-District Building near the Deputy Commissioner's Office will function as an alternate EOC in case DC's Office is damaged due to disasters. The meeting hall of DIPRO near DC's Office may also be selected as an alternate EOC if the first is non-functional.

3.3.4 PUBLIC-PRIVATE PARTNERSHIP

3.3.4.1 Public and Private Emergency Service Available in the District

EARTH MOVING AND ROAD CLEANING EQUIPMENTS

Sl.No	Name	Address	Contact No
1	Bawlliana	Bazar	9436376150
2	Chhuanawma	New Serchhip	9612125996
3	Liansiama	Bazar	8119812364
4	Sangzuala	AOC Veng	9862236358
5	Masawma Sailo	Bazar	9862050912
6	Lalthianghlima	Chanmari	9862732526
7	C. Zokhuma	TuikhuahVeng	9862967089
8	EE, PWD	Serchhip	222620 /222243

TRADERS

SL No	Type of Traders	Contact Person	Address	Telephone
		F.Kapthiauva& Sons	N.Vanlaiphai	224146
1	House Building	V.Thasiama	Thenzawl	261226
	Materials	P.C. Zosangliana	Serchhip	222574
		V.Lalrindika	Serchhip	9436146723

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		K. Kapzawna	Chhingchhip	223013
		T.Rosiama	Serchhip	9612129174
		Lawmzuala	New Serchhip	9436376754
		Ralzatawna	Serchhip	222277
		P.C.Lalremruata	Serchhip	9436146348
2	Groceries	P.C.Lalfakzuali	Serchhip	222545
2	Groceries	C.Lalliana	Thenzawl	261271
		B&B Civil Canteen	New Serchhip	8974212075
		C.L.Khuma	Serchhip	222358
3		R. Manhlira	Serchhip	
	Medicine Shop	Lalchhawna	Serchhip	
4	Rice Mill	A. Lalliana	Serchhip	222033
	Electrical	C.Lalhriatrenga	Serchhip	222234
5	Equipments	F.Lalrinawma	Serchhip	
	Equipments	Hmingthansiama	Serchhip	

RESOURCE INVENTORIES OF SERCHHIP DISTRICT

Sl	Skilled	Names	P=Private	Office Address/	Contact
No	Human Resources		PF=Professi onal	Home Address	No
		Biaksanga, Elect-II	PF	Serchhip Power Division	943198357
1	Electricians	C. Lalruala, Elect-II	PF	-do-	943198357
		Lalchhuanawma, Elect-II	PF	-do-	943198357
		VL. Hruaitluanga	PF	DMS Office/Bazar Veng	9862123295
	Computer	Jerry C Laldikkima (for cctns)	PF	SP Office/Bazar Veng	8089916387
2	Technician	Zairemthanga	PF	CMO Office/	9612196297
	/Expert	C.Lalmalsawmi	PF	CMO Office/	9436376248
		H.Lalhruaitluangi	PF	CMO Office/	9436376736

		K.C.Lalbiaknia	PF	CMO Office/	9863360673
		ZorinsangaRalte	PF	BDO's Office	9862539255
		Lalkrosthanga	PF	BDO's Office	9863222834
		Vanlalmana	PF	PWD Serchhip Power Division/Serchhip	9615330960
3	Carpenter	Lalmuanpuia	P	DC's Office/ N. Serchhip	8131821508
		Lalhmangaihsanga	P	Hmar Veng	9862361461
		Lalchhunga	PF	N.Vanlaiphai	
		C.Rohnuna	P	-do-	9402519203
	C .	BS Tluanga	p	N.Vanlaiphai	
4	Cement Mistiri	BC Lalbiakkima	p	-do-	9402104449
		C Lalngaihzuala	P	Hmar Veng	9383248467
	Masonry	Nunzama	P	N.Vanlaiphai	
5	(Lungrem)	BC Lalbiakkima	P	-do-	9402104449
6	Plumber (Tui pipe siamthiam)	David Lalrohlua	P	N.Vanlaiphai	
		Dr.Z.D.Lalmuanawma	PF, JN Hospital	AOC Veng, Serchhip	9862294782
		Dr. K Lallawmzuala	PF, JN Hospital	Medical Quarter	8974160202
7	Doctor	Dr.Maria VL Rosangi	PF, JN Hospital	Medical Quarter	9862300952
		Dr.Lalnunhlima Khiangte	PF, JN Hospital	Medical Quarter	9436146116
		Dr.Janet Laldinpuii	PF, JN Hospital	Medical Quarter	9612134038

		Dr.Joseph Lalmuanpuia Hauzel	PF, JN Hospital	Medical Quarter	8414007498
		Dr.ChristopherL.Hmar	PF, JN Hospital	Medical Quarter	9862384090
		Dr LalruatlianaPachuau	PF, JN Hospital	AOC, Serchhip	9862013829
		Dr Vanlalchhuanga	PF, JN Hospital	Medical Quarter	
		Dr.Remlalnghaki	PF, Thenzawl CHC	Thenzawl	9436198493
		Dr.Lalranhluna	PF, Thenzawl CHC	Thenzawl	8414812622
		Dr.BenjaminMalsawmtl uanga	PF,Thenza wl CHC	Thenzawl	9436361775
		Dr.LalmuanawmaJongte	PF,N.Vanla iphai PHC	N.Vanlaiphai	9863524473
		Dr. Annie Lalhriatrengi	PF	N.Vanlaiphai	8414046831
		Dr.MaryZohmingliani	PF,Chhing chhip PHC	Chhingchhip	8974246379
		Dr.C.Vanlalhruaia	PF,Ngentia ng PHC	Ngentiang	9436383740
		Dr.B.Lalthantluanga	PF,E.Lung dar PHC	E.Lungdar	9612166240
		JH.Malsawma, BE(Elect)	PF, Serchhip Power Division	P & E Veng	9436145046
8	Engineer	Jim Elliot L.Sailo, B.Tech(Elect)	PF, Serchhip Power Division	Bukpui	9436155301
		J.Lalremruata, Dip(Elect)	PF, Serchhip Power	E.Lungdar	9862732430

	Division		
R.Lalchhanhima, B.Tech(Mech)	PF, Serchhip Power Division	Bukpui	8415848086
H.Zoramthanga, Dip.(Elect)	PF, Serchhip Power Division	P & E Veng	9436146747
Vanlalnghaka, Dip(Elect)	PF, Serchhip Power Division	P & E Veng	9485055468
C.Zairemmawia, Dip(Elect)	PF,Serchhi p Power Division	Bukpui	9402112904
T.Lalbiakhluna, Dip(Elect)	PF, Serchhip Power Division	Bukpui	9862366346
H.Lalchhandama	PF,PWD Serchhip Division	Serchhip	8730974660
LawmsangaRalte	PF,PWD Serchhip Division	R.Tuichang	7308288538
C.Lalfakzuala	PF,PWD Serchhip Division	E.Lungdar	9436146066
R.K.Ngursangliana	PF,PWD Serchhip Division	N.Vanlaiphai	9438188201
Khawtinthanga	PF,PWD Serchhip Division	N.Vanlaiphai	9436964837
P.C.Neihkima	PF,PWD Serchhip Division	Chhingchhip	9862647862

	R.Lalchhanhima,	PF,	Bukpui	8415848086
1		Serchhip		
	B.Tech(Mech)	Power		
		Division		

MAXI CAB COUNTER

S/No	Name Of Counter	Phone No
1	Dingi Counter	9862647653
2	Mazovi Counter	222230
3	Apollo Counter	9089483747
4	Chhingpuii Counter	7089642363
5	Sawmtea Counter	8794646782

SERCHHIP DISTRICT MAXI CAB ASSOCIATION, SERCHHIP

President : Lalmuanawma Phone no 9436376557 Secretary : Lalchhanchhuaha Phone no 8787836779

SERCHHIP TAXI OWNER ASSOCIATION

President : RosanglianaRalte Phone no 9436190590 Secretary : PC Lalnunchama Phone no 8974981149

SERCHHIP TAXI OWNER ASSOCIATION

President : Vanlaldawta Phone no

Secretary: C Lalneihkima Phone no 9089201424

SERCHHIP TRUCK OWNER ASSOCIATION

President : Vanlaldawta Phone no

Secretary : C Lalneihkima Phone no 9089201424

SERCHHIP DISTRICT VOLUNTEER QUICK RESPONSE TEAM(QRT)

Sl/n	Name	Father's/Mother's name	Qualification	Contact
1	C. Lalthakima	C Ramdinsanga	BA	9089641932
2	PC Lalnunzira	PC Vanlalnghaka	HSSLC	6009014569
3	Laldinpuia	R. Lalngaihzuala	HSSLC	8259914553

4	H. Vanlalawmpuia	Lalvenzuali	BA	7629861190
5	Lalramngheta	C. Lawmzuala	HSSLC	9402156202
6	Ferry Lalkhawngaiha	K. Zonunsanga	HSSLC	9383177114
7	H. Lalremruatpuii	Lalrinchhunga	HSSLC	8794201695
8	Lalnunhlui	Lalbiakdiki	HSSLC	9366227745
9	Laltlanmawia	Rothangliana	HSSLC	9089250671

3.3.5 FORECASTING AND WARNING AGENCIES

DEOC will take it up in partnership with DIPRO and Meteorological Department. Toll free number 1077 is activated in District Emergency Operation Centre.

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CHAPTER-4

PREVENTIONANDMITIGATIONMEASURES

A better Disaster management with minimum vulnerability is possible only by means of preventive, preparedness and mitigation measures. Neither a disaster can be prevented or diverted to any other place. The only possible thing is to minimize the effect. Mitigation in fact, is not, a cost. In the long run it pays for itself.

4.1 PREVENTION MEASURES

Prevention consists of actions that reduce risk from natural or manmade disaster incidents. It is required to list and elaborate all types of measures (like - building codes, floodplain management, storm water management, coastal area zoning and management plan, etc.) – planned and implemented by the districts as a part of prevention measures. It is good to have long term mitigation goals in place and connect these goals with measures that district has planned and implemented. These goals may include (but not limited to):

- 1. Provide better early warning methods for flood, storms, cyclone
- 2. Reduce the destruction and loss of life within buildings
- 3. Provide for safer environments for transportation systems
- 4. Eliminate flooding in populated areas 5. Ensure redundant water supply systems
- 6. Reduce environmental degradation and restoration of livelihood
- 7. Reduce effects of the natural environment on the infrastructure
- 8. Ensure redundant power systems on critical facilities
- 9. Ensure adequate materials available for road maintenance

4.1.1 Specific projects proposed for preventing the disasters.

1. Establishment of the control rooms;

The district administration should ensure the operation of the control room. The control room are presently run by major line department Police, Hospital etc the district level should be functional.

2. Plan updating

Disaster Management Plan needs updating annually. It includes skilled manpower. Their addresses and contact numbers, necessary equipments, medicine stocks, daily necessities. All these things have to be updated after a certain interval of time.

3. Communication system

Training is given for search & rescue, first aid's team of disaster management at the district and village level. These teams will provide timely help to any type of disasters.

Widespread awareness programme through media etc so that communities are sensitized on the action they must take when there is need for it.

4. Training for disaster management team

Each DMT's comprises of women and men volunteers assigned the special task of .The First Aid Team and Search & Rescue Team should be provided with training from time to time so that their timely help can be used during any disaster. DDMA Serchhipwill conductaworkshoponCBDMinwhichlocalpeople, masons, NGOsmembers, Students, tookparticipation.Communities arealwaysthefirstresponders. Communityparticipationensures local ownership, addresses local needs, and promotes volunteer is m and mutual helptoprevent and minimized amage. Sub-head quarter YMA will be used in providing disasterrelated information and education to general public. Atthetime of disaster, the Office of Sub-Headquarter YMA, located Bazar, Kawnpui, Serchhipcanbe converted into information and reporting hubs.

5. Organization of mock drill exercise

Mock drill is an integral part of the community based disaster management plan, as it is a preparedness drill to keep the community alert. Mock drills are organized in order to activate the DMT's of district level and modification of DM Plan.

6. Community awareness on various disasters

- 1) Construction of earthquake resistant structure.
- 2) Retrofitting the weak structures.
- 3) Construction of breast walls, retaining walls etc to increase resisting force for preventing landslides.

7. Mainstreaming of DRRin development planning

DDMAhas to issue directionstimetotime inaccordancewithall stakeholders regarding inclusion of Disaster Risk Reduction (DRR) in developmental Planning. Disaster RiskReduction(DRR)issuesinDevelopmentPlansetcaretobeinterlinkedverticallyand horizontallyforfail-safeinfrastructuresinSerchhip Mainstreamingdisastermanagementintothedevelopmentplanningprocessessentiallymeans looking critically at each activity that is being planned, not only from the perspective of reducing the disastervulnerabilityof thatactivity, but also from the perspective of minimizing that activity's potential contribution to the hazard. Every development plan of a department should incorporate impactassessment, risk reduction, and the 'donoharm' approach. Examples of elementsof zoning, upgradation of building codes and their effective approachareurbanplanningand enforcement, adoption of disasterresilient housing designs andconstructionof andhospitals, floodproofing, response preparedness planning, insurance, establishment of early warning systems forvarioustypesofdisasters, generating community awareness, creating technical competence and promotingresearchamongengineers, architects, healthexperts, and scientists. Inthisdistrict,

8. RiskAssessmentand VulnerabilityAnalysis

communitytowardsDRR issues.

Everydepartmentatdistrictlevel willanalyzethespecificrisksfacedbythedepartmentinthatarea orsubjectonwhichthedepartmenthasthe jurisdiction. Theconcerneddepartmentwilldoariskand

DDMAhas tosensitize officialsofPWD, PHE, LAD/UD, RD/DRDAandalsomasons and

vulnerabilityanalysis andprepareareportandpresentittoDDMA. The NODALOFFICER of concerned department will be responsible for the said assignment. DDMA will take cognizance of the reportand action will be taken accordingly.

9. Constructionwork

As andwhentheearthquakeresistantfeatureswillbeincorporatedinthebuildingby-lawsof the Stateandadequatezoninglawswillbeputinplaceto regulatedevelopmentawayfromunsafe locations,theconcerneddepartmentwillberesponsibleforimplementationandraisingpublic awareness aboutthese laws.

10. Infrastructureand HousingRepairand Maintenance

HousingandRoads andBridges arethetwoissueswhichareimportantinviewofdisaster. Formitigationofearthquakeretrofittingandrenovationof lifelinebuildingshasparamount importance.Lifelinebuildings representcriticalinfrastructureforthestate, such asschools hospitals. The Public works department will be the primary agency responsible of conducting lifelinebuildings.Existingdevelopment structuralassessment,retrofittingandrenovationof programmesmaybeexaminedtoincorporatedisasterresistanttechnologiesinallexistingandnew publicbuildings.PWDwillberesponsibleforpreparingariskandvulnerabilityanalysis presentittoDDMA.TheNODALOFFICER of PWDdepartmentwillberesponsibleforthesaid assignment.DDMAwilltakecognizanceof thereportandactionwillbetakenaccordingly. Embankments/Banks/Dams andwaterresources, construction, strengthening of microlevel protection features need to be identified and taken on priority in a reasy with recurrent threat off loods, and other waterrelateddisasters.PHE willberesponsibleforpreparingariskandvulnerabilityanalysis report andpresentittoDDMA.TheNODALOFFICERofPHEdepartmentwillberesponsibleforthesaid assignment.DDMAwilltakecognizanceof thereportandactionwillbetakenaccordingly. Allthedepartmentswillhavetoensurethatmitigationmeasures are incorporatedintorepairs, major alterations, newdevelopment, and redevelopment practices, especially in a reason bject to substantial riskfromhazards. Fortheruralareas, DRDAwillcoordinatewiththeDistrictAuthorityto ensurethat allmitigationmeasures have been implemented under the National Rural Employment Guarantee Act, provide for strengthen ingandmaintenanceof suchphysicalfeaturesthatmayvitallyprotect/helpinrescue ofcommunitiesduringdisaster situations. Fortheurban LAD/theUrbanDevelopmentdepartmentwillcoordinatewiththedistrictauthoritiesto ensurethatmitigationmeasures are included.

12. Research and TechnologyTransfer

Underthe

guidanceofScienceandEnvironmentdepartment,PWDwillestablishandmaintain partnershipsbetweenalllevelsofgovernment,theprivatesector,communitygroups,andinstitutions ofhigherlearningthatimproveandimplementmethodstoprotectlifeandproperty.

13. Trainingand CapacityBuilding

TrainingandCapacityBuildingofGovernmentOfficials: Atthedistrictlevel,trainingprogrammes will be conductedincoordinationwithNGOs, PWD andgovernmenttraining/researchinstitutions (ATI, Disaster Management Cell).

14. CommunityLevelTrainingandPublicAwarenessActivities:

ATIhas alreadyorganizedaworkshoponcommunitybaseddisastermanagement(CBDM) in the last few years. The community awareness and training activities has been basically

carriedoutinthe formof

training programmes through NGOs, and Government Training Institutions.

Apartfromspreadingawarenessofdisasters, the focus will essentially be on community capacity building.

Special focus will be given to local contractors and masons, who are the prime responsible for construction work. Training programmes will target the informal construction sector by building their capacities on safe construction practices and retrofitting of existing structures. An institutional arrangement is required to ensure that in the long term, contractors and mason ensure safe construction practices.

15. Land UsePlanningand Regulations

TheofficeofdepartmentofLand Revenue & Settlement, Serchhipwillbeprimaryagencytoencouragenew avoidingorminimizingexposuretohazardsorenhancedesign requirementstoimproveresiliencyinfuturedisasters. Thisofficeshouldalsoensureproper enforcementofexistingregulations and acts.

16. Incentives and Resources for Mitigation

ThemainsourceforfundingwillbeStateDisasterResponseFundtoimplementtheabovestat ed mitigationstrategy. Thefundwillbeusedtoprovideincentivestodevelopmentalprojectswhere mitigationmeasureshavebeenadopted. Leveraging of funds from other developmental schemes also needstobetaken into account.

17. Preparedness for schools

In Serchhip District there is the National School Safety Programme which is going on. Through these programmed 200 schools of the district was selected for training in disaster management. In connection with this programme sixty five stakeholders from the villages of the selected schools had undergone training in disaster management and from the selected schools; two hundred eighty five teachers are already trained as trainer for their schools.

18. Commanding officer, Assam Rifle

The Commanding Officer shall workinclose coordinationwiththedistrictadministration and shall have access to all the available manpowermachinery and material sattheir respective disposal. They are required to draw contingent plan with all available resources at their command and shall also apprise the chair man with such information. These organizations shall also be responsible for the protection of vital installations and maintaining the supply lines.

4.1.2 Specific Projects for Vulnerable Groups:

Children under 18 years are protected and guided under the CSS project in the District. The District Child Protection Officer will be in charge of the protection of girl child in normal as well as at the time of occurrence of Disasters in the District.

Under the NLUM Programme, Women are being focused specially for a better livelihood and Self-Help groups are organized in urban area as well as Rural areas. UD&PA Dept will be responsible for vulnerable group especially in the event of Disasters.

Type of Disability SlSeeing Hearing Speech Movement Mental Mental Other Multiple retardation illness disability disability No $7\overline{2}$ 228 157 135 95 31 100 173

Disabled Population by type of Disability (2011)

There is an ongoing programme under SSA known as Child with special needs Programme. Identification of disable people between 6-14 years is done by community people under SSA. This programme provides assistance like free medical check up and aid to the identified disasbled school children, free assistance in cash and in kind. This Programme also provides transport allowances to physically challenged students. Special cars are given and also special attention is given to students with physically disability by constructing ramps in school and offices.

There is another programme under RMSA in collaboration with SCERT known as IED programme which identified persons with disability fron age group of 16-18 years.

4.2 Mainstreaming DRR in development plans and programs.

In Serchhip district, all the Heads of Department has been informed regarding mainstreaming of Disaster Risk Reduction in the development programmes of all the department especially to PWD, DRDA, P&E, PHE, Education Department and Information and Public Relation Department.

4.3 List of on-going and proposed development projects and programs addressing disaster prevention - both directly and indirectly

4.3.1 Individual level – Awareness generation thorugh Media

4.3.2 Community level-Drainage system and Check Dam has been proposed for AOC-Hmar veng area within Serchhip town.

4.4 Mitigation Measures

Mitigation embraces all measures taken to reduce both the effect of the hazard itself and the vulnerable conditions to it in order to reduce the scale of future disaster. Therefore mitigation activities can be focused on the hazard itself or the elements exposed to the threat. Mitigation aims at reducing the physical, economics and socio vulnerability to threats and the underlying causes for this vulnerability.

Proper preparedness and mitigation measures instantly help to respond disaster a disaster in time. So district wise preparedness and mitigation is highly required. A prepared community is the best community to minimize the loss and damaged caused by the disaster.

Mitigation focuses on various ways and means of reducing the impact of disasters to the communities through damage prevention.

4.4.1 Hazard-Wise Mitigation Measures

a) Earthquake

- Construction of earthquake resistant buildings in safe location.
- Reconstruction/retrofitting of unsafe old buildings and structures.
- Enforcement of building code and byelaws.
- Ensure the safety of buildings or institutions where mass gathering usually takes place as in schools, public halls etc.
- Strict regulation for approvals of building design and to ensure safe construction practices are followed while construction of new buildings is undertaken.
- Mass education on safe construction practices and protection of human being from earthquake. Practice do's and don't's on regular basis.
- Have mock drills with all stakeholders and institutions and the general public to ensure the preparedness level.
- Training of engineers and masons on safe construction practices.

b) Flood

- Strengthen the early warning system for accurate warning to the community.
- Storm drains should be strengthened and cleared before rainy season.
- Land use planning to avoid mudslide and landslide due to heavy rainfall.
- Community awareness and education to prevent flood.
- Mapping of flood prone areas and flood risk mapping which can assist during pre-disaster decision making.
- Formulation of flood preparedness plan which includes emergency response planning and training.

c) Cyclones/High wind

- Structural modification in existing houses to keep the roof intact during heavy wind. Construction of Cyclone shelters that can act as safe place to flee during cyclone
- Construction of wind breakers to minimize the effect of high wind on the houses.
- Strengthen early warning system in the district. Coordinate with Meteorology Dept. to get localized cyclonic information and alert the people for preparedness.
- Mapping, delineation and demarcation of cyclone hazard areas and sensitive areas.

d) Landslides

• Identify all streams runoff and clear blocked areas before the rainy season, to avoid blockade.

- Maintain and protect both sides of river and stream to avoid erosion and improve the channels for free flow of water.
- Monitoring of landslide prone areas either through and automated system or by preparation of hazard area maps and following up ground check on such areas during monsoon or raining season.
- House site allotment should be considered only after careful consultation with Land Use Plan to avoid risk against landslide and land-sinking.
- Campaigns to create public awareness on the importance of proper drainage system.

e) Drought

- Tracking the behavior of monsoon and taking advance action to reduce the drought situation.
- Construction of rainwater harvesting structures in prone ares to ensure that water is as least available during drought prevalence.
- Crop insurance should be promoted to transfer risk.

f) Fire

- Identify vulnerable forest areas prone to fire damage annually and prepare a fire damage map.
- Clearance of fire lines which are absolutely necessary by controlled burning along the highways, village roads, foot-paths, plantations, regeneration areas, protected areas and electricity transmission lines etc.
- Constitution of Village Fire Protection Committee of permanent nature.
- Effective communication system for early detection of fire incident through fire watchers and carrying out intensive patrolling during dry season. Imparting training to staff and villages for fire fighting.
- Strict enforcement of existing Fire Protection Regulation Act.

g) Epidemics

- Health department needs to be provided with more water quality monitoring centers for effective surveillance of water quality principally during the monsoon months and during flood events.
- Bleaching powder should be adequately available with all the villages.
- Rural hospitals should be upgraded to include blood bank and surgical facilities.
- Contingency plan for response should be prepared after identifying the epidemics that are likely to occur in the region.
- First aid training will help to cope better during the emergency response period for epidemics.
- Improving the sanitary conditions, drive to check and fumigate breeding places of any vector, disinfecting the water sources etc.

h) Road accidents

- Setting up of highway safety patrol team along the Aizawl-Serchhip highway which will be a specialized division of police to tackle road accident.
- Provision of adequate signboards, speed breakers and guard stones/steels

near cliffs and accident prone spots.

• The risk at the accident prone spots and cliffs must be minimized by adequate construction signboards.

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4.4.2 Hazardwise Non Structural Mitigation Measures

Mitigation Strategy of Various Government Department

a) Agriculture Department

- Storing of seeds, seedlings, mini kits, fertilizers, pesticides and other agricultural inputs for making them readily available to the affected cultivators under the loan/grant for raising alternative crops after any disasters.
- Raising seed beds with support from community and keep them in stock to the places prone to the disasters for easy access.
- Introduction of new seeds storage banks at community level.
- Drawing up contingency plan for the purposes and community should be aware about the contingency plan.

b) School Education Department

- Have School Safety Plans in all schools.
- Practice evacuation drills on regular basis.
- Strengthen school building against earthquake, cyclonic storms, landslides and fire.
- Ready with books and kits for crash course after any major disasters.

c) Health Department

- There should be a health and medical services plan for vulnerable areas.
- Emergency Mass Casualty Plans for each hospital and health service centers to be drawn up.
- Mobile health and medical facilities to be always alert and ready.
- Materials and manpower shall be made available at all time to set up temporary health centers in affected areas.
- Inoculation, vaccination and health care shall always be in readiness.
- Storing of medicines, equipments in disaster prone areas.

d) Animal Husbandry & Veterinary Department

- Storage of feed, fodder, medicine, vaccine and preventive measures for animal health.
- Supply of fodder in times of need with support from community for more generation of fodders.
- Deployment plan of Veterinary personnel, where it is required and train them to manage emergency situation.

e) Public Health Engineering Department

- Keeping ready materials required for quick supply of drinking water where it may be required after any disaster.
- Protect all water supply systems from earthquake and landslides. Keep ready
 with alternate water supply system in case normal water supply system is
 broken.
- Fire Hydrant be installed at strategic locations In Serchhip Town.
- Provide water to Fire & Emergency Services when there is an outbreak of fire for refilling of empty Fire Tender without any delay in time.

f) Police Department

- SDRF Units in the Police Battalions shall be always put on alert and their equipment kept in tip-top condition.
- Put on alert officers and other ranks to immediately act and take control of any critical situation side by side with the administration.
- Provide security relief operation in disaster situation.
- During normal time, trained personnel of SDRF Units can impart training to Community DMTs on research and rescue operation and maintain linkages with community leaders for better cohesion during any type of disaster.

g) Fire & Emergency Department

- Enhance the number of units in the State to provide effective services.
- Create more community volunteers to support the department in carrying out their activities.
- Organize trainings of volunteers and upgrade their skill and knowledge on search and rescue on regular basis.
- Provide budget head for regular training of the volunteers.

h) Public Works Department

- Protective measures have to be taken in all roads to avoid break due to disasters. Maintain all roads before the rainy seasons.
- Ensuring that equipments, materials and workers are kept ready to repair broken roads and establish linkages quickly after any disaster.
- Keep an updated list of heavy earthmoving equipment, etc with contact numbers.
- Special provision for roadside drainage be included with road development projects.
- Vigilance maintained during construction work to ensure that engineering designs are strictly followed for safety against cyclonic wind and earthquake.
- Rock fall/ Landslide vulnerable area be monitored regularly and take necessary preventive measures by removing or fixing those portions which are likely to fall during rainy season.

i) Power & Electricity Department

- Assess the electricity supply system of the State and take preventive action to protect the supply system during disaster periods.
- Keeping ready the requirements of manpower and stock to meet any emergency situation.
- Conduct refresher training for existing staff at regular interval to handle the emergency situation and provide electricity to the essential services and community as well.
- Keep equipments ready to provide electricity supply temporarily to disaster affected areas.

j) Environment & Forest Department

• Support the community in generation of wind break by planting appropriate

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- trees near the community settlements.
- Give support to Soil & Water Conservation Department to maintain all river banks and streams to protect landslides and mud slides.
- Enhance the community participation in generation of more saplings and encourage them to protect the forest.
- Generate the awareness among the community to avoid forest fire.

k) Transport Department

- Keep list of transport/ vehicle for relief and rescue operation.
- Keep contact with Aviation Department for helicopters for emergency operation to facilitate quick arrangement of airlift that may be required during disaster period.

1) Food, Civil Supplies & Consumer Affairs Department

- Construction of food storage facilities in disaster prone areas to keep sufficient food-grain before disaster seasons.
- Stock sufficient food-grain before monsoon starts in isolated rural areas.
- Since the State relies heavily on imported food-grains, the department shall stock sufficient food-grain before monsoon starts when road communications could be disrupted for a long time.

m) Rural Development Department

- All construction taken up by the Department should be invariably be of earthquake resistant design.
- Existing rural infrastructure constructed by Rural Development Department are to be inspected and safety against earthquake of high intensity be ensured especially for buildings used for mass gathering, like hall etc.
- All engineers under the Department shall be trained in Earthquake Resistant Construction.

n) Land Revenue& Settlement Department

- Coordinate with Urban Development & Poverty Alleviation Department and follow the Land Use Plan approved by the Government before making house sites plan for residential or other purposes.
- "No Development Zones' as per approved Land Use Plan should not be disturbed.
- Natural drainage should not be disturbed while allotment of house sites in areas where natural drains crosses the sites.

o) Local Administrative Department (UD& PA Department)

- Master Plan for all urban habitations be drawn up after careful conduct of Hazard, Risk and Vulnerability Analysis.
- The Mizoram Urban & Regional Development Act/ Rules including Building Regulations be revised/amended to incorporate the recommendations of the Team of Expert (MHA).
- The MURDA/Rules be implemented strictly throughout the State where

applicable.

• Assistance be given to the Autonomous District Councils to develop respective Building Byelaws to ensure safety against all hazards.

p) Village Councils/Local Councils

- LC/VC level Disaster Management Committee be formed to look after various aspects of pre and post disasters activities.
- Coordinate with the local NGO's to establish active Disaster Management Teams for various activities like S&R, First Aid, Shelter Management, Information & Damage Assessment etc as may be considered required.
- Assess the risk factor of the community and develop various protection measures along with the Government Dept. and NGO's.
- Carry out mock drills twice a year to assess the preparedness levels.

q)Contractors:-

 At presentSerchhip Districthave 26registered contractors with PWD Division Serchhip District.

CHAPTER - 5

PREPAREDNESS MEASURES

Preparedness is the state of readiness to deal with a threatening disaster situation or disaster and the effects thereof. The preparedness level at the District has to be checked by the DDMA

5.1 Identification of stakeholders involved in Disaster response

The overall responsibility of Disaster management lies with the DDMA, however, all stakeholders like the different Departments of the Government, Local authorities such as the Village Councils, NGOs and the Community have to support the DDMA in all its efforts for effective management of disasters. Zonal Officers are appointed by the DDMA within the district to tackle various problems during the non-disaster time and disaster time of activities.

Zone No.	Designation of Zonal Officer	Name of Officer with Contact No.	Area to be covered
Zone - I	SDO (Sadar), DC Office	Pi Rebecca Laldinmawii Hrahsel, SDO (S) Phone No : 8974736278	New Serchhip North, New Serchhip South, P&E, Chanmari
Zone - II	SDO(C) Thenzawl	Pi Rebecca Laldinmawii Hrahsel, SDO(C) Thenzawl Phone No : 8974736278	Thenzawl town, Buangpui, Neihloh, Zote South, Kanghmun South
Zone - III	SDO(C) North Vanlaiphai	Pu Daniel Sailo , SDO(C) N.Vanlaiphai Phone No: 8731058236	North Vanlaiphai, Lungkawlh, Lungchhuan, Bawktlang, Sialsir, Chekawn
Zone - IV	Settlement Officer, LR&S	Pu Gaston Vanlalhriatpuia, SO Phone No: 8974834840	Chhingchhip, Chhingchhip Mualpui, Kawnpui North, Kawnpui
Zone - V	BDO, Serchhip	Pu Zohmangaiha, Superintendent, DC's Office Serchhip (He will be the incharge officer until new BDO is posted) Phone: 9862324621	Rullam, Vanchengte, Sialhau, Hmunzawl, Thinglian, Ngentiang, Lungpho, Thentlang, Hmuntha, Khawbel
Zone - VI	BDO, East Lungdar	Pu Daniel Sailo, BDO E.Lungdar Phone No: 8731058236	East Lungdar, Sailulak, Leng, N.Mualcheng, Khawlailung,Piler
Zone - VII	SDC-I	Pu Lalhruailiana Zote, SDC(I) Phone No : 8974196381	Baktawng, Chhuanthar Tlangnuam, Khumtung, Hualtu, Buhkangkawn, Hmawngkawn

Zone - VIII	Addl.DC	James Lalnithanga, Addl.DC Phone No: 9862447706	Chhiahtlang North, Chhiahtlang South, Field Veng, Vengchung, Dinthar, Hriangtlang
Zone -IX	PD, DRDO	HD Lalpekmawia, PD DRDO Phone No: 8974189546	Hmar Veng, Chhim Veng, Darnam, Keitum, Bungtlang

5.1.1 Response and evacuation of the disabled

Immediately after a disaster the following actions are to be taken for disability-related responses:

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

5.2 Formation of Teams

5.2.1 Early Warning

Chairman : DC Secretary : DIPRO

Members Department : NIC, BSNL, POLICE, Private Telecom

5.2.2 Search and Rescue

Chairman : Superintendent of Police

Secretary : O/C F&ES

Members Department : Police, 14AR, YMA

5.2.3 Evacuation

Chairman : DC

Secretary : DSP Police

Members Department : Police, Fire, PWD, PHE, NCC, Army

5.2.4 Damage and Loss Assessment

Chairman : District Research Officer, Serchhip
Secretary : Information and Public Relation Officer
Members Department : I&PR, DC's Office, YMA, Police

5.3 Activation of IRS in the District

IRS POSITION	SUITABLE OFFICER
Responsible Officer	Deputy Commissioner
Incident Commander	Addl. Deputy Commissioner
Deputy IC Superintendent of Police	
Information and Media Officer	District Information and
	Public Relation Officer
Liaison Officer	SDO Sadar
Safety Officer	SDC, i/c DM&R
Operation Section Chief	Addl. Superintendent of Police
Staging Area Manager	SDO (Civil) Thenzawl/ North Vanlaiphai
Response Branch Director	SDC (P)
Division Supervisor / Group in Charge	Deputy Superintendent of Police (HQ)
Task Force/ Strike Team	Commander / Leaders of SDRF, MAP, MRP,
	IR, F&ES, MRHG, YMA
Single Resources	SMO-H & FW Dept, SDO-PWD/ P&E,
	S.O,F&ES
Transportation Branch	District Transport Officer

ROAD GROUP		
Group-in-Charge	Deputy Superintendent of Police	
Vehicle Coordinator	Addl. District Transport Officer	
Loading-in Charge / Unloading-in-Charge	MVI Transport Department	

RAIL GROUP		
Group-in-Charge	Not relevant in District in Mizoram	
Vehicle Coordinator	Not relevant in District in Mizoram	
Loading-in Charge / Unloading-in-Charge	Not relevant in District in Mizoram	

WATER GROUP	
Group-in-Charge	Executive Engineer, PHE
Coordinator	SDO, PHE

AIR OPERATION GROUP	
Group-in-Charge Air Operation	District Aviation / Helipad
Helibase / Helipad-in-Charge	Executive Engineer, PWD
Loading-in Charge / Unloading-in-Charge	Superintendent of Excise
Loading-in Charge / Unloading-in-Charge	J.E, PHE

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The DC being the head of the District and chairman of the DDMA is designated as the Responsible Officer (RO) of the district. The DC may delegate some of the functions to the ADC for the day to day supervision and management of the incident. However, he will remain fully briefed by the DEOC and IC and be aware of all developments and progress of response activities at all times. The hierarchical representation of RO is shown at Fig. 1

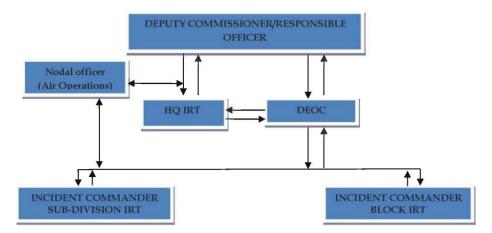


Fig.l: Hierarchical representation of RO

The heads of different departments in the District will have separate roles to play depending on the nature and kind of disaster. The roles and responsibilities of the members of the DDMA will be decided in advance in consultation with the concerned members. The roles of other line departments also have to be clearly delineated in various disaster situations in the DDMP which will be duly approved by the State Government, so that there will be no ambiguity about their functions during response.

5.4 Protocol for seeking help from other agencies like Army, Air Force & Central Paramilitary Forces, NDRF and SDRF

The Chairman of the DDMA will write to the Government in the Disaster Management & Rehabilitation Department for requisition of Army, Air force & Central Paramilitary Forces which will take up the matter with the concern Ministries.

5.5 National Disaster Response Force

The NDRF Battalion/Team can be requisitioned by the DDMA directly in cases of rapid onset disasters where early warning/alerts is not available and through the Director General, NDRF and NDMA in cases where sufficient lead time is available. The DDMA will maintain close liaison with the NDRF Commander, Guwahati for rapid deployment in case of threatening disaster situations/disasters.

5.6 State Disaster Response Force

The Chairman of the DDMA will write to the Government in the Disaster Management & Rehabilitation Department for requisition of SDRF which will take up the matter with the Director General of Police

5.7 Mechanism for checking and certification of logistics, equipments and stores

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

5.8Operational check-up of Warning Systems & EOC

Operational check-up of EOC should be done twice a year. Equipments especially communication equipment, should be checked and tested regularly with the assistance of the MPRO.

5.9Command & Coordination

The DC/RO will convene a coordination meeting regularly with all the stakeholders including the NGOs for effective management of disaster and for preparedness of South West Monsoon and Cyclone seasons.

5.10Community Preparedness

Community is one of the most important stakeholders and also the first responders to any disaster, hence, community preparedness plays a very important role in -Community warning systemIMD is responsible for warning of thunderstorm, cyclone and earthquake and the DDMA/ DEOC will warn the public through the Information & Public Relations Department to the BDOs for further information to all the Village Early Warning Teams. After receipt of warning, the teams shall communicate the message to the concerning people of the areas by sound system or any locally available resources. The DDMA/DEOC shall ensure fail safe mechanism for timely dissemination of forecasting and warning of impending disaster to the Community awareness and education programmes on DM are conducted regularly under the supervision of DDMA & BDOs by involving the community all the village levels.

5.11Community's responsibility

The Community should not only support the DDMA but owned the responsibility for effective DM at their level. Their responsibilities are-

- To promote community education and awareness
- Training and capacity building in Search & Rescue, First Aid and conducting Mock Drills
- Preparation of CommunityNDMP through participatory approach along with formation of DM teams.

5.12 Standard Operating Procedures (SOPs)

Arrangements for VIP visits:

VIP visit to any affected areas is important to build confidence on the people after a disaster. However, minimum protocol requirement is to be maintained so that it will not affect the relief and response operations. Procurement: Resources have been updated in the IDRN website. However, procurement of resources like tents, blankets, tarpaulins, equipments etc during disasters will be done by the Procurement Unit Leader. Emergency procurement of resources can be made by the DDMA as per Section 50 of the DM Act, 2005.

5.13 Knowledge Management, Networking and Sharing

- Documentation of disasters and to make it available in easy accessible format
- Undertake research studies and application of outcomes in disaster management practices
- Documenting field data, experience and indigenous technological knowledge from local community
- Development of plan by using available resources like IDRN.
- Sharing of data/information/reports/proceeding through consultation meeting/seminars etc.
- Use of information and Communication Technology at DEOC.

5.13.1 India Disaster Resource Network (IDRN)

IDRN, a web-based information system is a nation-wide electronic/on-line inventory of resources like equipment, skilled human resources and critical supplies collected from all departments in the district. All resources from different departments at the district have been uploaded and updated regularly.

5.13.2 State Disaster Resource Network (SDRN)

SDRN, a web-based supply chain management system that helps relief agencies or response agencies and local government to access and feed in real time information on products and services required for humanitarian relief.

5.14Media Management/information dissemination

Media plays a very important to check rumour and panic, hence, Media Management System and proper coordination with the DDMA is necessary. The main roles of Media are informative, suggestive and analytical. The I&PR Department is responsible for Media Management. The I&PR Media preparedness measures is attech in the annexure.

5.15Medical Preparedness and Mass Casualty Management

The District Medical Superintendent is in charge of Disaster Medicines and Mass Casualty Management. The following activities are to be prepared-

- Preparation of Authentic medical database for public and private facilities available in the district.
- Resource management- Manpower, logistics, medical equipments, medicines, antidotes, personal protective equipments, disinfectant, vaccine.
- Identification of medical IRS at the district level and disaster site.
- Preparation of Medical Management Plan
- Preparation of Hospital Preparedness/Disaster Management Plan
- Training and capacity building -Hospital preparedness, Pre hospital care, Mass Casualty Management, etc.
- Medical Preparedness for Chemical Emergencies- including formation of trained medical first responder, QRT, stationary and mobile decontamination facilities, identification of poison centers, mobile hospital, antidotes planning and crisis management planning at hospitals.

CHAPTER-6

CAPACITY BUILDING AND TRAINING MEASURES

Developing a DDMP without building capacity or raising awareness amongst stakeholders can be detrimental to the development of a successful and sustainable plan. Stakeholders and communities are critical components to a successful, long-term, sustainable disaster management plan. Capacity Building develops and strengthens skills, competencies and abilities of both Government and non–government officials and communities to achieve their desired results during and after disasters, as well as preventing hazardous events from becoming disasters. Capacity Building is a complex, long-term phenomenon requiring the development of human resources, the establishment of well functioning organizations within a suitable work environment and a supportive socio-political environment for improving the performance of institutions and personnel. Developing institutional capacity is very important. At the same time, by making the local community part of the process and solution would help in ensuring that disaster mitigation measures are more likely to be implemented and maintained over time. The capacity building plan should cater to the _differential capacity building needs based on the functional responsibilities assigned to stakeholders

6.1 Approaches towards Capacity building

The approaches of the DDMA are proactive in prevention, mitigation and preparedness and follow a holistic and integrated approach in dealing with disasters.

- Holistic approach is about integrating all aspects of disaster management like preparedness, response, recovery etc with sustainable development.
- Integrated approach is about involving all stake holders, the Government, NGOs and the community with DM.
- Community-based Disaster Management / Community-based Disaster Preparedness approach is about involving the community in every aspect of disaster management planning. Involving communities in disaster preparedness programs provides a venue for these communities to implement their own solutions thus inculcating ownership and an increased probability of sustainability.

6.2 Capacity Building Plan

6.2.1.1

Task	Activity	Responsibility
Training	Sensitization to Representatives & law/ policy	Revenue
	makersSensitization & training	Department,
&	to government officials of different	DM&R,
Awarene	departments	SDMA,
SS		DDMA

	Training to Civil Defence & Home Guards personnel in various aspect of DM including Search and Rescue & First Aid	Revenue Department, DM&R, Police, SDMA, DDMA,
	Training to engineers, architects, structural aspect of DM	DDMA, PWD and all relevant departments
	Training of doctors & paramedics on Medical preparedness & Mass Casualty Management	DDMA, Health Department
	Training to educational institutions, teachers etc on College/ School Safety, Search & Rescue, First Aid	DDMA education Department,
	Training to Police and Traffic personnel in various aspect of DM	DDMA, Home Department
	Training to Fire & Emergency personnel in various aspect of DM	DDMA, Home Department
	Training to NCC, NSS, NYK & volunteers in various aspect of DM	DDMA
	Training to NGOs/CBOs in various aspect of disaster management	DDMA
	Training to Media in various aspect of disaster management	DDMA,I&PR
	Training to Teachers/Caretakers of PWDs (Persons with Disabilities)	DDMA & Social Welfare Department
	Training on stakeholders Gend & Disast t al er er o l	DDMA
IEC	Advertisement, hoarding, booklets, leaflets, banners, demonstration, street play, rally, exhibition, audio-visual and documentary etc	DDMA all line & departments

Training Institutes and Phone numbers:

Administrative Training Institute, New Secretariat Complex, Aizawl	Director	2323321/2315506
State Institute of rural development (SIRD), Durtlang	Director	221521/221523
Mizoram Remote Sensing Application Centre (MIRSAC)	Project Director	0389-2341240
PHQ Khatla, Aizawl	DGP Mizoram	0389-2334682/2335146

Training on First Aid: Skilled / Medical experts

6.2.2.2

Sl.no	Expertise	Name	Designation	Address	Contact
1	Doctor	LP.Malsawma	СМО	Serchhip	222334
2	Doctor	Z.D.Lalmuanawma	Med.Supt	Serchhip	226184
3	Doctor	Lalnunhlima Khiangte	МО	Serchhip	9436146116
4	Doctor	Maria Vanlalrosangi	МО	Serchhip	9862300952
5	Doctor	Janet Laldinpuii	Dental surgeon	Serchhip	9612134038
6	Doctor	K.Lallawmzuala	Medicine	Serchhip	
7	Doctor	Christopher L.Hmar	MO (Ortho)	Serchhip	
8	Doctor	R. Lalchhandama	Surgeon	Serchhip	
9	Doctor	Laltharzeli Fanai	MO (Gynae)	Serchhip	
10	Doctor	C.Lalrinzama	MO Pediatrician	Serchhip	
11	Doctor	Dr.Lalruatliana Pachuau	MO Surgeon	Serchhip	
12	Doctor	Zodinmawii	МО	Serchhip	
13	Doctor	Andrew	МО	Chhingchhip	
14	Doctor	Remlalnghaki	МО	Thenzawl	
15	Doctor	Benjamin	МО	Thenzawl	
16	Mechanica/ civilengineer	ZD Lalthuamliana	BE	Serchhip	
17		Dr.R.Lalmakthanga	BVSC	Serchhip	222055
18		Dr.Lalrokima	BVSC	Serchhip	

6. 3Police, Fire Services, SDRF

District Police Team 2020

Sl.No	Name	Designation
1	Ms.Dawngkima	Superintendent of Police
2	PB.Singh	SDPO
3	V. Lalduhawma	Inspector
4	Zosangliani	Inspector
5	Lalsangzuala	SI
6	Hmingthansangi	SI
7	T. Lalhruailiana	ASI
8	F.Lalchungnunga	Constable
9	Lalnghakliana	Constable
10	PC.Malsawmkima	Constable

Note: Other SI, ASI and Constables in the Police Dept will be deputed at the occurrence of the Disaster according to the Police response Plan.

Fire & Emergency Services:

Sl.No	Name	Contact No
1	Ruatliana, FSM	9612842714
2	KC Lallawmkima, Fireman	8132927618
3	C. Laldinkima, Fireman	9862652585
4	R. Laltanliana, Fireman	8730834544
5	J.R. Lalnitawna, D/G-i	8730903683
6	F.X. Laltanpuia, D/G-ii	9862685677

There are Fire mens in the fire stations that are skilled trained in Rescue and lifting.

SDRF: 1st Batallion MAP, Armed veng – 0389-2322306/2325046

3rd Batallion MAP, Mualpui – 2325572/2324862

5th IR Bn, Sakawrtuichhun – 2916156/2341491

DDRF: District Organiser, DEOC/ District Magistrate will be responsible in deputing the DDRF Team. Contact – 1077/9862116104.

6.4 Community Based Disaster Management

Taking into account the negative impact of the natural disasters in the district and as Community is the first responder to any disaster and the first to be affected. Defining community is the first step towards community preparedness and stressed that any strategy must focus on the community and its problems for effective implementation of the programme. Community is one of the most important stakeholders in DM. Therefore, effective participation of the community which includes all sections of a society is emphasized to capacitate the community and increase their preparedness level so that loss of life & property can be reduced. The concept of putting the communities at the forefront gives rise to the idea of CBDM. The community needs to be empowered for coping with disasters and as well as the need to mobilize their capabilities and capacities for effective DM. It is also known that the local communities have an active part to play in all phases of disasters because:

- A good state of preparedness by the community before a disaster strikes may reduce its impact.
- The Community can save more number of lives during the golden hours after a disaster strikes till the arrival of external help.
- The Community can effectively address the issues of water and sanitation, health, rehabilitation etc in more organized way.

NGOs (YMA, MHIP, etc)

In Serchhip district one Nodal Officer has been designated. Pu R. Kawlthuama, President, Sub-hqtr, YMA. Mob-9436146136. The sub-headquarter YMA would perform the following duties within the ambit of its own organizational structure, in association with various NGOs.

<u>In the preparedness stage</u> it will take steps for preparing community based disaster management plans. It will identify volunteers in disaster prone areas and arrange for their training. It will organize awareness raising programs, seminars and meetings with the people for improving their capacity to face disasters. It will maintain contacts with District Administrators on its activities. It will ensure road communication and pre-positioning of relief material as close as possible to disaster prone communities.

<u>In Alert and Warning Stage</u> it will issue warning notice to all YMA branch concerned in the district. It will keep the survey and relief team of head quarters on stand-by in readiness with required transport and equipment. It will mobilise volunteers and issue instructions for sending them to potential disaster affected areas. It will take part in evacuation programme of population with close cooperation of volunteers. It will coordinate with pre identified NGOs for possible joint operations.

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<u>During disaster</u>It will ensure survey of loss and damage in affected areas and dispatch of relief teams from concerned YMA branch. It will assist the Government to determine loss, damage and needs related information. It will give emergency assistance to disaster affected people especially in the following cases:

- Help in rescue and evacuation work, temporary shelter, first aid, food and clothing,
- Arrange for distribution of relief material received from Government and various donors of areas not affected by disaster.
- Send request for requirement of relief and rehabilitation to the Central YMA, Aizawl after informing about loss and damage due to disaster.

After disaster It will participate in reconstruction and rehabilitation programmes in special circumstances. It will take steps for correct and effective evaluation of preparedness work and for correcting errors/weakness in such work. It will extend Cooperation to the district/state EOC for disaster documentation.

OFFICER IN CHARGE OF THE DISTRICT CONTROL ROOM:

The Deputy Commissioner of the District shall be the control room in charge of the District. The DC will oversee all the functioning of the crisis management and shall remain in the control room. In case of his absence, other officer will be appointed to take over the charges, and shall be responsible for the implementation of the Standard Operating Procedure for effective management of the situation.

The officer in charge of the Control Room will make a duty routine in times of normal, during disaster and post disaster. They will receive all the disaster information from various sources and send out the warning to all field officers. And any officer receiving disaster warning must inform the Control Room at instant for further follow up action.

During Emergency, the Officer in Charge must ensure the availability of the following equipments in the Control Room and ensure they are fully functional for proper disaster management activities:

- Communication facilities, phone (land line and mobile wireless set).
- Generator, inverter and batteries.
- Radio/TV for information collection.
- Record Book for entry of important notes and warning received about disaster.
- Sufficient fuel for running the generator.
- Vehicles for emergency (two, four wheelers).
- Disaster mapping of different aspect like vulnerable and safe areas etc.
- Standard Operating Procedure for line departments.
- Important contact numbers for emergency.
- List of NGOs, NSS, and NCC with their capability to respond disaster.

Task Activity Respons	onsibility
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Community Preparedness	Identification of vulnerable community & vulnerable groups keeping in mind the gender Issues	DDMA,BDOs
	Information on risk & vulnerability	
	Encourage preparation of DM plan through PRA	
	Advice and issue direction wherever necessary for community disaster prevention, mitigation and preparedness through local resources and participatory approach	
	Provide necessary resources and support for DRR at community level	
	Review the preparedness at community level	
	Promote community preparedness, education, awareness and training	
	Ensure fail safe mechanism for timely dissemination of forecasting and warning of impending disaster to the community	
	Disseminate information to community to deal with any disaster situation	

6.5 Training of Trainers

ATI Aizawl has been conducted Training of Trainers in Disaster Management for both institutions and for the volunteers in the District. Identified experts from from DRC Serchhip, Search and Rescue Team members from YMA and trained health Professionals like Doctors, Nurses are being identified as trainers of the District. Besides these, Engineers, Masons and other Professionals are owned by the District as trainer of the community in Disaster Management.

6.5.1 Contact persons of Professionals at different line.

Sl.No	Expertise	Name	Designation	Address	Phone
1	Public Health	LP.Malsawma	CMO	Serchhip	222334
	Specialist			JN Hospital	
2	Ex-Serviceman	Zaliankhuma		Serchhip	222560
3	Mechanical Civil	ZD Laltlanzova	BE	Serchhip	222325
	Engineer			-	

6.5.2 Disaster Management Education

Disaster Management Education has been given importance in the district. All the offices and Schools in Serchhip district has been given awareness on disaster management. All offices had been given training and guidance for preparation of Disaster Management Plan. Public Building safety and community safety against various hazards had been studied and awareness on Community based Disaster Management has been conducted at different places in the Community within the district. Village Disaster Management Plans are prepared and Block DM Plans are to be prepared and updated every year.

6.5.3 Schools

Under the Programme of National School safety policy, Schools in Serchhip district has prepared DM Plan. The DDMA has given School DM Plan to be followed for all the schools in Serchhip district. From Primary to High School, Schools are given direction to conduct Mockdrill frequently as directed from the DEO. The National School safety Policy 2016 is being implemented in Schools and institutions within the District.

In Serchhip district, there is one academic college available. Serchhip Govt College has prepared DM Plan and acquired equipment for Search & Rescue and First Aid. Adventure Club in Govt Serchhip College are also identified as Search & Rescue Team for the District.

6.6 Skill up gradation and follow up training programmes

Serchhip District Disaster Management Authority has the follow up training Programmes

Sl.no	Activity	Target Group	Responsibility
1	Community Based Disaster Management Training	Community/Vc area within Serchhip district	DC's Office
2	School safety Training	Schools in Serchhip district	DDMA/DRC/DEO
3	Search & Rescue Training	NGO/Volunteers at District level	DDMA
4	Training on First Aid	NGO/Volunteers at District level.	DDMA/ Health Dept

Chapter -7

RESPONSE AND RELIEF MEASURES

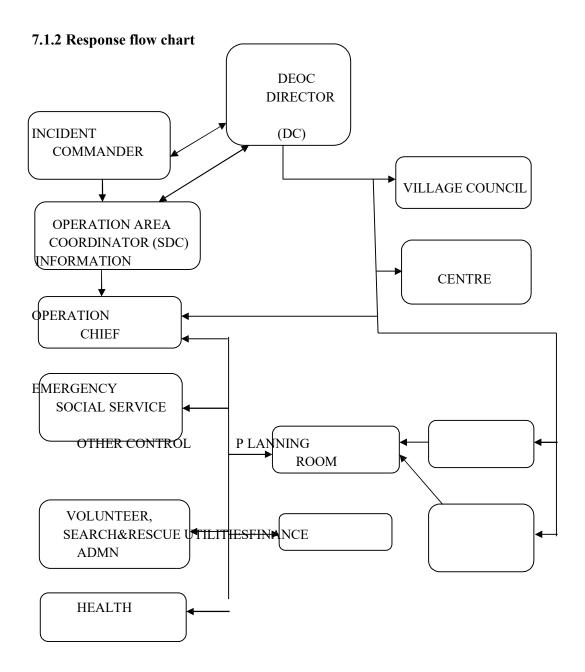
Response planning provides rapid and disciplined incident assessment to ensure a quickly scalable, adaptable and flexible response. It incorporates National and State response doctrine, which defines basic roles and responsibilities for incident response across all levels of government and the private sector. Before taking up response activities, the DM (RO/IC as per IRS) will hold a meeting to take stock of the situation, availability and mobilization of resources for listing out the various tasks and to provide proper briefing to the responders. The Incident Action Plan will be drawn and put into action based on the situation assessment. The Deputy Commissioner will nominate Operation Section Commander (OSC) based on —incident type and rest will follow as per IRS/IRT and other procedural guidelines issued by the state.

7.1 Response planning (multi-hazard), preparedness and assessment

Response planning of Earthquake, Cyclone, Floods, Landslide are different as the nature and effect of the disaster is different.

7.1.1. Quick assessment of damages and need

Rescue and Relief operations shall be based on ground assessment of damage and losses. Preliminary Assessment shall be carried out immediately within 24hours for planning and response. The Damage Assessment Team will be active on the Disaster Site, Ariel surveys and information collected from primary and secondary sources. If all forms of communication fail, MPRO may be expected to collect and give report by using their WT set along with other line Departments or by using Torch light /Morse Code Communication Techniques. Need based quick assessment is needed here in case the incident side is needed to provide resources at the response situation.



7.1.3 Warning and alert

On the receipt of Warning or alert from any sluch agency which is competent to issue such a warning, or on the basis of reports from the Deputy Commissioner of the occurrence of the disaster, the response plan of the district will be put into operation. The deputy Commissioner will act a Responsible Officer and Addl.DC will assume the role of Incident commander during thr emergency situation.

The details of agencies competent to issue warning or alert pertaining to variouaa types of disasters are as follows:

Disaster	State agencies
Earthquake	DM&R, DC
Floods	DM&R, DC
Landslide	DM&R, DC, GM&R, I&PR
Cyclones	DM&R, DC, , I&PR, DST
Drought, Hailstorm, Pest attack	Agri &MI
Epidemic and Biological	H&FW, AH&Vety
Major road Accidents	Transport Dept, DC, Traffic
Large Scale Refugees	Home Dept, DC
Cyber Terrorism	ICT, Police, State Forensic Library
Collapsed Structure	PWD, P&E, Police
Major breakdown of Law and Order	Home Dept, DC
Forest fire	E&F, DC
Urban and Rural fire	F&ES
Persons with Disabilities	SWD
Livestock Management	AH&Vety

7.1.3.1 Early Warning Systems: Two way communication system between village and district

In the Early warning system, Communication through Landline Telephone, Radio, WT from Police and Television Communication will be maintained. At the failure of all other types of communication, Morsecode Communication/Torchlight Communication is identified as one source of communication between District and a number of villages in the east side of the District. Withdrawal of warning should also be done by DDMA. BSNL, NIC, I&PR, Television channels, Doordarshan and Radios are the primary source of communication between District and villages.

Early Warning Dissemination: Early warning Action Plan

Type of Action	Cloudburst	Cyclone	Flood
Responsibility Agency	I&PR,	I&PR,	I&PR,
	Doordarshan, AIR,	Doordarshan, AIR,	Doordarshan,
	Local Cable	Local Cable	AIR, Local
	Operators	Operators	Cable Operators
Trained Personnel &	yes	yes	yes
Operators			
Villages not covered or	SMS, Dak Runner	SMS, Dak Runner	SMS, Dak
difficult area			Runner
Measures required to	FM, Channel,	FM, Channel,	FM, Channel,
improve timelines &	Morse Code Signal	Morse Code	Morse Code
Outreach		Signal	Signal

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Warning to various Stakeholders:

Weather bulletins are broadcasted in local daily newspapers as routine from the AIR station, Doordharshanand Local Cable TVs. When there is a threat of cyclone, special information are broadcasted as soon as they are received from IMD and repeated in subsequent transmission. Dissemination of warning to the general public at large in vulnerable areas through print, radio, TV and other media.

<u>Cyclones:</u> Incase of cyclones,72 hours advance warning o fvarious levels of certainty are provided by IMD. This system as well as e-mail Information from NESAC is currently available for emergency operations. After getting information from IMD, warning disseminat ion is the responsibility of state government(DM&R). The DM&R is responsible for dissemination of warnings to the public and line departments.

On receiving the initial warning, the warning messages are transmitted through wireless to all districts and dub-divisions. DEOC is to be activates on receiving the warnings.

Drought:

Drought in the Indian region is monitored from the progress of the onset and the withdrawal of the south west monsoon. Weather forecast are classified into:

- 1) Short Range Forecast (Validity forless than3days)
- 2) Medium Range Forecast (Validity from3to 10 days)
- 3) Long Range Forecast(Validity formore than 10 days)

These forecast are issued by the Indian Meteorological Department through the All India

Radio, the Doordharshan and various newspapers.

Earthquake andman-made Disasters:

For Earthquake and most of the man-made disasters, prediction cannot be done so the response activities are initiated immediately after its occurrence

The occurrence of disaster shall be communicated to:

At the state level:

Governor, Chief Minister, Home Ministers, MLAs and Deputy Commissioners from the affected area.

At the Central Level - PMO, Cabinet Secretary, Secretary of Home and Defence, NSMA, MHA.

District Level – All line Department odf Disaster Management, DC, Village Council of the affected area, NGOs.

7.1.4 District CMG meeting

In the event of the Disaster Situation, the Responsible Officer calls for CMG meeting of the District level whereas command of the disaster site comes under the incident commander. Quick Response, relief and rehabilitation is prior requirement and financial assistance from the Deputy Commissioner is in active according to the situation.

7.1.5 Activation of EOC

- On receipt of a disaster warning or a FIR, the Deputy Commissioner, after verification that the situation merits declaration of a Disaster, alert all members of DDMA and will convene a meeting of the District Disaster Management Committee.
- Based on the ratification of the Committee, the Deputy Commissioner will declare an emergency.
- Alert and informed all concerned line departments to post their representatives at the EOC on a round the clock with immediate effect.
- Alert and activate all Emergency Support Functions.
- Alert EOC of the neighboring districts and state EOC.

Site Operation Center

Site Operation Center, a complementary unit to the EOC would operate close to the site. This will be directly linked with the EOC. It will have Incident Command Post with one Site Incident Commander. Site Operation Center will coordinate various activities of evacuation, rescue and relief operations.

If SOC has not been set up on the first visit of the site, the officers so deputed from the District Administration viz. SDO, BDO or other officer's conveniently available near the site will see to it that the SOC is set up without delay. In order to make SOC more effective and cohesive, the local leadership should be associated in such a way that maximum participation in terms of manpower and authority is ensured.

Alternate EOC and Location

E-District Building near Deputy Commissioner's Office will function as alternate EOC in case DC's Office is damaged due to disasters. The meeting hall of DIPRO near DC's Office may also be selected as alternate EOC if the first is non-functional.

7.1.6 Resource mobilization

The Government of Mizoram allocates fund in the state budget for Relief activities. In addition, funds are available through the Disaster Response Fund. However, these funds may not be adequate to meet DM requirements in the aftermath of the large scale Disaster. In such circumstances, the GoM shall explore additional funding through NDRF, aid, grants, loans, etc. as identified in the pre-Disaster phase. Likewise, the Deputy Commissioner is the

Responsible Officer in the District for mobilizing funds and even explore additional funds through aids, loans etc.

7.1.7 Seeking external help for assistance

In accordance with the First Assessment report taken, The Responsible Officer shall seek external help of resources and funds for assisting the disaster affected area where in the magnitude of the disaster are beyond the coping capacity of the district resources. Skilled personnel and resources from SDRF, NDRF are met through the nodal department like Disaster Management and Rehabilitation Department in the state. Aids, Loans are directed against the affected people for quick relief by any possible means.

7.1.8 Pyscho Social care of affected population (Availability of psychosocial support service personnel that have the capacity to assist persons with disabilities affected by disasters)

Psychological care is needed in the disaster site of the district when the affected people are harmed psychologically due to huge loss of life and property. The district has Counseling Team of psychological experts to meet the needs of the affected people. Real time assistance of financial and other resources does help the people mentally. In this case, Social Welfare Department is responsible for Trauma & Psycho care of the affected population.

7.1.9 First assessment report

DEOC shall send first assessment report immediately to SEOC, NEOC,MHA, Government of India and all designated authorities/agencies within maximum 24 hours of occurrence of calamity. FAR shall invariably give on account of the severity of the disaster, damage &loss caused, locally available capacities, and priority. The FAR shall briefly summarize:

- Severity of the disaster
- Actions being taken locally
- Local coping capacities
- Immediate priorities for external relief required and approximate quantities for the same
- Best logistics means for delivering relief
- Forecast of possible future developments including new risks.

7.1.10 Media management / coordination / information dissemination

The role of media, both print and electronic, in informing the people and the authorities during emergencies, becomes critical, especially the ways in which media can play a vital role in public awareness and preparedness through educating the public about disasters; alerting government officials, helping relief organizations and the public towards specific needs and even in facilitating discussions about disaster preparedness and response. During an emergency, people seek up to date, reliable and detailed information. The District

has established n effective system of collaborating with the media during emergencies. At the DEOC, a special media cell has been created which is made operational during emergencies. Both Print and electronic media is regularly briefed at predetermined time intervals about the events as they occur and the prevailing situation on ground.

7.1.11 Development of SOPs Sequences of actions to be taken at the time of disaster

- ➤ In the event of disaster, DC, Serchhip, SP and Project Director, DRDA shall be informed immediately about the incident. Then, these three officers would inform the concerned officials based upon the kind of disasters. The DEOC would also in activated in emergency mode. Besides, immediate relief and rescue operation would start at the places. Then, the DC will inform the level of disaster and accordingly action will be taken.
- ➤ The SEOC should be established near the incident site with one responsible officer to see the overall management and coordination. He/ She will be assisted by one or more officials from NGOs.
- The fire brigade should be kept ready near the incident area to control any outbreak of fire.
- ➤ The Medical Team should be sent immediately to provide first aid medical help and look after any injury. Casualties with serious injurious will beimmediately sent to hospitals.
- ➤ District Quick Response Team and other District DM Teams should be sent to the site of disaster immediately.
- ➤ Different aspect of relief and rehabilitation of the affected persons should be started immediately. Eg. Shelter, food, clothing etc.
- ➤ The over all management will be looked after by DC or any other officials present at the site designated by DC or in their absence by Village level officials including NGO's.

District Quick ResponseTeam

Chairman : Additional Deputy Commissioner.

MemberSecretary : Sub-DeputyCommissioner(DM&R).

Members : Executive Engineer, PWD.

Executive Engineer, PHE. Executive Engineer. P&E.

President, Sub-Hqrs YMA, Serchhip. President, Sub-Hqrs MHIPSerchhip. President, Sub-Hqrs MUP Serchhip.

FirstAid&Medical Team

Chairman : Chief Medical & Health Officer, Serchhip.

Secretary : DMS&HO.

Search&RescueTeam

Chairman : Superintendent of Police, Serchhip.

Secretary : O/CF&ES.

Shelter Management team

Chairman : Executive Engineer, PWD, Serchhip.

Secretary : Superintendent of Excise.

Food&WaterManagementTeam

Chairman : District Civil Supply Officer, Serchhip.

Secretary : Executive Engineer, PHE.

Relief Coordination Team

Chairman : Project Director, DRDA, Serchhip.

Secretary : District Agriculture Officer.

Information and Damage Assessment Team

Chairman : District Research Officer, Serchhip.

Secretary : Information and Public Relation Officer.

Trauma Counseling Team

Chairman : Assistant Settlement Officer, Serchhip.

Secretary : President, Sub-Hqrs MHIP.

PatrollingTeam

Chairman : SuperintendentofPolice. Secretary : Executive Engineer, P&E.

7.1.12 LONGTERM RESPONSE PLAN

The long-term response plans are related with Recovery and Reconstruction activities on one side and institutionalizing disaster management in district administration on the other side. There are Standard Operation Procedures (SOPS) for the Emergency Support functions. In long term measures the following actions shall be undertaken duly.

1 Constitution of Emergency Support Functions, Disaster Management Teams, Quick response Teams, field response Teams

- 2 Refresher trainings for all such teams in a regular interval of time and exercise of mock Drills
- 3 Continuous awareness/sensitization programmes for the stakeholders and the general Public.
- 4 Gettingpre-contractwithvendersandmerchantestablishmentstoprocure relief materials in times of disaster.

7.2 ACTION PLAN FOR EMERGENCY SUPPORT FUNCTIONS

The action plans for ESFs for disaster management are discussed below. The DDMA shall ensure that these actions plans are updated bi annually and practiced through mock drills in the District

7.2.1 Action plan for police

- 1 The Nodal Officer from the Police will activate Quick response teams.
- 2 The Quick Response teams will be deployed at the Onsite EOCs.
- 3 As per the information from IMTs, more officers may be sent at site.

Action to be taken:

- If felt, cordoning off area to restrict movement of onlookers, vehicular and pedestrian traffic should be done.
- 2 Quick assessment of law order situation in affected areas.
- Prepare updates on law and order situation every 2-3 hours and brief the incident Commander.
- 4 Arrangements for controlling situations like rioting and looting.
- 5 QRTs will guard property and valuables in affected areas.
- 6 control and monitoring traffic movement.
- 7 QRTs will provide diversion of traffic on alternate routes as and when it is necessary.
- 8 The QRTs will also provide information about traffic flow along various corridors, especially heavy traffic or congested roads.
- 9 QRTs will communicate to police control rooms, detailed on the field activities including deployment and reinforcement of staff and resources and communicate nature of additional requirements.

Equipments to be brought:

- 1 Search Lights.
- 2 Electric Generators.
- 3 Crane-heavy Duty, Fork Type.
- 4 Recovery van.
- 5 Stretchers.

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- 6 First Aid Kits.
- 7 Vehicles: Mini Buses, heavy truck, light ambulance vans, mobilization trucks.
- 8 Water tanker.
- 9 Any other.

7.2.3 ACTION PLAN FOR FIRE & EMERGENCY SERVICE

Response Activation:

- As soon as the Nodal officer gets information about the disaster, he should reach the EOC.
- 2 The Quick Response teams will be deployed at the onsite EOCs.
 - As per the information from IMT, more officers may be sent at site.

Actions to be taken:

- At the site, QRTs should contact the local volunteers and local people to gather information about vulnerable areas so that search and rescue operation can take place through a proper channel in heavily dense areas, large buildings, community centers, hotels, hospitals, public buildings and any other area having large gathering.
- 2 Locate the damaged and collapsed structures and rescue the population buried and trapped in rubble
- 3 The injured people should be taken out of damaged buildings etc with utmost care
- 4 Special care to women and children groups should be given as they are expected to be more affected and helpless incase on any emergency situation
- Coordinate with the Transportation ESF if a large number of medical professionals need to be sent to the affected sites and/or a large number of victims need to be transported to health facilities

Equipments to be brought:

- 1. Water Tenders
- 2.Ladder Platforms
- 3.Haz Mat Van
- 4.Concrete Cutter
- 5. Other equipments necessary for Search and Rescue Operations, depends upon need.

7.2.4 ACTION PLAN FOR HOME GUARDS

Response Activation:

1 As soon as the Nodal Officer gets information about the disaster, reach the EOC.

- 2 The Quick response teams will be deployed at the three sites
- 3 As per the information received from IMT, more officers may be sent at site.

Actions to be taken:

- Support and coordinate with the Incident command System for Law and Order, Search and Rescue and Medical response and Trauma Counseling functions.
- 2 Locate the damaged and collapsed structures and rescue the population buried and trapped in rubble.
- 3 The injured people should be taken out of damaged buildings etc with utmost care
- 4 Special care to women and children groups should be given as they are expected to be more affected and helpless incase of any emergency situation.
- 5 In case of fire, the civil defense team members should do fire fighting.
- 6 First Aid should be provided along with the members of ESF on Medical Response.
- 7 Demonstrate Search and Rescue.

Equipments to be brought:

- 1) Extension Ladders 2) Sledge Hammers
- 3) Lifting Tackles 4) Stretchers
- 5) Tarpaulins 6) Any other

7.2.5 ACTION PLAN FOR POWER & ELECTRICITY DEPARTMENT

Response Activation

- 1 Get the power ESF activated.
- Nodal Officer of primary agency will call nodal officers of supporting agencies.
- As per the information from IMTs, the nodal officer of primary agency will activate the State Quick response Teams at field level.
- 4 The Quick response teams will be deployed at the affected site.

Actions to be taken:

Team Leader will dispatch emergency repair teams equipped with tools, tents etc.

Equipments to be brought:

All Equipments required to restore failure in network at situations should be available.

7.2.6 ACTION PLAN FOR BSNL

Goal: The BSNL is primarily responsible for restoration of communication facilities. The BSNL should ensure the smooth flow of information that can cater to the outreach in a time-sensitive manner at state level in response efforts.

Response Activation:

- Soon after receiving information about disaster (from any source), Nodal Officer will contact State/District Emergency Operations Centre.
- The nodal Officer from BSNL will activate the Quick response Teams.
- The Quick response teams will be deployed at the incident sites.
- As per the information from Incident Management team, more teams may be deployed.

Actions to be taken:

- Communicate situation to support agencies and request for detailed information on the status of equipment and infrastructure damage in the affected area (s).
- Launch assessment mission to understand better the nature of damage to telecom services and network.
- Ensure possible arrangements for establishing reliable and appropriate network.
- Work out a plan of action for private telecom companies and convene a meeting to discuss and finalize the modalities.
- Compile and communicate Action Taken report to district and State Authorities.
- New numbers and detailed of contact persons to be communicated to emergency Operations Centre (District/State).
- Establish telephone facilities for the public and information on this should announce through media.
- Monitor the situation and arrange for emergency staff required to operate systems established.
- Inform district/state authorities on debris clearance of the work required.
- Initiate temporary rehabilitation work required.
- Launch rehabilitation work and arrange for repairs and relocation, if required.
- Other necessary equipments to restore communication network/set-up alternative emergency communication.

Equipments to be brought:

• Other available various types of equipment/material/technical manpower and services, if requested.

7.2.7 ACTION PLAN FOR LAD

Action to be taken

• LAD will bring debris of heavy RCC structures (having beams/columns) and put dummies beneath the debris. This will facilitate demonstration of search & rescue operations. Soon after search and rescue team leave the site, LAD will mobilize equipments for debris clearance.

- LAD will assume main role in Equipments support, debris and road clearance, on receiving the intimation of the disaster from State EOC.
- LAD will coordinate with the supporting agency's officers to mobilize equipments from the ware houses
- The respective supporting agencies will contact their respective personal to move the equipments to central warehouse
- The equipments like JBC, concrete cutters identified as per the need will be transported to the site.
- On receiving intimation on the intensity of the damages of structure, the nodal officer will make an assessment of the damages of roads and structures reported at the site and surrounding areas.
- The supporting Agencies nodal officers will call for personal to immediately start debris clearance operation to enable movement to the affected site.
- All supporting agencies will inspect the road/rail network and structures within the disaster site and surrounding
- LAD will also ensure proper corpse disposal and post mortem by coordinating with ESF on medical response.
- Assessment of damage (locations, no. of structures damaged, severity of damage)
- The QRTs will be deployed at the affected site.
- Enlisting the types of equipment as compiled from resources inventory required for conducting the debris clearance
- The QRTs will report the situation and the progress in response activities to the respective EOCs.
- Undertake construction of temporary roads to serve as access to temporary transit and relief camps, and medical facilities for disaster victims.
- Undertake repair of all paved and unpaved road surfaces including edge metalling, pothole patching and any failure or surface, foundations in the affected areas-by maintenance engineer's staff and keep monitoring their conditions.
- Ensure a critical number of medical professionals to reach the site including specialists from outside the state.
- If temporary living arrangements are being made from the affected populace, the LAD must ensure high standards of sanitation in settlements in order to prevent the multiplicity of the disaster.
- It should also ensure the provision of medicine and other medical facilities required at the disaster site and the hospital health centers catering to disaster victims.
- In case of orthopedic care required in disasters like earthquakes the immediate response would have to be complimented by a follow up treatment schedule for a majority of the patients in/near their place of residence.

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• Compile an itemized assessment of damage, from reports made by various receiving centers and sub-centers.

Equipments to be brought

- 1 JCB, concrete breakers, cranes, supporting rescue operations.
- 2 Vehicles (Trucks)
- 3 Earth movers, rescue equipments.
- 4 Mobile medical vans
- 5 Other disaster management related equipments

7.2.8 ACTION PLAN FOR PWD

Action to be taken

- The above agencies will bring debris of heavy RCC structure (having beams/columns) and put dummies beneath the debris. This will facilitate demonstration of search & rescue operations. Soon after search and rescue team leave the site, will mobilize equipments for debris clearance
- Assume role in Equipment support, debris and road clearance, on receiving the intimation of the disaster from State EOC/Nodal Officer of LAD.
- Coordinate with the LAD officers to mobilize equipments from the ware houses.
- Contact respective personal to move the equipments to central warehouse.
- The equipments like JCB, concrete cutters identified as per the need will be transported to the site.
- On receiving intimation on the intensity of the damages of structure, the nodal
 officer will make an assessment on of the damages of roads and structures
 reported at the site and surrounding areas.
- The nodal officers will call for personal to immediately start debris clearance operation to enable movement to the affected site.
- A review of the current situation should be taken up by nodal agency to update the support agencies to delegate their respective personnel to take precautionary measure to plan de-routes for the transportation ESFs to be operational
- All supporting agencies will inspect the road network and structures within the disaster site and surrounding
- Ensure proper corpse disposal and post mortem by coordinating with ESF on medical response
- Assessment of damage (locations, no. of structures damaged, severity of damage)
- The QRTs will be deployed at the affected site.
- Enlisting the types of equipment as compiled from resource inventory required for conducting the debris clearance

- The QRTs will report the situation and the progress in response activities to the respective EOCs
- Undertake construction of temporary road to serve as access to temporary transit and relief camps, and medical facilities for disaster victims.
- Undertake repair of all paved and unpaved road surfaces including edge metalling, pothole patching and failure of surface, foundations in the affected areas by maintenance engineer's staff and keep monitoring their conditions.
- Ensure a critical number of medical professionals to reach the site including specialists from outside the state.
- If temporary living arrangements are being made from the affected populace, the agencies must ensure high standards of sanitation in settlements in order to prevent the multiplicity of the disaster.
- Coordinate, direct, and integrate response to provide Equipments support, relief camps establishment, and sanitation health assistances.
- Mobilizes different modes of transportation eg. Trucks, etc to be put on stand-by
- Assist timely re-establishment of the critical transportation links.
- Establish temporary electricity supplies for relief material go downs and relief camps.
- Compile and itemized assessment of damage, from reports made by various receiving centers and sub-centers.
- Other disaster management related equipments.
- Equipments to be brought
- JBC, concrete beakers, cranes, Grader, bulldozers, Gas Cutter, Jack Hammer, Tipper, folkanes, dumper, Aeromatic Hammer for debris/road clearance, supporting rescue operations.
- Vehicles (Trucks), Earth movers, rescue equipments, Mobile medical vans
- Other disaster management related equipment.

7.2.9 ACTION PLAN FOR HEALTH DEPARTMENT (SERVICES)

Response Activation:

- Nodal Officer will call nodal officers of supporting agencies.
- In coordination with the transportation ESF, it will ensure a critical number of medical professionals to reach the sites including specialists
- In coordination with the transportation ESF, it will ensure a critical number of medical professionals to reach the sites including specialists.
- If temporary living arrangements are being made from the affected populace, must ensure high standards of sanitation in settlements in order to prevent the multiplicity of the disaster.

- Also ensure the provision of medicine and other medical facilities required at the disaster site and the hospital health centers catering to disaster victims.
- In case of orthopedic care require, immediate response would have to be complimented by a follow up treatment schedule for a majority of the patients' in/near their place of residence.
- Ensure setting up of temporary information centers at hospitals with the help of ESF on help lines and warning dissemination
- Coordinate, direct, and integrate state level response to provide medical and sanitation health assistances.

Action to be taken

- Readying all hospitals (including private hospitals) for managing large no.of casualties and severely injured population.
- Sufficient stock of required medicines, vaccines, drugs, plasters, syringes, etc
- Provide systematic approach to patient care (Mass Casualty Management)
- Triage done to determine who needs to be taken to a medical facility on a priority basis and who can be treated on-site
 - First-aid provided as required
 - Patient Stabilized before transport
 - Patients transported to nearest available medical facility having the required facilities
 - O Trauma counseling provided to the victims and their relatives at the site and in the hospital
 - o In the hospital emergency department, triage carried out again to prioritize treatment, and appropriate care provided
 - o Maintain patient tracking system to keep record of all patients treated
 - Deploy mobile hospitals as needed
- Arrange for additional blood supply: organize blood donation camp for additional blood requirement
- Provide for sending additional medical personnel equipped with food, bedding and tents.
- Send vehicles and any additional medical equipment
- QRTs will report the situation and the progress on action taken by the team to the respective EOCs
- QRTs Quickly asses type of injuries, no. of people affected, and possible medical needs
- QRTs will ensure timely response to the needs of the affected victims.
- Establish health facility and treatment centers at disaster sites.

- The district civil surgeon with district/state control room should coordinate the provision of medical services.
- Procedures should be clarified between
 - Peripheral hospitals
 - Private hospitals
 - Blood banks
 - General hospitals and
 - Health service established at transit camps, relief camps and affected villages.

QRTs should maintain check posts and surveillance at all entry and exit points from the affected area, especially during the threat or existence of an epidemic.

Equipments to be brought:

- 1 Mobile medical vans (Clinics) with paramedical staff as well
- 2 mobile radiology units, pathology test arrangements
- 3 Vehicles for carrying severely injured
- 4 Stretchers, life saving drugs, blood etc
- 5 Other resources required during emergency for setting up medical camps

7.2.10 ACTION PLAN FOR PHE

Response Activation

- 1 Upon receipt of notification about disaster, PHE Nodal Officer will activate quick response teams.
- 2 The quick response teams will be deployed at the sites

Actions to be taken

- 1 Quick assessment of water line damage and contamination
- 2 Supply of water tankers to disaster affected communities
- 3 Deploy response teams to repair and restore water supply lines that may be damages after disaster.
- 4 Quick assessment of water contamination levels and taking steps to restore clean drinking water.
- 5 Provide information to IMT, district EOC and state EOC about extent of damage.

Equipments/Materials to be brought to site

1 Water tankers.

7.2.11 ACTION PLAN FOR DEPARTMENT OF TRANSPORT

Response Activation

- 1 Team Leader will activate ESF on receiving information of the disaster from state EOC.
- 2 Team Leader will inform Nodal Officers of support agencies about the event and ESF activation

Actions to be taken

1 Team Leader communicates situation to support agencies and request for detailed information on the status of transportation infrastructure in the affected area (s).

7.2.11.1Responsibility Matrix should be evolved for each response measure within the time frame and the responsibility matrix for major stakeholders

7.2.11.2*Hazard specific Responsibility matrix for emergency response function for sudden disasters whereearly warning is available*

Time	Task	Department/Agency	Activity
1	2	3	4
D-72 Hr	WarningDissemination	DC, DIPRO, NIC,Media, NGO	Warningtoofdisaster and preparedness
			activity and activation of DEOC
D-48 Hr	Identificationofsafeplace and Food stock	DC, Food & Civil Supplies, NGO	Give instructions to public regarding safe place and stock of basic needs
D-24 Hr	Checking connectivity and identification of alternate control rooms and volunteers with resources	DM Teams	Checking the availability of resources in DEOC, line departments and volunteers
D0 Hr	QuickResponseofDisaste r includingmeetingof CMG	Trainedpersonnel, NGO, DC and line departments	AssessmentofDisaste r effect, search and Rescueand First Aid
D+30min	collection of Resources	DC, NIC, Radio and Television, Doordarshan, Search and RescueTeam	Evacuate Disaster site andTriage
D+2	Damage Assessment	DC, Media,NGO, IPRO	Give out assessment report to concerned authorities

D+3	Temporary Shelter and transportation of victims	Transport Dept, NGOs, DC	Provide temporary shelter for affected people
D+6	External aid and pay out assistance	DC, DM&RDEpt	Assistance paid to Affected people in the District
D+12	Traumacounseling	CounselingTeam, NGO	Counseling and psycho care given to affected people
D+24	Provide Basic needs to affected area, clear out Roads and give out continuous information of disaster	Health Department	Clearance of debris and road blocks, accedd of communication with all possible means

RECONSTRUCTION, REHABILITATION AND RECOVERY MEASURES

Rehabilitation, reconstruction and sustainable recovery refer to measures that help restore the livelihoods, assets and production levels of emergency-affected communities. These measures rebuild essential infrastructure, institutions, and services and restore the means of production destroyed or made non-operational by a disaster.

Rehabilitation and reconstruction assistance is geared towards limiting the need for relief and allowing development activities to proceed. Rehabilitation and reconstruction include measures which help increase the resilience of food systems in case of future disasters and emergencies. Major emphasizes on strengthening co-ordination of locally active emergency and development institutions and one encouraging the participation of the affected population in designing and implementing interventions to promote household food security and nutrition. Priority is give into the needs of food-insecure households and towards promoting sustainable livelihoods.

- **8.1 Reconstruction, Rehabilitation and Recovery** come under the post-disaster phase. Currently, the activities in this phase are primarily carried out by the local bodies (Village councils/District, Sub-division, RD blocks and various government departments and Agencies. However, their activities in this phaseshallbei9n accordance with the reconstruction and Rehabilitation plans framed by DDMA, in conjunction with implementing authorities.
- **8.2 Relief and Recovery coordination:** The Deputy Commissioner announced that relief may be followed by further recovery of damage and loss at the time of disaster. A threat to human life and property could be a curse and long time sufferings for the people in the affected areas of Disaster. The DDMA therefore, is the think tank for further recovery of loss and damage in the form of Loans, Aids from internal and external sources of the District and State Government assistance. The recovery may be in the form of development of livelihood of the people better than before.

8.3 Damage and Loss assessment

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

- 1) Preliminary Damage Assessment which is conducted immediately after a disaster
- 2) Detailed Damage Assessment which is conducted before reconstruction and rehabilitation by all relevant departments. Damage Assessment team at the initial period will be followed by secondary assessment and final assessment will be conducted carefully so that all the property losses could be recovered at the best form.
- **8.4Restoration of Livelihood** Restoration of Livelihood of people and livestock is the main concern during the post disaster phase. In the District. With the guidance of the Deputy

Commissioner, AH & Vety Dept is exclusively responsible for livestock management and all other stakeholders including NGOs, CBOs would work together for restoration of livelihoods of the people.

8.4.1 Housing units & basic infrastructure rehabilitation

For housing rehabilitation, the existing inhabited settlements may be completely re constructed at a new site for which land acquisition may have to be done. Housing Rehabilitation may also be carried out by way of up gradation of existing damaged houses through repairing and retrofitting. Restoration of basic infrastructure including roads, bridges, drinking water supply, electricity, communication network, school, health Centers etc maybe required to be built in the existing sites or in the new relocated site depending upon the nature and extent of the rehabilitation programme. Repair/reconstruct the lifeline buildings/critical buildings which are necessary for treating the affected people rehabilitation in these buildings as shelters.

8.4.2 Economic Rehabilitation

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

8.4.3 Social Rehabilitation

Restoration of educational institutions, cultural places, community resources and infrastructure.

8.4.4 Recovery

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

The nodal departments are to be assigned the responsibilities of reconstruction and restoration activities and perform these activities and restore the minimum basic infrastructure in the area which is vital for sustaining human life in the area. These departments are PWD(R&B), Health& Family Welfare, MUDA, PHE, Education, C&RD departments, etc.

8.5 Reconstruction/Repair of-

8.5.1 Lifeline Buildings/Social Infrastructure

The SDRF funds provided by the government provides for recovery of lifeline buildings which is not enough for full recovery. The DDMA then suggested encouragements of insurance of lifeline buildings and social infrastructure every year.

8.5.2 Damaged Buildings.

The SDRF funds provided by the government provides for recovery of damaged buildings which is not adequate for full recovery. The DDMA is responsible for encouragements of insurance of lifeline buildings and social infrastructure every year.

8.5.3Promote owner driven approach in recovery

The DDMA along with stakeholders department and NGOs CBOs worked together for the recovery process of the disaster affected areas. The suggestions lie on the owner approach in working towards the progress of the recovery process. NGOs in Serchhip District like YMA, MUP, MHIP, etc and other religious institutions are helpful in recovery program of the damage areas of a disaster.

8.6Recovery Program

The recovery program of disaster affected areas is essential for further development of the livelihood of the people. The recovery program is divided into Short term and long term processes.

8.6.1 Short term Recovery Program

Short term recovery program focuses short term livelihood security measures, loans, assistance, grants and aids. The DDMA suggested that coordination between Government Line departments, NGOs and public should go hand in hand. A peaceful transparent manner in the form of recovery process in collection of recovery funds, pay out assistances, aids and grants from government should prevail between public, affected people, NGOs and Government authorities like DDMA.

8.6.2 Long term Recovery Program

Long term recovery program depends much on DDMA which suggested approaches towards national recovery measures. Sustainable livelihood of the people in the disaster affected area is the goal of the recovery program of the DDMA. A better education and

facilities, shelter and meeting basic necessity with maximization of per capita income is the road towards a sustainable future. Development of these vulnerable people should be carefully thought of as the existing site of infrastructure, damaged buildings could be restructured better than before. Public roads, connectivity, water resources and Electricity.

8.7 Insurance

General insurance of Buildings, Roads, water supply, can be attained from Insurance Company as well as from contractors of this infrastructure. The DDMA suggested to people that Private and public buildings and other valuable properties like vehicles, crops, Agricultural land to be insured for better recovery. Crop insurance is advisable as the farmer gets cash for crop loss due to drought and heavy rains.

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FINANCIAL RESOURCES FOR IMPLEMENTATION OF DDMP

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

StateAllocation

Every year the Disaster Management & Rehabilitation Department, Government of Mizoram prepares the Budget for Disaster Management in the State.

State Disaster Response Fund(SDRF)

As per Section 48 (la) of the DM Act, 2005, SDRF isto be created with 90% Central Share and 10% State Share. This fund is to be made available to the SEC for post-disaster activities.

State Disaster Mitigation Fund (SDMF)

As per Section48 (lc) of the DM Act 2005,SDMF is to be created for pre-disaster activities and to be made available to the SDMA.

District Disaster Response Fund (DDRF)

As per Section 48(lb) of the DMAct,2005, DDRF is to be created for pre-disaster activities and to be made available to the DDMA.

Distric Disaster Mitigation Fund (DDMF)

As per Section 48 (d) of the DM Act, 2005, DDMF is to be created for post-disaster activities and to be made available to the DDMA.

Department Fund

As per Section 39(e) of the DM Act, 2005 each department of the State Government shall allocate funds for measures for prevention of disaster mitigation, capacity building and preparedness.

Recommendation of the 13th Finance Commission

The Thirteenth Finance Commission (2010-2015) recommended fund for Capacity Building for Disaster Response at the District, Block and Village levels. This recommendation helps to capacitate all stakeholders in DM and also for preparation and updation of DM Plans.

All State Government Departments, Boards, Corporations and ULBs would prepare their DM plans including the financial projections to support these plans. The necessary financial allocations would be made as part of their annual budgetary allocations and ongoing programmes and should be used for mitigation and preparedness measures. They will also identify mitigation projects and project them for funding in consultation with the SDMA/DDMA to the appropriate funding agency. The Departments should also keep in mind for mainstreaming or integration of DM into their development plans and projects. The guidelines issued by the NDMA vis-a-vis various disasters should be considered while preparing mitigation projects.

Disaster Risk Insurance

DDMA should look at other options of new financial tools like catastrophe risk financing, risk insurance, micro-insurance etc. to compensate for massive losses on account of disasters.

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

Evaluating the effectiveness of plans involves a combination of training events, exercises etc. to determine whether the goals, objectives, decisions, actions and timing outlined in the plan will result in an effective response. Indicative guidelines for monitoring and evaluation of the plan are as given below:

- 1. Regularly review the implementation of the plan.
- 2. Check the efficacy of the plan after any major disaster/emergency in the district and see what did work and what did not work and make amendments to the plan accordingly.
- 3. As per Sub Section (4) of Section 31 of the Disaster Management Act, 2005, the plan would be reviewed and updated annually and the year in which the plan has been reviewed would be clearly mentioned in shape of header in each page of the plan.
- 4. Keep District, State and National Disaster Resource Inventory updated (SDRN / IDRN) and connected with the plan.
- 5. Update coordinates of responsible personnel and their roles / responsibility every six months or whenever a change happens. Names and contact details of the officers/officials who are the nodal officers or the in-charge of resources to be updated on regular basis.
- 6. Plan should be web enabled with access on intra and internet.
- 7. Plan should be circulated to all stakeholder departments, agencies and organisations so that they know their role and responsibilities and also prepare their own plans.
- 8. Regular Drills / exercises should be conducted to test the efficacy of the plan and check the level of preparedness of various departments and other stakeholders. It would ensure that all parties understand their roles and responsibilities clearly and understand the population size and needs of vulnerable groups.
- 9. Regular training and orientation of the officers/officials responsible to implement the plan should be done so that it becomes useful document to the district administration. 10. Army, NDRF, SDRF and other agencies should be integrated into the plan exercise regularly.
- 11. DDMA should hold Regular interaction and meetings with the Army or any other central government agencies for strengthening coordination during disasters.
- 12. The DEOC should be made responsible for keeping the plan in updated form and collecting, collating and processing the information.

COORDINATION MECHANISM FOR IMPLEMENTATION OF DDMP

Dealing with a major disaster requires resources from outside the district. When the capacities of a district administration are overwhelmed, higher levels are called upon to assist. Likewise, assets and capabilities in the corporate and non-governmental sectors available around the district may be brought to bear. There are many actions undertaken by participants in disaster management that support this goal, both pre-disaster (to forestall or reduce potential damage) and post-disaster (to recover from actual damage) and ideally these activities would reduce the potential effects of a disaster significantly. For achieving this objective, the plan should have a pre-established and practiced mechanism for Inter, intra and extra agency coordination. Communication is the most important tool for effective coordination. Generally, Emergency Operation centre (EOC) is the enabler of communication and coordination. EOC communication and coordination plan (EoC-SoP) should specify procedures for interfacing with different stakeholders during all phases of emergency, as stated in the DDMP framework. Pre-Disaster meetings to review the DDMP with all stakeholders should also be planned.

Serchhip District EOC has likage with the NGOs, CBOS, Neighbouring Districts and Task forces like NDRF, SDRF, DDRF, District Search & Rescue Team in the district itself. Important phone numbers of the above would be mentioned in the annexure.

11.1.Intra and inter department coordination with horizontal linkage

All Department stakeholders of DM has well connections as per their responsibility in the DM. Frequent Meetings /Trainings for all stakeholders on IRS position and DM Plan makes the EOC familiar/well connected with all departments in the District.

11.2<u>Co-ordination mechanism with NGO's, SHG's</u>, industries, private school and hospitals

In Serchhip District, one private Hospital-Mercy Hospital with capacity of 10 bed has newly opened in 2017. About 10 Doctors are available on call in this Hospital which makes the capacity of the District in medical sector stronger to face disaster.

11.3 Coordination with block, Village level task force

All village Council and DM Committee has submitted their phone number in the DEOC. Village Task Force would be on call at the occurrence of Disaster. VCP/Chairman of VDMC is responsible for his/her village disaster situation.

11.4Coordination system with state department and training institutes at district level

Training Institutes like ATI, SIRD, DRC, DIET and NDRF training Centre at Sesawng has linkage with the District Authority as well as the DEOC.

11.5 <u>Coordination with local self government – Village Council</u>

The District DM Plan included all Village Council and NGOs CBOs within the District the preparedness, mitigation and response measures. SDRF plays an important part in linkages of People together at the District level. The Village Disaster Management Committee prepared Village Disaster Management Plans to activate in times of disaster occurrence.

STANDARD OPERATING PROCEDURES (SOPs) AND CHECKLIST

12.1 Definition of disaster situations

Disaster is a Catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or man made cause which results in substantial loss of life or human suffering to and which is beyond the coping capacity of the affected area.

12.2. Actions on receipt of Warning and Warning Dissemination

Objective: To monitor situation and disseminate information

Sl.NO	Type of Disaster	Date/Time of Warning Receive	Responsible nodal Department /Agencies	Line Dept/Agency
1	Forest Fire	3 weeks	EF&CC	F&ES, I&PR, RD, VDMC
2	House Fire	Within 3 weeks	F&ES	I&PR, RD, VDMC
3	Biological disaster and epidemics	-weeks	H&FW/AH&Vety	I&PR, AH&Vety, RD, H&Fw, PHE, VDMC
4	Drought	3 weeks	DDMA	I&PR, Agriculture, Horticulture, PHE, Fisheries, RD, VDMC
5	Floods	2 days ahead	DDMA	I&PR, Home Dept., SYS, PHE, PWD, P&E
6	Landslide	2 days ahead	DDMA	I&PR, PWD, P&E, PHE, LR&S, VDMC
7	Cyclone	-24hrs	DDMA	I&PR, PHE, Fisheries, RD, Agriculture, Horticulture

• Key Actions:

- Collect regular updates (twice a day) from the EOC regarding type, magnitude, location etc. and other relevant indicators of the possible disaster situation. The frequency of information updates can be increased based on the severity of the hazard.
- Validate the information from neighbouring districts and the state.
- Activate information sources in cross-border districts to get more real time information on rain, water level, release of water from barrage etc.
- Convene a joint meeting of Essential Service Functions (ESF) team leaders, DDMC,

EOC officials and DDMA to discuss updates and required preparations in case of a possible disaster.

- Instruct the Incident Command Team and Desk officials to get ready as per their standard operating procedures and the directions of the Incident Commander.
- Disseminate early warning or alert in the most prone areas through the Disaster Management Teams (District Information & Public Relations Officer) and block level officials.
- Disseminate hazard specific precautionary information and measures to be taken at various levels.
- Review hazard specific contingency action plans and activate the EOC, DMTs, QRT,FRT, ESFs etc. as per that.
- In case of disasters like Earthquake where sufficient EW is not available, immediately get into activation actions and also refer to earthquake contingency actions
- In case of slow onset disasters, like drought, monitor drought specific indicators as mentioned in drought specific contingency actions

12.3Roles & Responsibilities of the departments/or stakeholders in emergency response

12.3.1 SOP FOR EMERGENCY SUPPORT FUNCTIONS

The Standard Operating Procedure (SOPS) for ESFs explains about the operations and responsibilities of the leading and supporting agencies that are to be involved in the ESF system. The document also outlines the purpose and scope for each function of operation that is to be followed by the respective ESF agencies when the Incident Commander activates the response plan during the emergency period.

The major functions of the incident command systems are summarized as follows. Nevertheless, they are to be released in cooperation of all the ESFs and participating agencies in disaster management. The Incident Commander is given with full control and command over the entire teams in district level.

12.3.2 SOP FOR NODAL AGENCY: COMMUNICATION

The communication ESF is primarily responsible for restoration of communication facilities. The ESF on communication should ensure the smooth flow of information that can cater to the outreach in a time-sensitive manner at state level in response efforts.

Situation Assumption:

- 1. There would be a congestion in the network because of increased calls to control rooms due to panic created in the community.
- 2. The initial reports on damage may not give a clear picture of the extent of damage to communication network.
- 3. The affected site may cut off from the state control rooms and the official on the site and find difficulty in communicating to the District/State EOC.

Nodal Agency: Bharat Sanchar Nigam Limited (BSNL)

Supporting Agencies: NIC, Police/Private Telecom.

12.3.3 SOP FOR NODAL AGENCY:

- Team Leader (TL) of communication EFS will activate the ESF on receiving the intimation of occurrence of disaster from the District EOC.
- TL would inform Nodal Officers (NOs) of support agencies about the event and ESF activation.
- TL would establish contact with the district EOC for First Information Report.
- TL request for reports from local ESF contact persons (this would be the local office of ESF Nodal Agency) to understand the current situation and action taken.
- Based on information given by the supporting agencies, TL decides on the need to launch an assessment mission to estimate the extent of damage to telecom services and network as well as to come up with possible arrangements to establishing reliable and appropriate network.
- TL communicates situation to supporting agencies and also request to provide details on the status of equipment and infrastructure in the affected area(s).
- TL informs the incident Commander on the status of telecom services.
- TL works out plan of action for private telecom companies and convenes a meeting of all ESF members to discuss and finalize the modalities.
- TL issue order to establish systems and reports to District EOCs on the action taken. New phone numbers and details of contact persons would also be communicated. If required mobile exchanges would be deployed.
- TL gets the temporary telephone facilities established for the public. Prior information on this would be announced through media.
- TL sends the District Quick Response team at the affected site with the required equipments and other resources.

12.3.4 SOP FOR QUICK RESPONSE TEAM ON COMMUNICATION:

- The QRT (Quick Response Team) members will reach to the nodal office as soon as they will get instructions from the TL.
- Once the QRTs receive the intimation from the nodal officer to reach at the site they would rush to the site.
- At the emergency site QRT members will take stock of the situation from the IC and would also know about their counter parts.
- QRTs would assess the ground situation and would send sectoral report to the District ESF agency.
- A sectoral would contain the following :
 - i. An assessment of overall damage, listing specifically.
 - ii. Overhead road damage (in miles/kilometers)
 - iii. Cable damage (in yards/meters)

- iv. Specific equipment damaged
- v. Established a temporary communication facility for use by the public.
- vi. Identify requirements of man power, vehicles and other materials and equipments. Give priority and concentrate on repairs and normalization of communication system at disaster-affected areas.
- Begin restoration by removing and salvaging wires and poles from the
- Roadways with the help of casual laborers
- Carryout temporary building repairs to establish a secured storage area for
- The equipments and salvaged materials
- Report all activities to head office
- Begin restoration by removing and salvaging wires and poles from the
- Roadways through recruited casual laborers
- establish a secure storage area for incoming equipments and salvages
- Materials

12.3.5 SOP FOR NODAL AGENCY: EVACUATION

The ESF on evacuation is primarily responsible for establishing evacuation plans, identification of fastest evacuation routes and alternate routes and coordinating evacuation logistics during field operations.

Situation Assumptions:

- 1. Most of the buildings would be damaged and would not remain serviceable.
- 2. Many structures would be damaged and there would be an urgent need to evacuate.

Nodal Agency: Office of the Deputy Commissioner, Serchhip.

Supporting Agencies: Police, Fire, PWD, PHE, NCC. Army

SOP FOR NODAL AGENCY:

- Team leader (TL) of evacuation ESF would activate the ESF on receiving the warning of the disaster from the District EOC.
- TL would inform Nodal Officers (NOs) of supporting agencies about the event and ESF activation.
- TL will direct the QRTs to be deployed at the affected site.
- TL will gather information on availability of predefined evacuation routes.
- Where the predefined evacuation routes are not available, the nodal officer would coordinate through District EOC with other ESFs nodal officers and the support agencies about clearing of routs and identifying alternate routes.
- The QRT members will reach the nodal office as soon as they get instructions to do so from the TL.

- Once the quick response team received an order from the nodal officer for reaching the site they would rush to the site.
- On reaching at the site the QRT members will take stock of the situation from the Incident Management Team at the site and their counter parts.
- The quick response team with the help of local task forces will start evacuating peoples to safe shelters or open areas.
- The QRT members should concentrate more on evacuation in areas that have been worst affected by the disasters.

Reporting about all activities to head office.

12.3.6 SOP FOR NODAL AGENCY: SEARCH AND RESCUE

Search and rescue operations are one of the primary activities taken up in a post disaster situation. The promptness in these operations can make a remarkable difference in the amount of loss of life and property.

Situation Assumptions:

- 1. Local community task forces will initiate search and rescue at residential level
- 2. Spontaneous volunteers will require coordination
- 3. Access to affected areas will be limited
- 4. some sites may be accessible only through air routes only

Nodal Agency: Police, Fire Service

Supporting Agencies: NCC, Army and health Reps, YMA

12.3.7 SOP FOR NODAL AGENCY:

- IC will call the TL of the primary agency and get the ESF activated
- TL of primary agency will call nodal officers of supporting agencies
- TL would activate the District Quick Response Team
- Quick Assessment of the S&R operations through surveys
- Assessment of the specific skill sets and the other equipment required
- Using IDNR network to check and map the availability of resources in and round the disaster site

12.3.8 SOP QUICK RESPONSE TEAM ON SEARCH RESCUE:

- Assessment of damage (locations, no. of structures damaged, severity of damage)
- The QRTs will be deployed at the affected site
- Enlisting the types of equipment required for conducting the S&R
- QRTs will report the situation and the progress in response activities to the respective EOCs

12.3.9 SOP FOR NODAL AGENCY: LAW AND ORDER

The ESF on Law and Order maintains the law and protects the property and valuable commodities. It is mainly responsible to control crowd and avoid riots situations.

Situation Assumption:

- 1. There would be panic and people would gather at a place
- 2. The crowds may go out of control
- 3. Riots may also take place

Nodal Agency : Police

Supporting Agencies : Home Guards, 14 AR

SOP FOR NODAL AGENCY:

- IC will call the TL of primary Agency and get the ESF activated
- TL of primary agency will call nodal officers of supporting agencies
- TL would activate the District Quick Response Team
- The QRTs will be deployed at the affected site
- Cordoning of area to restrict movement of onlookers, vehicular and pedestrian traffic should be done
- Any additional requirements at site to be taken care of

12.3.10 SOP FOR QUICK RESPONSE TEAM ON LAW AND ORDER:

- Quick assessment of law and order situation in affected areas
- Support and coordinate with local Administration
- Prepare updates the la and order situation every 4-6 hours and brief the authorities
- Controlling situations like rioting and looting, and cordon of sensitive areas QRTs will guide property and valuables in affected areas
- Control and monitor traffic movement
- QRTs will provide diversion of traffic on alternate routes as and when it is necessary
 especially heavy traffic or congested roads
- The QRTs will also provide information about traffic flow along various corridors
- QRTs will communicate to police control rooms, details on the field activities including deployment and reinforcement of staff and resources and communicate nature of additional requirements

12.3.11 SOP FOR NODAL AGENCY:MEDICAL RESPONSE AND TRAUMA COUNSELING

The ESF on Medical Response and Trauma Counseling will look after emergency treatment for the injured people immediate after the disaster take place.

Situation Assumptions:

- 1. Emergency Medical services will be required by affected the disaster
- 2. Like outbreaks of epidemic diseases after the disaster
- 3. hospital services would be affected

Nodal Agency : Health Department

Supporting Agencies: SWD, NSS, MHIP, MUP

SOP FOR NODAL AGENCY:

IC will call the TL of Primary Agency and get the ESF activated. Team Leader (TL) of primary agency will call nodal officers of supporting agencies.

- In coordination with the transportation ESF, it will ensure a critical number of medical professionals to be reached at the site including specialists from other.
- If temporary housing arrangements are being made for the affected population, the ESF must ensure high standards of sanitation in settlements in order to reduce epidemic outbreak.
- Ensuring the provision and continuous supply of medical facilities (medicines, equipments, ambulances, doctors and manpower etc.) required at the disaster affected site and the hospital health centers catering to the disaster victims.
- In case of orthopedic care required in disaster like earthquakes the immediate response would have to be complimented by a follow up treatment schedule for a majority of the patient in/near their place of residence.
- Trained professional should be mobilized by psychosocial support.
- Ensuring setting up of temporary information centers at hospitals with the help of ESF through help lines and warning dissemination system.
- TL will coordinate, direct, and integrate state level response to provide medical and sanitation health assistances.
- On the recommendations of the EOC, the TL also responsible to :
 - o Send required medicines, vaccines, drugs, plaster, syringes, etc.
 - o Arrange for additional blood supply, send additional medical personnel equipped with food, bedding and tents etc.
 - Send vehicles and any additional equipment.

12.3.12 SOP FOR QUICK RESPONSE TEAM ON MEDICAL RESPONSE AND Psycho Social and TRAUMA care:

- QRTs will provide situation and progress reports on the action taken by the team to the respective EOCs.
- QRTs will assess type of injuries, number of people affected and possible medical assistance needs.
- QRTs will ensure timely response to the needs of the affected victims such as :
 - o Establishing health facility and treatment centers at the disaster sites.
 - Providing medical services as reported by the District Civil Surgeon with District EOC and State EOCs
 - o Procedures should be clarified in between
 - Peripheral Hospitals
 - Private Hospitals
 - Blood Banks
 - General Hospitals and Health services establish at transit camps, relief camps and affected villages

QRTs should maintain check posts and surveillance at all entry and exit points from the affected area, especially during the threat or existence of an epidemic.

12.3.13 SOP FOR NODAL AGENCY: WATER SUPPLY

The ESF on drinking water and supply will ensure provision of basic quantity of clean drinking water and water for other purposes in a manner that does not allow the spread of diseases through the contamination of water.

Situation Assumptions:

- Existing water storage bodies will be damaged and unusable.
- There should be an urgent need of water to assist victims in rescue operation.
- Break down of sanitation system.
- Contamination of water due to outflow from sewers or due to breakage of water pipelines.

Nodal Agency : PHE Supporting Agency : LAD

SOP FOR NODAL AGENCY:

- Team Leader (TL) of ESF on Water Supply will activate the ESF on receiving the intimation of the disaster from District EOC.
- TL would inform Nodal Officers (NOs) of support agencies about the event and ESF activation.

- TL will ensure special care for women with infants and pregnant women.
- Provide for sending additional support along with food, bedding, and tents.
- Send vehicles and any additional tools and equipments needed.

12.3.14 SOP FOR QUICK RESPONSE TEAM ON WATER SUPPLY:

- QRTs will ensure that supply of drinking water is made available at the affected site and relief camps.
- QRTs will ensure the temporary sewerage lines and drainage line are kept separate.
- QRTs will report the situation and the progress on action taken by the team to the EOC.
- QRTs will intimate their TL of the additional resources needed.
- Carry out emergency repairs of al damages to water supply systems.
- Assist health authorities to identify appropriate sources of potable water.
- Identify unacceptable water sources and take necessary precautions to ensure that no water is accessed from such sources, either by sealing such arrangements or by posting the department guards.
- Arrange for alternate water supply and water storage in all transit camps, normal water supply is restored.
- Ensure that potable water supply is restored as per the standards and procedures laid down in "Standards for Potable Water".
- Plan for emergency accommodations for staff from outside the area.
- QRTs will ensure timely response to the needs of the affected victims.
- QRTs will set up temporary sanitation facilities at the relief camps.

12.3.15 SOP FOR NODAL AGENCY: RELIEF (FOOD AND SHELTER)

In the event of a disaster there would be a need of disbursing relief materials due to massive destruction of life and property taken place. The ESF on relief should ensure coordination of activities involving with the emergency provisions of temporary shelters, emergency mass feeding and bulk distribution of relief supplies to the disaster victims as also the disaster managers and relief workers.

Situation Assumption:

- 1. Probably of shortage of a critical resources
- 2. Immediate assistance to the community at the time of resource shortage particularly when affected area is larger.

Nodal Agency: Department of Food and Civil Supplies & Consumer Affairs

Supporting Agency: DC,NGOs, PWD

SOP FOR NODAL AGENCY:

- TL will activate the ESF on receiving the information of the disaster from District EOC.
- TL would inform the Nodal Officer (NOs) of support agencies about the event and the ESF activation.
- TL will coordinate with all state and district level suppliers as identified with under IDRN.
- TL will coordinate with other ESFs related to transportation, debris road clearance to ensure quality supply chain management of relief materials.
- Ensuring composite relief with availability of complimentary relief material.

12.3.16 SOP FOR QUICK RESPONSE TEAM ON RELIEF:

- QRTs will report to site of the relief camps.
- QRTs will be responsible to management and distribute relief items to the affected victims.
- QRTs will be responsible for supporting the progress on action taken by the team to the EOC.
- QRTs will provide information to their TL about the need of additional resources.
- Clearing of the areas to establish relief camps.
- Setting up relief camps and tents using innovate methods that can save time.
- Assist local authorities to set up important telecom and other service related facilities.
- Initiate, direct and market procurement of food available for different inventories and ensuring food supplies to the affected population.
- Preparing take-home food packets for the families.
- Ensuring distribution of relief material to the all people including vulnerable groups of the target area such as women with infants, pregnant women, children, aged people and handicapped.
- Ensuring support to Local Administration.
- Local adequate relief camps based on damage survey
- develop alternate arrangement for population living in structures that might be affected even after the disaster.

12.3.17 SOP FOR NODAL AGENCY: DEBRIS AND ROAD CLEARANCE

The importance of this ESF emanates from the fact that most large scale hazards such as earthquakes, cyclones, and floods primarily affect the building structures.

Situation Assumption:

1. Access to disaster-affected area would depend upon the re-establishment of ground and water routes.

- 2. Early damage assessment may be incomplete, inaccurate and general. A rapid assessment may be required to determine response time.
- 3. Engineers and masons may be required in large scale for the inspection of present buildings.

Nodal Agency : PWD Supporting Agency : LAD

SOP FOR NODAL AGENCY:

- Team Leader (TL) will activate the ESF on receiving the information of the disaster from District EOC.
- TL would inform nodal Officers (NOs) of supporting agencies about the event and ESF activation.
- TL will coordinate with the supporting agency to mobilize equipments from the warehouse through IDRN database.
- The respective supporting agencies will contact their respective personal to move the equipments to central warehouse.
- The equipments like JCB, concrete cutters identified as per the need will be transported to the site.
- As per the information the Nodal Officer of Debris clearance will make an assessment on of the damages of roads and built structures at the site and surrounding areas.
- The nodal Officers of supporting Agencies will immediately start debris clearance operation to enable movement to the affected site.
- Review of the current situation is taken up by the nodal agency to update the support agencies and to delegate for the transportation ESF's to be operational.
- All supporting agencies will inspect the road and rail network and structures within the disaster site and surrounding.
- TL will also ensure proper corpse disposal and post mortem by coordinating with ESF on medical response.

12.3.18 SOP FOR QUICK RESPONSE TEAM DEBRIS AND ROAD CLEARANCE:

- Damage assessment including locations, number of structures damaged and severity of damage.
- The QRTs will be deployed at the affected site.
- Enlisting the types of equipments as compile from IDRN resources inventory required for conducting the debris clearance.
- And relief camps, and medical facilities for disaster victims.
- The QRTs will report the situation and the progress in response activities to the respective EOCs.

- undertake constructions of temporary roads to serve as access to temporary transit and relief camps, and medical facilities for disaster victims.
- Repairing of all paved and unpaved road surfaces including edge metallingpathole
 patching and failure of surface, foundations in the affected areas by maintenance
 engineer's staff and keep monitoring their conditions.

12.3.20 SOP FOR NODAL AGENCY: HELP LINES, WARNING DISSEMINATION

The ESF on help lines and warning dissemination should process and circulate information about the welfare of citizens of affected area and managing the tremendous flow of information. The help lines will be responsible for providing, directing and coordinating operations.

Situation Assumptions:

- 1. There may be a flood of information and confusion about the injured population
- 2. The communication with affected area may be partially impaired.

Nodal Agency : D.C

Supporting Agencies: DI&PRO, NIC, Media, NGO Reps

SOP FOR NODAL AGENCY:

- IC will call the TL Primary Agency and get the ESF activated.
- TL of primary agency will call nodal officers of supporting agency.
- TL would activate the District Quick Response Team.
- The QRTS will be deployed at the affected site.
- QRTs will report the situation and the progress in response activities to the respective EOCs.
- Sending flash news of latest updates/donation requirements for disaster area all over the state.
- Assisting the EOC in providing updated information to national as well as the District Level.
- Setting up of all free numbers for emergency information assistance.

SOP FOR QUICK RESPONSE TEAM ON HELP LINES, WARNING DISSEMINATION:

- The QRT members will reach to the Nodal Office as soon as they will get instructions.
- QRT teams would reach to the site immediately after receiving instructions from the nodal officer.
- On the Site QRT members will take stock of the situation from the IC at the site and their counter parts.

• The QRTs will coordinate, collect, process, report and display essential elements of information and facilitate support for planning efforts in response operations.

12.3.20 SOP FOR NODAL AGENCY: ELECTRICITY

The ESF on electricity will facilitate restoration of electricity distribution system after a disaster. In the event of a disaster there would be major electricity failure and many power stations damaged.

Situation Assumptions:

- 1. Prolonged Electricity failure
- 2. The affected victims may be panicked.
- 3 Halt of all activities specially jamming communication-networking systems in the affected site.

Nodal Agency : P&E Supporting Agency : NGOs

SOP FOR NODAL AGENCY:

- IC will call the TL of Primary Agency and get the ESF activated
- TL of primary agency will call nodal officers of supporting agencies
- TL would activate the District Quick Response Team
- The QRTs will be deployed at the affected site
- TL will dispatch emergency repairs teams equipped with tools, tents and food

12.3.21 SOP FOR QUICK RESPONSE TEAM ON ELECTRICITY:

- The QRT members will reach the nodal office as soon they instructions to do so from the TL.
- QRT members would reach to the site immediately after receiving instructions from the nodal officer.
- On the site QRT members will take stock of the situation from the IC at the site and their counter parts.
- The QRTs will coordinate, collect, process, report and display essential elements of information and facilitate support for planning efforts in response operations.
- Begin repairing and re-construction work
- Assisting hospitals in establishing an emergency supply by assembling generators and other emergency equipments, if necessary.
- The members of QRTs will establish temporary electricity supplies for other key public and private water system.
- The members of QRTs will establish temporary electricity supplies for transit camps, feeding centers, relief camps, District Control Room and on access roads to the same.

- The members of QRTs will establish temporary electricity supplies for relief material go downs.
- Compile an itemized assessment of damage, from reports made by various electrical receiving centers and sub-centers.
- Report about all the activities to the head office.

12.3.22 SOP FOR NODAL AGENCY:TRANSPORTATION

The ESF on Transport should ensure smooth transportation links at state and district level. Within the disaster context, quick and safe movement of material and humans are a priority. It should coordinate the use of transportation resources to support the needs of emergency support forces requiring transport capacity to perform their emergency response, recovery and assistance missions.

Situation Assumptions:

- 1. The state Civil Transportation infrastructure will sustain damage, limiting access to the disaster area.
- 2. Access will improve as routes are cleared and repaired.
- 3. The movement of relief supplies will create congestion in the transportation services.

Nodal Agency: Department of Transport

Support Agency: PWD

SOP FOR NODAL AGENCY:

- TL of Transportation ESF will activate the ESF on receiving the intimation of the disaster from District EOC.
- TL would inform Nodal Officers (NOs) of support agencies about the event and ESF activation.
- TL establishes contact with the district EOC for FIR
- TL requests for reports from local Transportation ESF contact person.
- TL communicates situation to support agencies and request for detailed information on the status of transportation infrastructure in the affected area(s).

SOP FOR QUICK RESPONSE TEAM ON TRANSPORT:

- The QRT members will reach to the nodal office as soon as they will get instructions to do so from the TL.
- As soon as quick response teams will receive instructions from the nodal officer they would reach to the site immediately.
- QRTs would report the situation and the progress on action taken by the team to the respective EOCs.
- QRT will send a requirement schedule for the different modes of transportation e.g. trucks, boats, helicopters to be put on stand-by

- QRTs will ensure timely re-establishment of the critical transportation links.
- The members of QRTs will establish temporary electricity supplies for relief material go downs.
- Compile an itemized assessment of damage, from reports made, by various electrical receiving centers and sub-centers.
- Reporting about all activities to the head office.

12. 4 Norms of Relief and Rehabilitation, Emergency Response and Functions

Sl.No.	Type of Function	Nodal Agency	Line Departments
1	Evacuation	DDMA	Home, SYS, VDMC
2	Search & Rescue	DDMA	Home, SYS, VDMC
3	Cordoning/ Traffic/ Law & Order	Home Dept.	VDMC
4	Dead Body Disposal	Home Dept.	H&Fw, UD&PA, RD, VDMC
5.	Carcass Disposal	AH&Vety	

12.5 Humanitarian Relief and Assistance

Sl.No	Type of Relief	Nodal Agency	Line Department/Agency
1	Food	FCS&CA	DDMA, Transport, VDMC
2	Drinking Water	PHE	H&Fw, RD, FC&CA, UD&PA, LAD, VDMC
3	Medicine & Nutrition	H&FW	SWD
4	Psycho Social care and trauma care	H&FW	SWD, NGO, VDMC
5	Clothing	DDMA	Industry, SWD, VDMC
6	Public Health&Sanitation	H&FW	PHE, AH& Vety, Transport, UD&PA, LAD, VDMC
7	Helplines	DDMA	I&PR, Home Dept, P&E, ICT, SC&Tech, H&Fw, SWD
8	Shelter Management& Repairs & Restoration of basic amenities	DDMA	UD&PA, LAD, P&E, PHE, H&FW, SYS, School Edn, H&TE, PWD, VDMC
9	Management of VIP Visits	DDMA	