

KHAWZAWL DISTRICT DISASTER MANAGEMENT PLAN 2022



**KHAWZAWL DISTRICT DISASTER
MANAGEMENT AUTHORITY**

Khawzawl District Disaster Management Plan, 2022

Contents	Page No.
Chapter 1: Introduction	9
1.1. Aims and Objectives of the DDMP	11
1.2. Authority for DDMP	12
1.3. Evolution of DDMP	13
1.4. Stakeholders and their responsibilities	13
1.4.1. State Disaster Management Authority	13
1.4.2. District Disaster Management Authority	13
1.4.3. Zonal Officers	16
1.4.4. Village Disaster Management Committee	16
1.4.5. Private Sector	17
1.4.6. Community Groups and Volunteer Agencies	17
1.4.7. Citizens	17
1.5. How to use the Plan	17
1.6. Approval mechanism of the Plan	20
1.7. Plan review and update periodicity	21
Chapter 2: Hazard, Vulnerability, Capacity and Risk Assessment (HVCRA)	22
2.1 Profile of the District	22
2.1.1 Location	22
2.1.2 Topographical Details	25
2.1.3 Geomorphologic Detail of Khawzawl District	25
2.1.4 Demography	26
2.1.5 Climate	26
2.1.6 Rainfall Data	27
2.1.7 Crop Pattern	28
2.1.8 Drinking water sources	28
2.1.9 Minor Irrigation Projects	28
2.2 Infrastructure and Services	29
2.2.1 Road Network	29
2.2.2 Transportation Facilities	29
2.2.3 Financial Institutions	29
2.2.4 Shelter	30
2.3 Matrix of Past Disasters in the District	30
2.3.1 Motor accident recorded at Khawzawl Police Station	30
2.3.2 Report of Natural Calamities	31
2.3.3 Life and Cattle loss	31
2.3.4 Damage to Infrastructure	31
2.3.5 Economic Losses	31
2.4 Probable months for occurrence of various hazards	32

Khawzawl District Disaster Management Plan, 2022

2.5	<i>Risk Analysis</i>	32
2.6	<i>Environmental Degradation, Livelihood Restoration and Livestock Management</i>	41
	2.6.1 <i>Environmental Degradation</i>	41
	2.6.2 <i>Livestock Management during Disasters</i>	41
	2.6.3 <i>Disposal of Dead Animals during Disasters</i>	43
2.7	<i>Strategy for Emergency Management</i>	43
	2.7.1 <i>Steps for Prevention, Mitigation and Preparedness</i>	43
	2.7.2 <i>Research</i>	45
2.8	<i>Hazard Risk Vulnerability Analysis</i>	45
	2.8.1 <i>Risk Assessment Result</i>	45
	Chapter 3: Institutional Arrangements for Disaster Management (DM)	46
3.1	<i>Disaster Management Organizational Structure at the National Level</i>	46
	3.1.1 <i>National Executive Committee</i>	46
3.2	<i>DM organizational structure at the state level including IRS in the state</i>	46
	3.2.1 <i>State Executive Committee</i>	47
	3.2.2 <i>IRS Positions and Suitable Officers at the State level</i>	47
3.3	<i>DM organizational structure at the district level</i>	49
	3.3.1 <i>District Disaster Management Authority</i>	49
	3.3.2 <i>Quick Response Team</i>	49
	3.3.3 <i>District Crisis Management Group</i>	50
	3.3.4 <i>Emergency Support Functions</i>	51
	3.3.5 <i>Formation of Teams at District Level</i>	52
	3.3.6 <i>District Disaster Management Committee and Task Forces</i>	56
	3.3.7 <i>State Disaster Response Force</i>	58
	3.3.8 <i>Village Disaster Management Committee</i>	59
	3.3.9 <i>Incident Response System in the District</i>	60
3.4	<i>District Emergency Operations Centre (DEOC) set up and facilities available in the District</i>	60
	3.4.1 <i>Equipment of DEOC</i>	60
	3.4.2 <i>Activities of DEOC</i>	63
	3.4.3 <i>Site Operation Centre</i>	63
	3.4.4 <i>Alternate EOC and location</i>	64
3.5	<i>Public Private Partnership</i>	64
	3.5.1 <i>Traders</i>	64

Khawzawl District Disaster Management Plan, 2022

3.5.2 Resource Inventories of Khawzawl District	65
3.5.3 Maxi Cab Counters	65
3.5.4 Vehicles in Khawzawl District	65
3.5.5 Volunteers Profile	65
3.6 Forecasting and Warning Agencies	65
	65
Chapter 4: Prevention and Mitigation Measures	66
4.1 Prevention Measures	66
4.1.1 Specific projects proposed for preventing the disasters	66
4.1.2 Specific projects for Vulnerable Groups	70
4.2 Mainstreaming DRR in development plans and programs.	70
4.3 List of on-going and proposed development projects and programs addressing disaster prevention - both directly and indirectly	70
4.3.1 Individual Level	70
4.3.2 Community Level	70
4.3.3 District Level	70
4.4 Mitigation measures	70
4.4.1 Hazard-wise mitigation measures	71
4.4.2 Hazard-wise non-structural mitigation measures	73
Chapter 5: Preparedness measures	79
5.1 Identification of stakeholders involved in disaster response	79
5.2 Formation of Teams	78
5.3 Activation of IRS in the District	78
5.3.1 Protocol for seeking help from other agencies like Army, Air Force and Central Paramilitary Forces	78
5.4 Mechanism for checking and certification of logistics, equipment and stores	79
5.5 Operational check-up of Warning Systems & EOC	80
5.6 Command & Co-ordination	80
5.7 Community Preparedness	80
5.8 Community's Responsibility	80
5.9 Standard Operating Procedures	80
5.10 Knowledge Management, Networking and Sharing	81
5.10.1 India Disaster Resource Network (IDRN)	81
5.10.2 State Disaster Resource Network (SDRN)	81
5.11 Media Management/Information dissemination	81

Khawzawl District Disaster Management Plan, 2022

5.12 <i>Medical Preparedness and Mass Casualty Management</i>	81
	82
	82
Chapter 6: Capacity Building and Training Measures	
6.1 <i>Approaches towards Capacity Building</i>	83
6.2 <i>Capacity Building Plan</i>	84
6.2.1 <i>Responsibility of Agencies</i>	85
6.2.2 <i>Medical Expertise</i>	85
6.3 <i>Police, SDRF, QRT</i>	85
6.4 <i>Community Based Disaster Management</i>	86
6.5 <i>Officer in charge of the District Control Room</i>	91
6.6 <i>Training of Trainers</i>	91
6.6.1 <i>Disaster Management Education</i>	91
6.6.2 <i>Schools</i>	92
6.7 <i>Skill upgradation and follow up training programmes</i>	92
6.8 <i>Disabled in the District</i>	93
Chapter 7: Response and Relief Measures	93
7.1 <i>Response planning (multi-hazard), preparedness and assessment</i>	93
7.1.1 <i>Quick Assessment of damages and need</i>	93
7.1.2 <i>Response Flowchart</i>	94
7.1.3 <i>Warning and Alert</i>	95
7.1.4 <i>District CMG meeting</i>	97
7.1.5 <i>Activation of EOC</i>	97
7.1.6 <i>Resource mobilization</i>	98
7.1.7 <i>Seeking external help for assistance</i>	98
7.1.8 <i>Pscho-social care of affected population (Availability of psychosocial support service personnel that have the capacity to assist persons with disabilities affected by disasters)</i>	98
7.1.9 <i>First assessment report</i>	98
7.1.10 <i>Media management/ coordination/ information dissemination</i>	99
7.1.11 <i>Development of SOPs: Sequences of actions to be taken at the time of Disaster</i>	99
7.1.12 <i>Long term Response Plan</i>	100
7.2 <i>ACTION PLAN FOR LINE DEPARTMENTS</i>	100
7.2.1 <i>Action Plan for Police</i>	100
7.2.2 <i>Action Plan for Fire & Emergency Services</i>	101
7.2.3 <i>Action Plan for Home Guards</i>	102
7.2.4 <i>Action Plan for Power & Electricity Department</i>	102

Khawzawl District Disaster Management Plan, 2022

7.2.5 Action Plan for Telecom Services	103
7.2.6 Action Plan for LAD	104
7.2.7 Action Plan for PWD	105
7.2.8 Action Plan for Health Department	106
7.2.9 Action Plan for PHE	107
7.2.10 Action Plan for Department of Transport	108
7.3 Responsibility Matrix	108
7.3.1 Hazard specific Responsibility Matrix	108
Chapter 8: Reconstruction, Rehabilitation and Recovery Measures	110
8.1 Relief and Recovery co-ordination	110
8.2 Damage and Loss assessment	110
8.3 Restoration of Livelihood	110
8.3.1 Housing units & basic infrastructure rehabilitation	111
8.3.2 Economic rehabilitation	111
8.3.3 Social rehabilitation	111
8.4 Reconstruction/Repair of –	111
8.4.1 Lifeline Buildings/Social infrastructure	111
8.4.2 Damaged Buildings	111
8.4.3 Promote owner driven approach in recovery	111
8.5 Recovery program	112
8.5.1 Short term Recovery program	112
8.5.2 Long term Recovery program	112
8.6 Insurance	112
	113
Chapter 9: Financial Resources for Implementation of DDMP	114
9.1 State Allocation	114
9.1.1 State Disaster Response Fund	114
9.1.2 State Disaster Mitigation Fund	114
9.2 District Fund Allocation	114
9.2.1 District Disaster Response Fund	114
9.2.2 District Disaster Mitigation Fund	114
9.2.3 Departmental Fund	115
9.2.4 Contributions to the Fund	115
9.3 Flexi Funds in Centrally Sponsored Schemes	115
	115
Chapter 10: Procedure and Methodology for Monitoring, Evaluation, Updation and Maintenance of DDMP	116

Khawzawl District Disaster Management Plan, 2022

Chapter 11: Co-ordination mechanism for Implementation of DDMP	117
11.1 Intra and Inter department coordination with horizontal linkage	117
11.2 Co-ordination mechanism with NGOs, SHGs, industries, private schools and hospitals	117
11.3 Co-ordination with block, village level task forces	118
11.4 Co-ordination system with state department and state department and training institutes at district level	118
11.5 Co-ordination with village councils	118
Chapter 12: Standard Operating Procedures (SOPs) and Checklist	119
12.1 Actions on receipt of Warning and Warning Dissemination	119
12.2 Roles & Responsibilities of the departments/or stakeholders in emergency response	119
12.2.1 SOP for ESF on Communication	119
12.2.2 SOP for ESF on Evacuation	122
12.2.3 SOP for ESF on Search and Rescue	123
12.2.4 SOP for ESF on Law and Order	123
12.2.5 SOP for ESF on Traffic Management	124
12.2.6 SOP for ESF on Emergency Public Information, helpline and warning	125
12.2.7 SOP for ESF on Medical Response and Trauma Counselling	126
12.2.8 SOP for ESF on Debris and Clearance	127
12.2.9 SOP for ESF on Electricity and Water Supply	129
12.2.10 SOP for ESF on Relief (Food and Shelter)	130
12.2.11 SOP for ESF on Transportation	131
12.2.12 SOP for ESF on Fire fighting	131
12.2.13 SOP for ESF on Public Works and Engineering	134
12.2.14 SOP for ESF on Animal Care	134
12.3 Norms of Relief and Rehabilitation, Emergency Response and Functions	135
12.4 Humanitarian Relief and Assistance	135
Annexures	136
Annexure I: List of VCPs/ Chairman, VDMCs in Khawzawl District	136
Annexure II: List of Abbreviations	136

Khawzawl District Disaster Management Plan, 2022

<i>Annexure III: Skilled Human Resource Inventories in Khawzawl District</i>	139
<i>Annexure IV: List of Disaster Management Equipment in the District</i>	147
<i>Annexure V: List of Flood/Cyclone Shelters in the District.</i>	149
<i>Annexure VI: List of Traders in Khawzawl District.</i>	155
<i>Annexure VII: List of Vehicles in Khawzawl District</i>	159

Khawzawl District Disaster Management Plan, 2022

CHAPTER 1 INTRODUCTION

Khawzawl District Disaster Management Plan 2022 is prepared to be activated in times of Disaster throughout the District.

Khawzawl District is one of the three youngest districts and the second least populated district in the state of Mizoram. It started functioning from August 12th, 2019. Its headquarters is Khawzawl. The district falls at the central eastern part of the state and is located at 152 km from Aizawl along National Highway 6 (Seling to Champhai). It is elevated at 1187 meters above sea level.

Khawzawl District lies between **23°12'17.44" N and 23°46'36.58" N** latitudes and between **93°0'47.22" E and 93°16'39.05" E** longitudes.

Administrative Profile of the District:

<i>Total Geographical Area</i>	1152.53 sq. km
<i>Boundary</i>	<ul style="list-style-type: none">• East: Champhai District.• West: Saitual District• North: Saitual District• South: Serchhip District.
<i>Administrative Sub-Divisions</i>	Khawzawl Sub-Division.
<i>Rural Development Block</i>	Khawzawl RD Block.
<i>Administrative units</i>	<p>Khawzawl District comprises of four Assembly Constituencies viz.</p> <ul style="list-style-type: none">• 21 – Lengteng,• 22 – Tuichang,• 23 – Champhai North and• 28 – Hrangturzo. <p>The district has 38 towns and villages having their own Village Councils.</p>
<i>Geographical area (in hectare)</i>	115253

Khawzawl District Disaster Management Plan, 2022

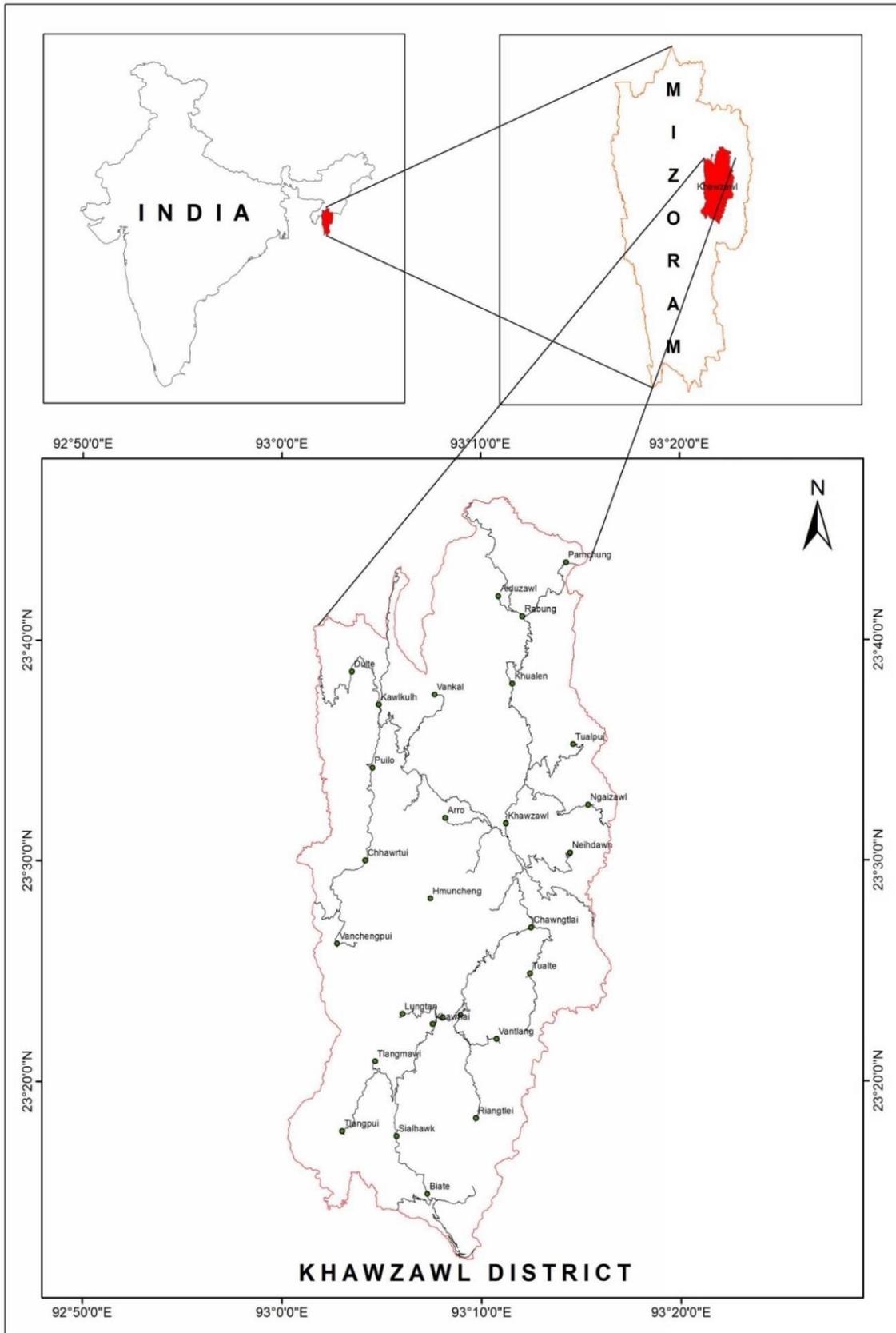


Figure 1. Location Map of Khawzawl District.

Khawzawl District Disaster Management Plan, 2022

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 situation to manage the disaster efficiently.
- 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 failproof 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.

Khawzawl District Disaster Management Plan, 2022

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:

Plans by different authorities at district level and their implementation. —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;

Khawzawl District Disaster Management Plan, 2022

- 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:

Khawzawl District is a disaster-prone district that falls under zone V of Earthquake. It experiences landslides, hailstorm, cyclones, cloudburst, forest and urban fires and road accidents. The need for Disaster Plan and Disaster Response plan arises from the fact that communities that have effectively applied the DDMP process are better able to cope with the impact of disasters. Having an effective DDMP results in better mobilization of human and other resources. This in turn results in better and more effective dealing of impending as well as aftermath of disasters.

1.4 Stakeholders and their responsibilities:

1.4.1 State Disaster Management Authority:

At the State level, the State Disaster Management Authority and the Office of the Director, Disaster Management and Rehabilitation Department are the major institutions in 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.

1.4.2 District Disaster Management Authority:

At the District level, District Disaster Management Authority, with the District Collector designated as Response Officer (RO), and other line departments at district HQ are responsible to deal with all phases of disaster management within district. Other technical institutions, community at large, local self-governments, NGOs etc. are also stakeholders of the District Disaster Management Plan.

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.

Khawzawl District Disaster Management Plan, 2022

- 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 make recommendations to the Director, Disaster Management and Rehabilitation Department) and State Government for declaration of disaster.

Powers and Functions:

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

- (i) Prepare a District Management Plan, including District Response Plan for the District.
- (ii) Coordinate and monitor the implementation of National Policy, State Policy, National Plan, State plan and District Plan.
- (iii) Ensure that the areas in the District vulnerable to disaster are identified and measures for the preventions of disasters and mitigation of its effects are undertaken by all the District Level Government Departments and the local authorities.
- (iv) Ensure that the guidelines for prevention of disasters, mitigation of its effects, preparedness and response measures as laid down by the National Authority and the State Authority are followed by all the District level State Government Departments and the local authorities.
- (v) Give directions to different District level authorities and local authorities to take such other measures for the prevention or mitigation of disaster as may be necessary.
- (vi) Monitor the implementation of Disaster Management plan prepared by the District Level Govt. Departments and local authorities.
- (vii) Lay down guidelines to be followed by the District Level State Government departments for the purpose of integration of measures for prevention of disaster and mitigation in their development plans and projects and provide necessary technical assistance therefore, and monitoring the implementation of such measures.
- (viii) Review the capabilities for responding to any disaster or threatening disaster situation in the District and give directions to the relevant Departments or authorities at the District level for their up-gradation as may be necessary.
- (ix) Review the preparedness measures and give directions to the District level or other concerned authorities, where necessary, for bringing the preparedness measures to the levels required for responding effectively to any disaster or threatening disaster situation.
- (x) Organize and coordinate specialized training programme for different levels of officers, employees and voluntary rescue workers in the District.
- (xi) Facilitate Community training and awareness programmes for prevention of disaster or mitigation with the support of local authorities, Governmental and non-governmental organizations.

Khawzawl District Disaster Management Plan, 2022

- (xii) Set up, maintain, review and upgrade the mechanism for early warning and dissemination of proper information to the public.
- (xiii) Prepare, review and upgrade the District level Response Plan and Guidelines.
- (xiv) Coordinate response to any threatening disaster situation of disaster.
- (xv) Ensure that the District Level Government Departments and local authorities prepare their response plans in accordance with the District Response Plan.
- (xvi) Lay down guideline, or give directions to the concerned District Level State Government Departments or any other authorities within the local limits of the District, to take measures to respond effectively to any threatening disaster or disaster.
- (xvii) Advise, assist and coordinate the activities of the District Level State Government Departments, statutory bodies and other governmental or non- governmental organizations engaged in disaster management in the District.
- (xviii) Coordinate with, and give guidance to, local authorities in the District to ensure that measures for the prevention or mitigation or threatening disaster situation or disaster in the District are carried out promptly and effectively.
- (xix) Provide necessary technical assistance or give advice to the local authorities in the District for carrying out their functions effectively.
- (xx) Review the developmental plans prepared by the District level State Government Departments, statutory authorities or local authorities with a view to make necessary provisions therein for prevention of disaster or mitigation.
- (xxi) Examine the construction in any area in the District and, if it is of the opinion that the standards for the prevention of disaster or mitigation laid down for such construction is not being, or has not been followed, may direct the concerned authority to take such actions as may be necessary to secure compliance of such standards.
- (xxii) Identify buildings and places which could, in the event of any threatening disaster or disaster, be used as relief centres and make arrangements for water supply and sanitation in such buildings and places.
- (xxiii) Establish stock piles of relief and rescue materials or ensure preparedness to make such materials available at a short notice.
- (xxiv) Provide information to the State Authority relating to different aspects of disaster management.
- (xxv) Encourage the involvement of NGOs and voluntary social welfare institutions working at the grass root level in the District for disaster management.
- (xxvi) Ensure that communication systems are in order, and disaster management drills are carried out periodically.
- (xxvii) Perform such other functions as the State Government or State Authority may assign to it or as deems necessary for disaster management in the District.

Khawzawl District Disaster Management Plan, 2022

1.4.3 Zonal Officers (ZO)

Khawzawl District is divided into 4 (four) Zones. There are 4 Zonal Officers from the cadre of Mizoram Civil Services appointed by the Deputy Commissioner and Chairman, KDDMA. They act as a link between the Village Disaster Management Committee (VDMC) and KDDMA. They collect report from their respective VDMC and submit the same to KDDMA for information, record & further action. The State Disaster Response Fund (SDRF) is scrutinized and allotted based on the Report submitted by Zonal Officers. They are also the Magisterial Field Officers/ Site Incident Commanders for KDDMA.

1.4.4 Village Disaster Management Committee (VDMC)

Taking into account the negative impact of the natural as well as man- made disasters in the district and as community is the first responder to any disaster and the first to be impacted: defining Community First Response is the first step towards community disaster preparedness, prevention, mitigation & response. As a holistic approach to Community Based Disaster Management, Village Disaster Management Committee (VDMC) is suggested to be formed at all the localities in the District. They report and coordinate with their respective Zonal Officers in case of disaster. They are the root towards disaster resilient district.

The role of the stakeholders has been prepared with the sole objective of making the concerned organizations realize their duties and responsibilities regarding disaster management at all levels and accomplishing them.

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.
- iv) To ensure that all construction projects under it conform to the standards and specifications laid down. 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/organization identified as critical infrastructure and key resource, including places of congregation in a district shall prepare on-site and off-site Disaster management plan.
 - (b) Carry out mitigation, response, relief, rehabilitation and reconstruction activities.

Khawzawl District Disaster Management Plan, 2022

1.4.5 Private Sector:

- i) The private sector should be encouraged to ensure their active participation in the pre-disaster activities in alignment with the overall plan developed by the DDMA or the Collector.
- 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 the district's resilience.

1.4.6 Community Groups and Volunteer Agencies:

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

1.4.7 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.

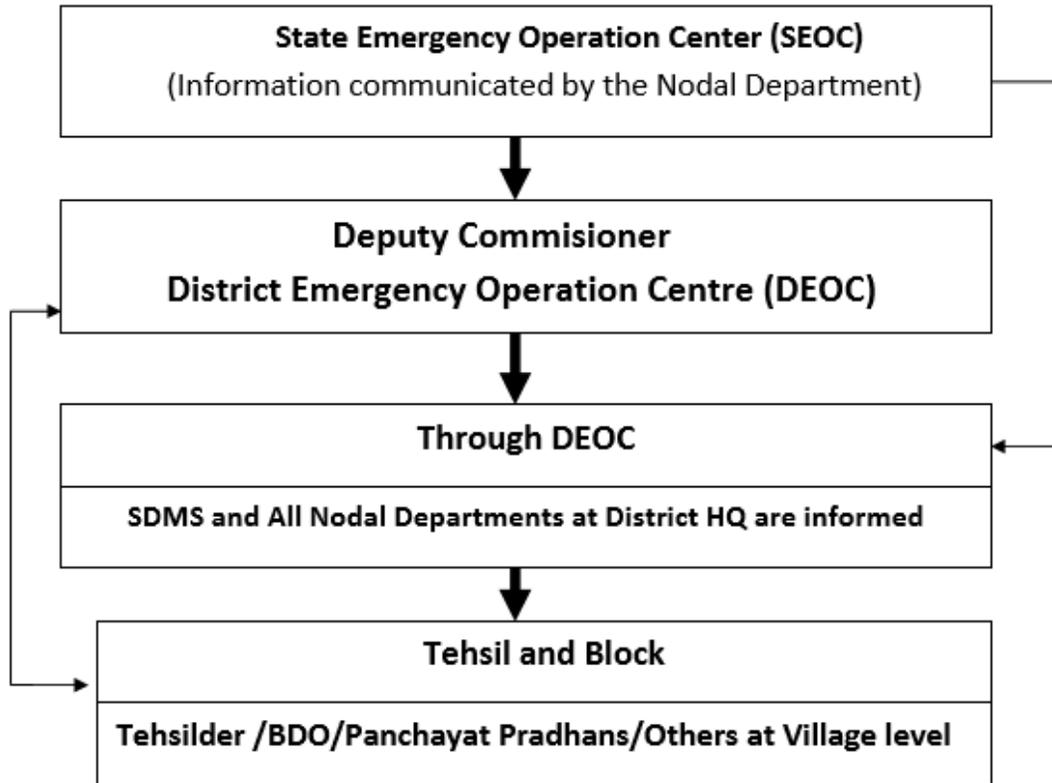
Khawzawl District Disaster Management Plan, 2022

- ix) Coordination with surrounding districts is essential, when an event occurs, that impacts beyond district boundaries. Procedure should be established and exercised for inter district collaboration.
- x) Departments, agencies and organizations assigned either primary or supporting responsibilities in this document must develop implementation documents in order to support this plan.
- xi) When local resources prove to be inadequate during emergency operations, request for assistance will be made to the State or higher levels of government and other agencies in accordance with set rules and procedures.
- xii) District authority will use normal channel for requesting assistance and/or resources, i.e., through the District Emergency Operations Center (DEOC) to the State EOC. If state resources have been exhausted, the state will arrange to provide the needed resources through central assistance.
- xiii) The District EOC will coordinate with the State EOC, Agencies of the Govt. of India like IMD / CWC to maintain upto-date information concerning potential flooding, cyclones etc. As appropriate, such information will be provided to the citizens of the affected areas in the district.
- xiv) Upon receipt of potential problems in these areas, DEOC / designated officials will appropriately issue alert and notify action to be taken by the residents.
- xv) Disaster occurrence could result in disruption of government functions and, therefore, all levels of local government and their departments should develop and maintain procedures to ensure continuity of Government action. 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:

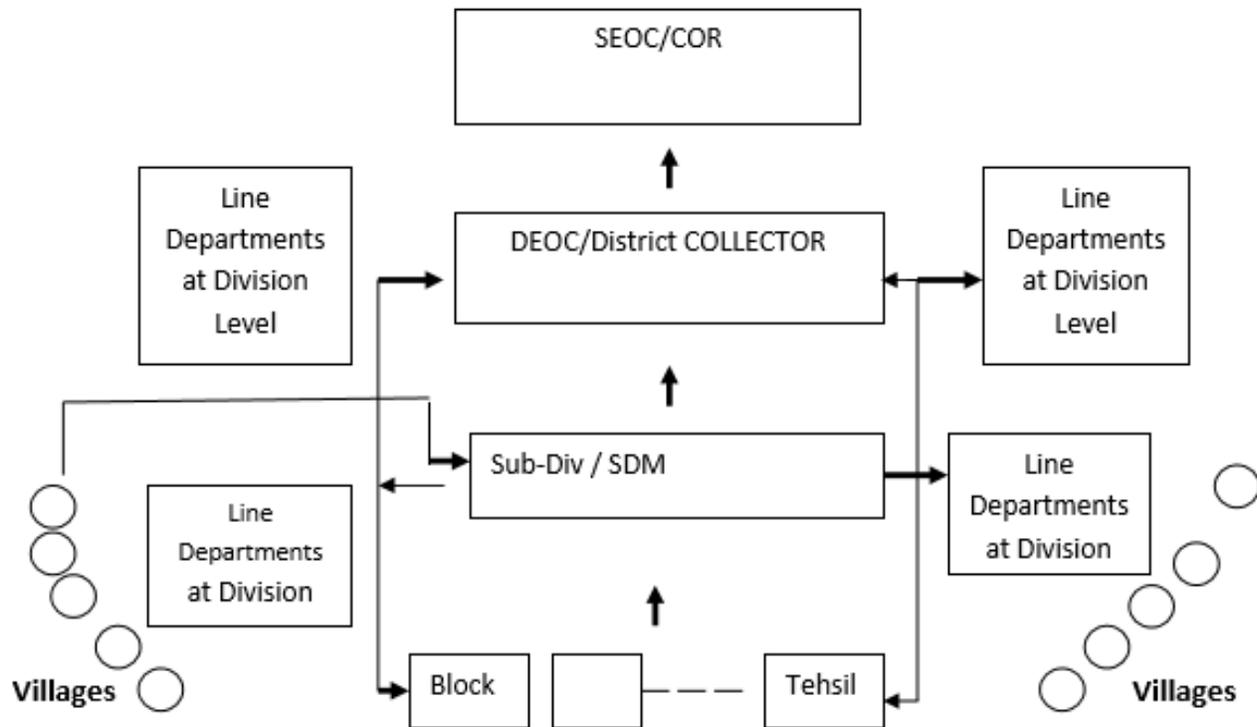
Khawzawl District Disaster Management Plan, 2022



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.

Khawzawl District Disaster Management Plan, 2022



Without Warning – Information, generally, should flow in a Bottom- up matter, 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 personnel and ERCs. In addition, they will issue instructions to include the following details:

- i) Exact quantum of resources (in terms of manpower, equipment 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.

Khawzawl District Disaster Management Plan, 2022

1.7 Plan review and update 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 polices 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:

- i) A major incident.
- ii) A change in operational resources (e.g., policy, personnel, organizational structures, Management processes, facilities, equipment).
- iii) A formal update of planning guidance or standards.
- iv) Each activation.
- v) Major exercises.
- vi) A change in the district's demographics or hazard or threat profile.
- vii) 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 (HVCRA)

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.

Khawzawl District is vulnerable to all types of disasters like earthquake, landslide, fire, house fire, cyclone, cloudburst, mudslide, hailstorm, etc. Due to less than desirable condition of town planning, inter-village routes and other means of inter village communications; it is imperative that an effective District Disaster Management Plan is prepared to tackle disasters at the onset, during and aftermath.

Khawzawl District lies in the Zone V of the earthquake map. It is also highly vulnerable to Landslide/landslip due to its soil type. It has also experienced all types of man-made disasters like motor accidents, house fire, etc. A large proportion of the population live in rural areas and 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 occur every year.

The whole District is vulnerable to the above-mentioned hazards but landslide/landslip is the most common and destructive hazard of the District which affects almost every village every year. Flood is one hazard which also causes damage to agricultural crops especially in plain areas (Phai) of the district during rainy season. Above all, Earthquake remain the most dangerous hazard for the District as connectivity of villages within the District will be severely affected due to blockage of inter-village roads by Landslide. Landlocked villages will be facing all kinds of difficulties if Earthquake of 7.0 or more magnitude occurs in the District.

For the purpose of HVCRA, the following are taken into consideration:

2.1 General Profile of the District:

2.1.1 Location:

Khawzawl District is one of the three youngest districts and the second least populated district in the state of Mizoram. It started functioning from August 12th, 2019. Its headquarter is Khawzawl. The district falls at the central eastern part of the state and is located at 152 km from Aizawl along National Highway 6 (Seling to Champhai). It is elevated at 1187 meters above sea level. Khawzawl District lies between **23°12'17.44" N and 23°46'36.58" N** latitudes and between **93°0'47.22"E and 93°16'39.05" E** longitudes.

Khawzawl District Disaster Management Plan, 2022

Total Geographical Area:

The total area is **1152.53 sq.km**, which is approximately **5.5%** of the area of the state of Mizoram.

Boundaries:

East : Champhai District.

West : Saitual District

North : Saitual District

South: Serchhip District.

Administrative Sub-Divisions: Khawzawl Sub-Division.

Rural Development Block: Khawzawl RD Block.

Administrative units: Khawzawl District comprises of four Assembly Constituencies viz. 21 – Lengteng, 22- Tuichang, 23-Champhai North and 28 – Hrangturzo. The district has 38 towns and villages having their own Village Councils.

Geographical area (*in hectare*) : **115253**

Khawzawl District Disaster Management Plan, 2022



Khawzawl District Disaster Management Plan, 2022

2.1.2 Topographical details

The general topography of Khawzawl District is mostly characterized by a hilly terrain with high and prominent relief or medium structural hill ridges, while a few parts – especially the northern and north-western parts – of the District, are portrayed by comparatively low and less prominent ridges. The district as a whole is characterized mainly by several ridge lines and intervening valleys.

The Eastern flank of the District is characterized by several high structural hill ridges with a narrow coastal plain along the bank of Tuipui river bordering Champhai District. The North Western boundary of the District is formed by Tuivawl river bordering Saitual District. The Northern region is characterized by relatively low undulating hillocks with varying dimensions.

The Southern part of the District is characterized by medium structural hill ridges which run parallel to each other. The Tuivawl, Tuichang and Tuipui rivers are the most important rivers within the District. Other important rivers include Tuimuk, Tuisen, Phaisen, Damdiai, Kangbur, Tuira, Tuiphal, Pumpet along whose banks major paddy fields are found.

2.1.3 Geomorphologic Detail of Khawzawl District

Sl. No.	Geomorphic Unit	Villages within
1	High Structural Hill	Aiduzawl, Arro, Tualpui, Ngaizawl, Neihdawn, Chawngtlai, Tualte, Khawhai
2	Medium Structural Hill	Hmuncheng, Rabung, Vankal, Khawzawl, New Chalrang, Lungtan, Chalrang, Vangtlang, Rianglei, Tlangmawi, Sialhawk, Tlangpui, Biate
3	Low Structural Hill	Kawlkulh, Dulte, Puilo, Chhawrtui, Vangchengpui, Khualen, Pamchung, banks of Tuichang river

Khawzawl District Disaster Management Plan, 2022

2.1.4 Demography (according to census 2011):

	Male	Female	Total
Population	18447	17934	36381
Literacy Rate	96.80%	94.57%	95.72%
No. of Households	N/A	N/A	7372
Density	N/A	N/A	32

2.1.5 Climate:

The climate of Khawzawl District is the “**Tropical Monsoon**”. The climate as a whole is controlled by its location, physiographic, pressure regime in North East India and Bay of Bengal, warm and moist maritime tropical air masses from the Bay of Bengal, local mountains and Valley winds. Also, the surrounding Hill Tracts of Chin, Arakan Yoma and Chittagong play an important role in shaping the climatic condition of the district.

The entire district enjoys a moderate climate owing to its tropical location. It is neither very hot nor too cold throughout the year. Khawzawl District falls under the direct influence of the South West Monsoon. As such, the area receives an adequate amount of rainfall which is responsible for a humid tropical climate characterized by shorter winter and long summer with heavy rainfall.

Seasons: Based on the variation in temperature, rainfall, humidity and other general weather conditions, four different types of seasons are observed for the district.

a) The Cold Season or Winter season (Thlasik):

Winter season starts from the month of December and it is the coldest season of the year. During this period, rainfall is less compared to other seasons, and whatever amount rainfall received originate from North East Monsoon, generally known as ‘Retreating Monsoon’. This season is very pleasant with clear blue skies in the absence of cloud cover.

b) Pre- Monsoon Season (Thal):

Spring is the shortest season of the year. Temperature is mild and the sky is clear. The people are accustomed to undertaking construct works during this season as there are no weather disturbances.

c) Summer / Rainy Season (Nipui/Fur):

Summer or Rainy season is the longest season covering about seven months. The early part of this season i.e., from second half of March till first half of May

Khawzawl District Disaster Management Plan, 2022

is characterized by bright sunshine and clear skies with little or no cloud till it is disrupted by the coming of monsoon showers. July, August and September are the wettest months of the year.

The heavy rainfall or downpour usually subsides in the first quarter of October. Rainfall during May, June, July, August & September alone contribute 76% of the total annual rainfall. This is the season of the cyclonic rains. The temperature remains high, but is kept low to a considerable extent by the rain.

d) Autumn (Favang):

This season is very pleasant when the summer rain already receded. This is the season the Mizos longs for, since they have no unfinished works in their traditional paddy fields.

The salient thermo-characteristics of Khawzawl district is that temperature do not fluctuate much throughout the year. April to September is the warmest period of the year. The temperature starts to fall down sharply from November and it is minimal in December and January.

2.1.6 Rainfall Data:

Annual Rainfall: **1695.1 mm** (Meteorological Data of Mizoram 2014)

The entire state of Mizoram is under the direct influence of the South West Monsoon. Hence Khawzawl District also receives an adequate amount of rainfall during the monsoon season. In Khawzawl District, June, July and August are the rainiest months while December, January and February are the driest months in a year.

There is one rainfall recording station in Khawzawl.

Sl. No.	Month	Rainfall (in mm)
1	January	NIL
2	February	25.4
3	March	15.3
4	April	30.5
5	May	357
6	June	253.5
7	July	265
8	August	298.4
9	September	339.8
10	October	107.9
11	November	2.3
12	December	NIL
	TOTAL	1695.1

Khawzawl District Disaster Management Plan, 2022

2.1.7 Crop Pattern:

Month	Area
Shifting Cultivation Area	1230 Ha.
Abandoned Shifting Cultivation Area	992 Ha.
Five major types of crops	Rice, Maize, Pulses, Ginger, Chilli

2.1.8 Drinking water sources (2011 Census)

Springs: Nil
Tuikhur (waterholes): 12
Hand Pumps: 18
PHE Stands: Nil

Rivers and creeks

Sl. No	Name of the River/Creek	Tributaries	Direction
1	Tuichang	Tuichang	South Flowing
2	Khuailui	Phaisen lui	South Flowing
3	Changel	Phaisen lui	South Flowing
4	Haidai	Tuimuk, Tuipui	East Flowing
5	Tumkhuai	Pumpet lui	East Flowing

2.1.9 Minor irrigation projects

Sl. No.	Particulars	Location	Area (in hectare)
1	Damdiai Phase I	Khawzawl	35
2	Phaisen	Khawzawl	82
3	Damdiai Phase II	Khawzawl	18
4	Mukte Phase I	Khawzawl	28
5	Damdiai Extension	Khawzawl	15
6	Phaitha	Khawzawl	55
7	Lower Phaisen	Khawzawl	43
8	Tuichangnar	Khawzawl	22
9	Tuisen	Khawzawl	22
10	Tuiphalthnar Phase I	Rabung	25
11	Choakbuklui	Khawzawl	30
12	Awnnu	Khawhai	33
13	Mukte Phase II	Khawzawl	33
14	Zosangsih	Chawngtlai	54

Khawzawl District Disaster Management Plan, 2022

Sl. No.	Particulars	Location	Area (in hectare)
15	Lower Phaisen Phase II	Khawhai	40
16	Tuira	Khawzawl	36
17	Khuaihnuai	Vanchengpui	60
18	Tuibel	Lungtan	40
19	Chhimluangzau	Kawlkulh	55
20	Lower Tuimuk	Khawzawl	45
21	Halsual	Khawzawl	35
22	Tuipuizau	Tualte	45
23	Tawitawzawl	Lungtan	80
24	Hmawngmuallui	Chawngtlai	66
25	Bawnzawl	Arro	35
26	Phaisenhnar	Khawzawl	25
27	Tuiphai Phase-II	Rabung	75

2.2 Infrastructure and services:

2.2.1 Road network (in kilometers)

Sl. No	Types of Roads	Surfaced	Un-surfaced	Total
1	State Highway	-	-	-
2	Major District Road	24		
3	Other District Road	194		194
4	Town Road	40.75	25.56	66.31
5	Village Road	144.28	81.20	225.48
6	National Highway	-	-	-
	Total	403.03	106.76	509.79

2.2.2 Transportation facilities

Name of the Block		Khawzawl	Remarks
Telecommunication (YES/NO)		YES	
Number of Bus	Govt.	YES	Detail document of vehicle registration within the District can be obtained from DTO, Champhai.
	Private	YES	
Number of Truck	Govt.	YES	
	Private	YES	
Number of Auto Rickshaw	Govt.	YES	
	Private	YES	
Number of Two-Wheeler	Govt.	YES	
	Private	YES	
Others	Govt.	YES	
	Private	YES	

Khawzawl District Disaster Management Plan, 2022

2.2.3 Financial Institutions

Sl. No.	Name of the Institution	Address	Telephone
1	State Bank of India	Khawzawl	8730003952
2	Mizoram Rural Bank	Khawzawl	9862809672
3	Apex Bank	Khawzawl	
4	State Bank of India	Biате	9436379092
5	Mizoram Rural Bank	Kawlkulh	8837348091
6	Mizoram Rural Bank	Khawhai	9862774746
7	Mizoram Rural Bank	Sialhawk	9774376474

(Note: As the bank branches do not have landline phone numbers, mobile numbers of Branch Managers are included)

In Khawzawl District, there are:

- 7 (seven) Bank Branches,
- 3 (three) ATMs,
- 9 (nine) Business Correspondents,
- 1 (one) Customer Service point and
- 18 Indian Post Payment Banks.

2.2.4 Shelter

Flood/Cyclone

Flood/ Cyclone shelter has not been constructed in the district but several halls have been identified by Village Disaster Management Committees for the purpose of emergency shelters during disasters.

The list of identified halls may be seen at **Annexure V**

2.3 Matrix of Past disasters in the district

2.3.1 Motor Accident recorded at Khawzawl Police Station in 2020

Month	No. of accident	Place of accident	Type of vehicle	Fatal	Injured
January	NIL	NIL	NIL	NIL	NIL
February	NIL	NIL	NIL	NIL	NIL
March	NIL	NIL	NIL	NIL	NIL
April	NIL	NIL	NIL	NIL	NIL
May	NIL	NIL	NIL	NIL	NIL
June	NIL	NIL	NIL	NIL	NIL
July	NIL	NIL	NIL	NIL	NIL
August	NIL	NIL	NIL	NIL	NIL
September	NIL	NIL	NIL	NIL	NIL
October	NIL	NIL	NIL	NIL	NIL
November	NIL	NIL	NIL	NIL	NIL
December	NIL	NIL	NIL	NIL	NIL

Khawzawl District Disaster Management Plan, 2022

2.3.2 Report of Natural Calamities (2020 – 2021)

Sl. No.	Type of Calamity	No. of villages affected	No. of houses damaged				Agricultural damaged	
			Partially	Severely	Fully	Estimated loss (in lakh Rs.)	Crop Area (in ha)	Estimated crop loss (in lakh rupees)
1	Landslide	8	11	2	5	20		
2	Fire	2	1		1	2		
3	Flood	8	7	1		1.31	38	3.718
4	Hailstorm							
5	Cyclone							
6	Earthquake	1	1			1.5		

Number of Villages affected by Disasters during 2020 – 2021: The whole District was affected by different Disasters like Landslide, Flood, Cyclone, Earthquake etc.

2.3.3 Life and Cattle loss during 2020-2021:

There is no Cattle loss recorded during 2020-2021 due to natural disasters.

2.3.4 Damage to Infrastructure during 2020- 2021

Due to Landslide, Earthquake and other disasters, Damages to Infrastructures has been reported in 2020-2021 such as:

- i) Damage of 5 (five) residential Buildings at Khawzawl Vengthar due to sinking of land.
- ii) Damage to 1 (one) house each due to fire in Arro Village and Chawngtlai.
- iii) Damage to bridge connecting Khawzawl Kawnzar cemetery due to landslide.

2.3.5 Economic Losses during 2020: Rupees 28.528 lakhs lost due to different types of Disasters in Agricultural/Crop or Infrastructure area.

Khawzawl District Disaster Management Plan, 2022

2.4 Probable months for occurrence of various hazards

		MONTH OF OCCURRENCE											
Sl. No	TYPES OF HAZARDS	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
1	Cyclone				←————→					←————→			
2	Flood						←————→						
3	Drought			←————→									
4	Earthquake	←————→											
5	Forest Fire	←————→											
6	Landslide			←————→									
7	Hailstorm			←————→									
8	Accidents	←————→											

2.5 Risk Analysis

Sl. No	Type of Hazards	Potential Impact	Vulnerability	Vulnerable Areas
1	Cyclone	Loss of crop, infrastructure, human and bovine life, livelihood system, houses, private and public properties etc., cattle, livestock.	Communication network, shelter, infrastructures, power system, water supplies, transport system, human beings, livestock., agriculture, educational Institutions.	Whole District
2	Flood	Loss of crop, agricultural produce disrupted, spread of diseases, epidemics.	Agriculture, embankments, livelihood and livestock.	Whole District, especially paddy fields and fish ponds in low lying areas around Khawzawl and Neihdawn
3	Drought	Failure of farming, loss of crops, scarcity of water supplies, livestock.	Crops, irrigation sources, livestock and drinking water supplies.	Whole District

Khawzawl District Disaster Management Plan, 2022

Sl. No	Type of Hazards	Potential Impact	Vulnerability	Vulnerable Areas
4	Earthquake	Loss of crop, infrastructure, human and bovine life, livelihood system, houses, private and public properties etc., cattle, livestock.	Communication network, shelter, infrastructures, power system, water supplies, transports system, human beings, live stocks. Agriculture, educational institutions.	Whole District
5	Forest Fire	Huge loss of property, forest area, loss of medicinal plant and forest resources	Human beings and livestock, forests, environment, loss of properties and valuable assets.	Whole District
6	Domestic/Urban Fire	Loss of Housing Settlements etc.	Human Beings and livestock loss, loss of properties and valuable assets	All Towns and Villages
7	Landslide	Loss of crop, infrastructure, human and bovine life, livelihood system, houses, private and public properties etc., cattle, livestock.	Agriculture and forest resources, communication and transport network, water supplies, irrigation, Livestock and institutions.	Whole District
8	Hail Storms	Loss of crops and damage to Households	Crops, Human Settlements and livestock	Whole District

Khawzawl District Disaster Management Plan, 2022

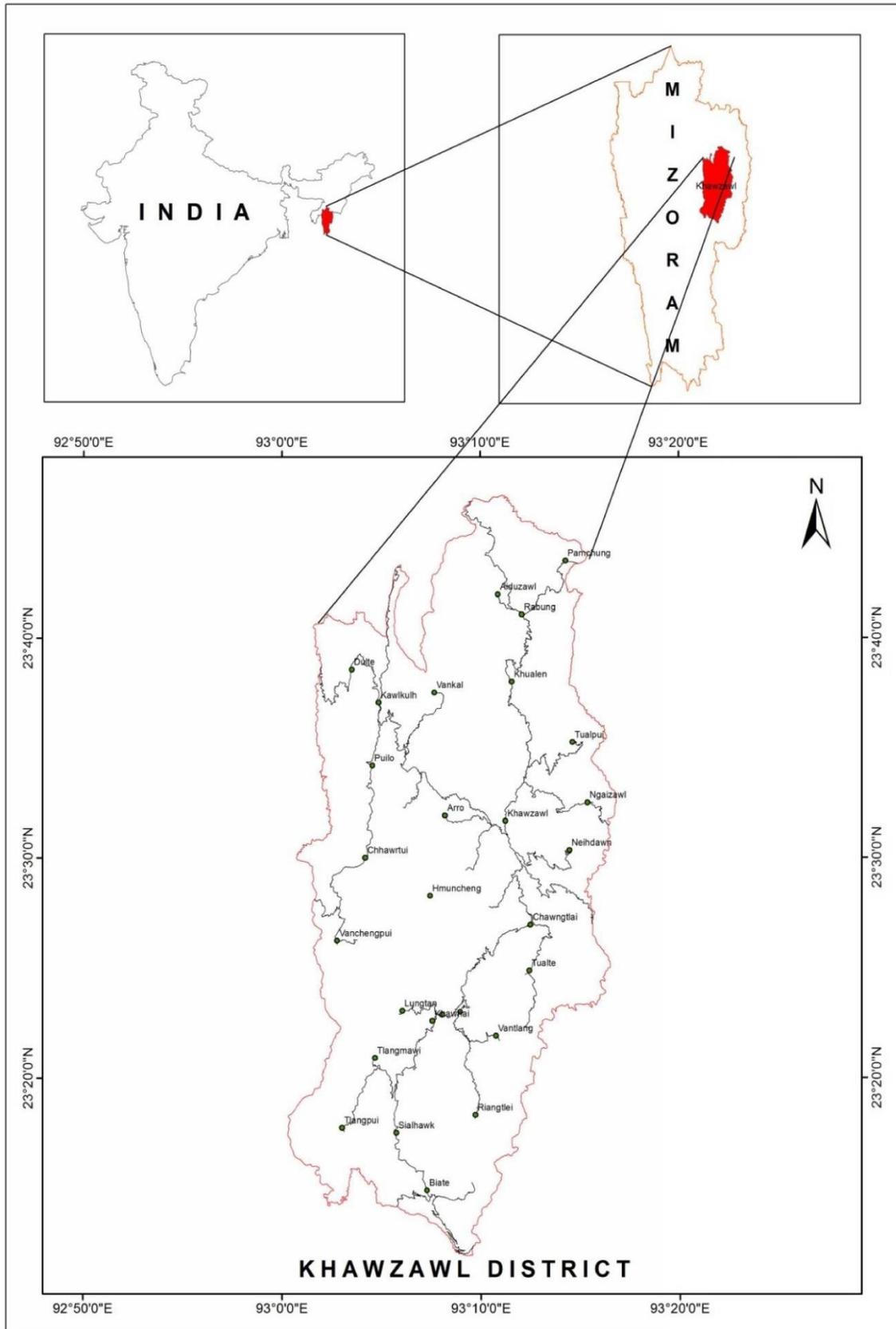


Figure 1. Location Map of Khawzawl District.

Khawzawl District Disaster Management Plan, 2022

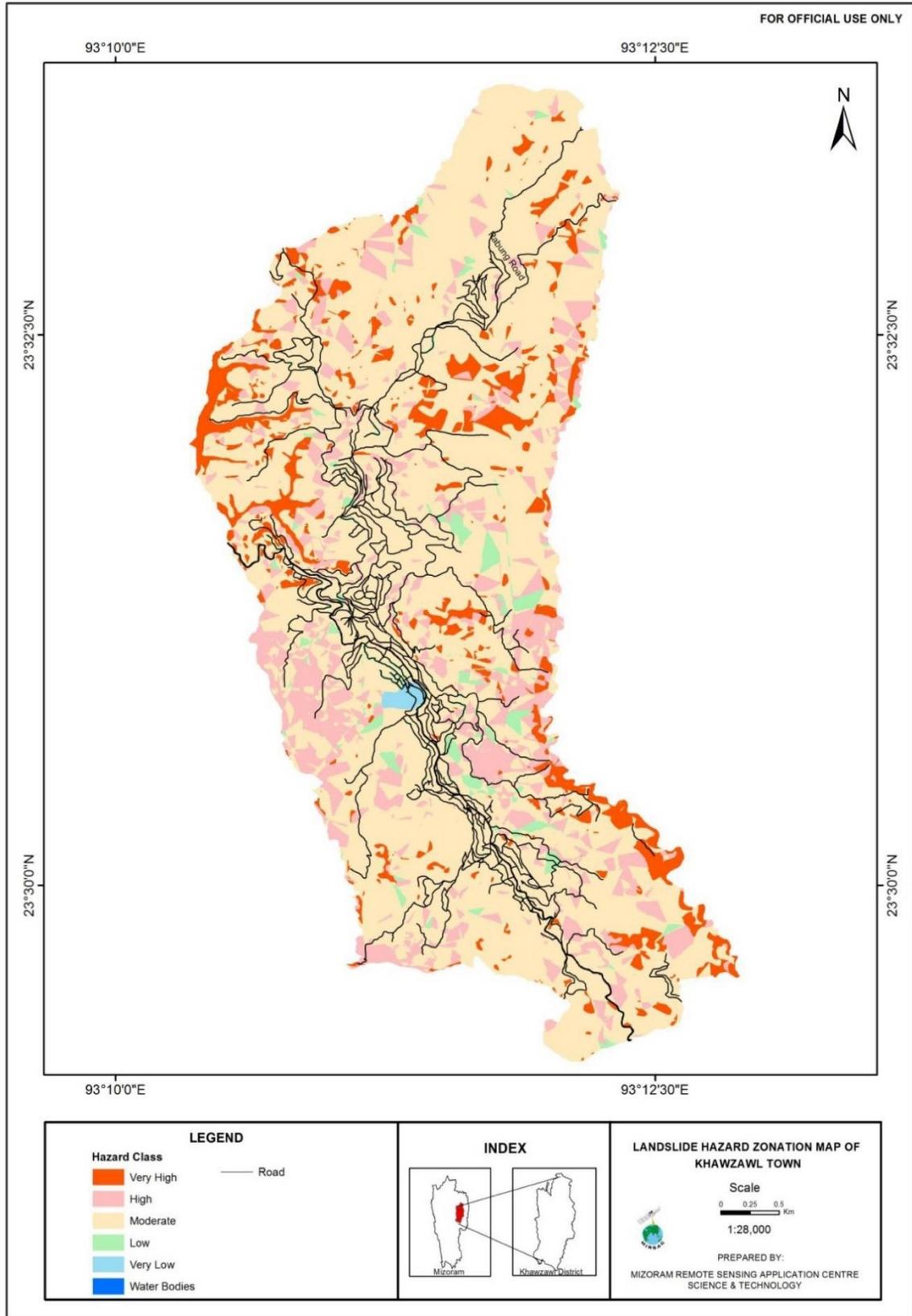


Figure 2. Landslide Hazard Zonation Map of Khawzawl District.

Khawzawl District Disaster Management Plan, 2022

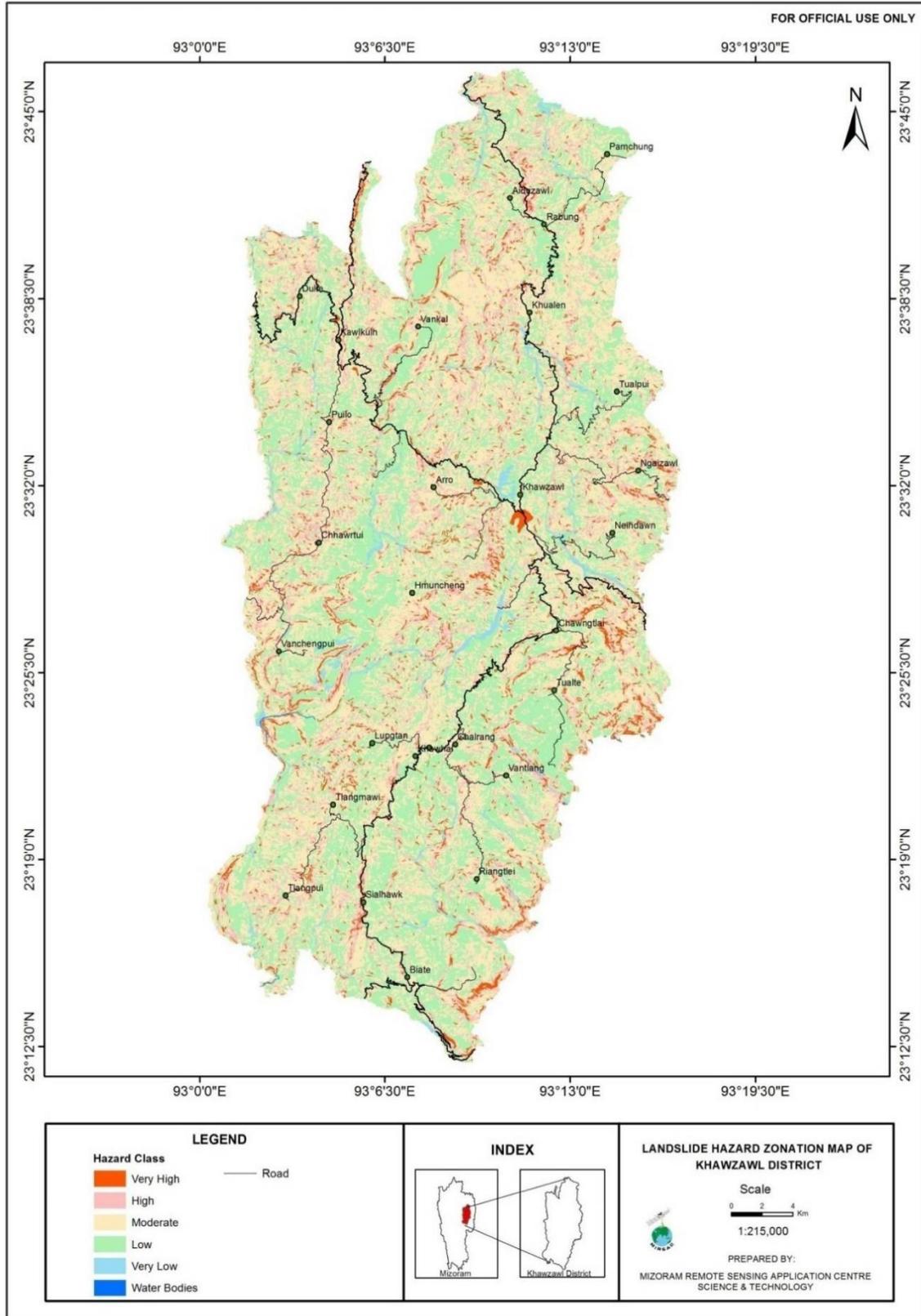


Figure 3. Landslide Hazard Zonation Map of Khawzawl Town.

Khawzawl District Disaster Management Plan, 2022

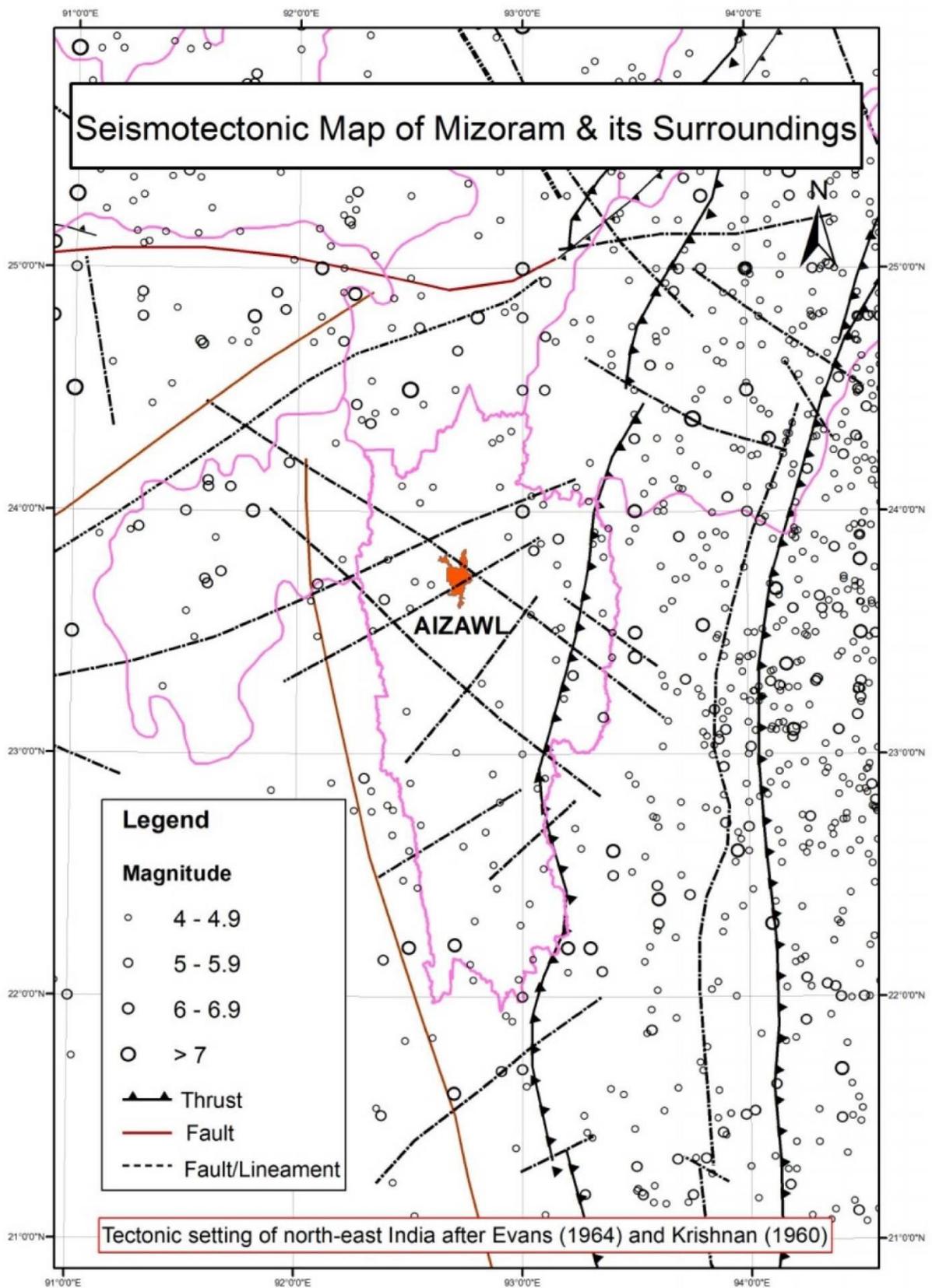


Figure 4. Seismotectonic Map of Mizoram and its surroundings

Khawzawl District Disaster Management Plan, 2022

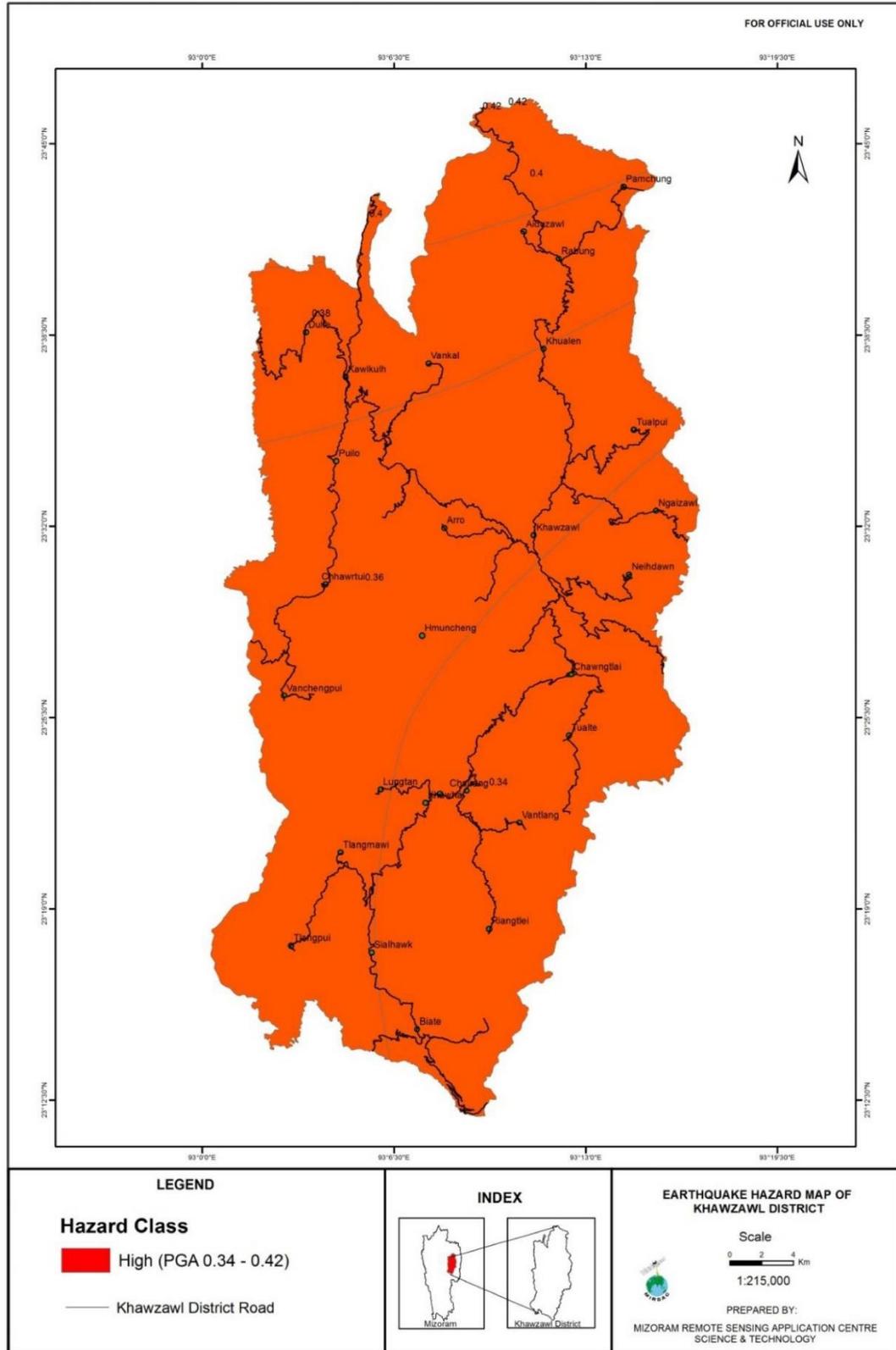


Figure 5. Seismic Hazard Map of Khawzawl District

Khawzawl District Disaster Management Plan, 2022

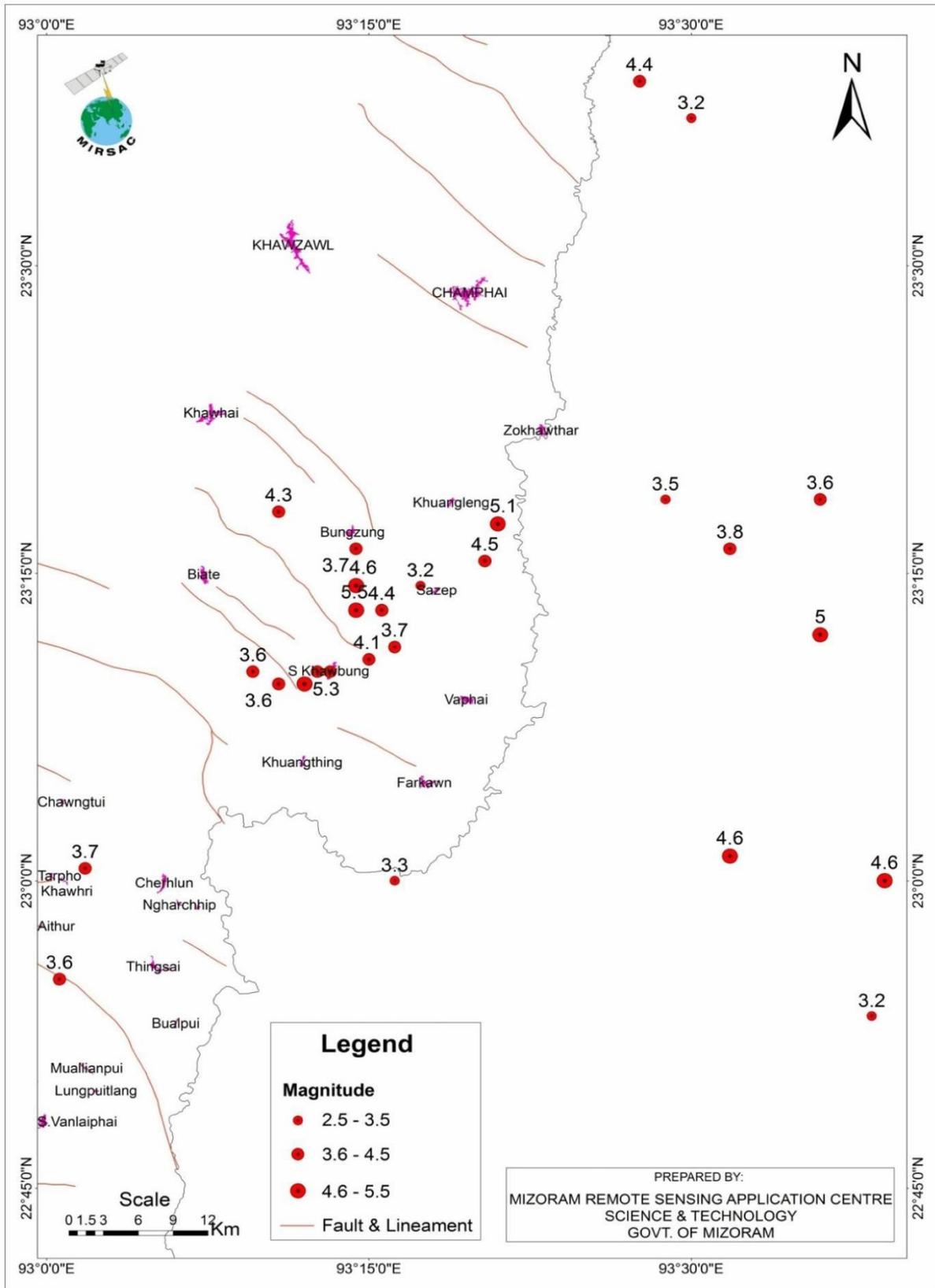


Figure 6. Epicentre Map of 2020 Earthquake

Khawzawl District Disaster Management Plan, 2022

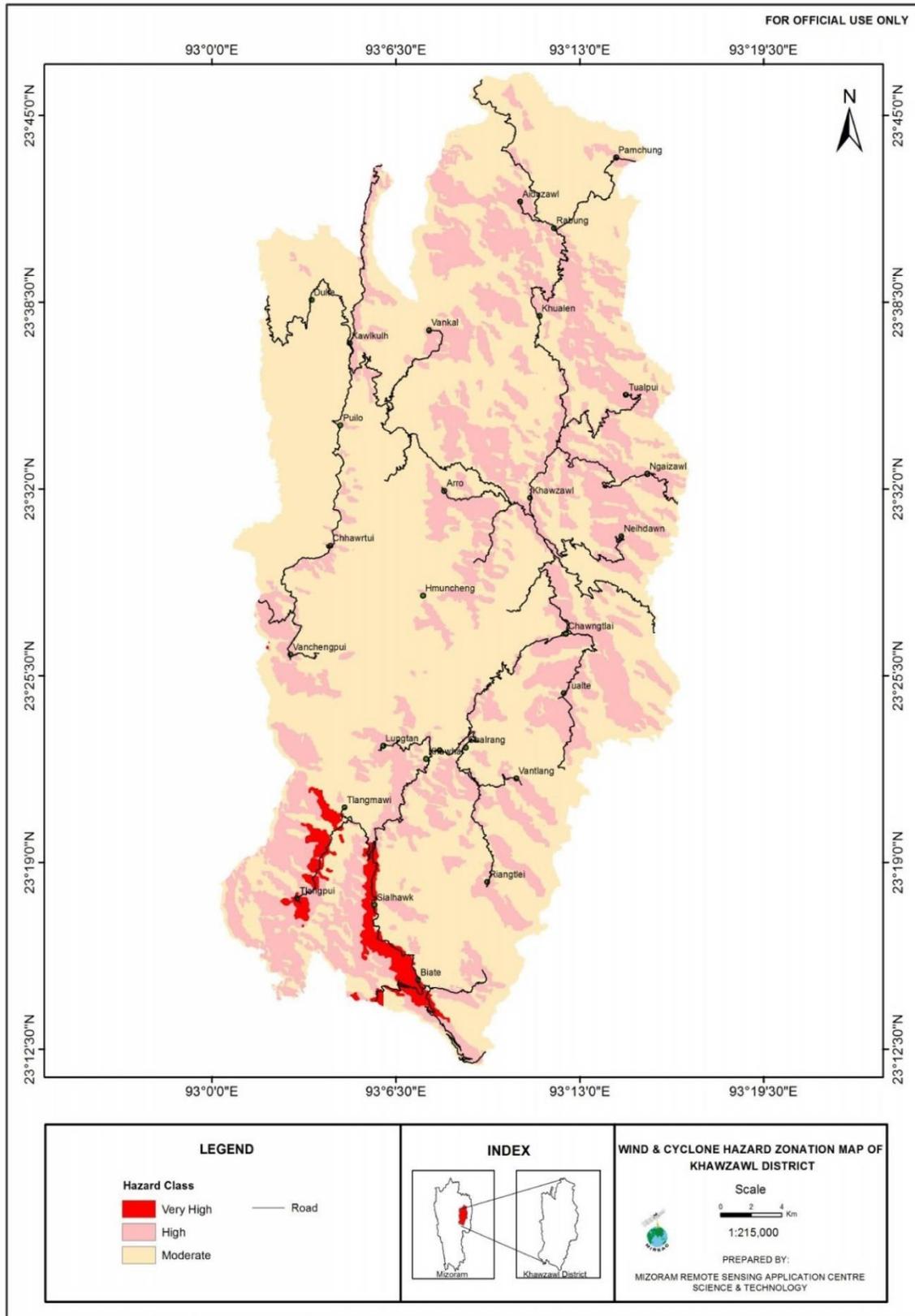


Figure 7. Wind & Cyclone Hazard Zonation Map of Khawzawl District.

2.6 ENVIRONMENTAL DEGRADATION, LIVELIHOOD RESTORATION AND LIVESTOCK MANAGEMENT:

2.6.1 Environment Degradation:

Due to Disasters like Forest fire, Jhum Cultivation, Draught, Floods, Mudslide, etc., forests and other plantation areas are being damaged which also causes degradation to the environment. Department of Forest, Horticulture Department and Agricultural Department are the departments responsible for re-forestation and to tackle deforestation and other means of environmental degradation in the district.

2.6.2 Livestock Management During Disasters:

Dept of Animal Health & Veterinary, Khawzawl District is responsible for Livestock Management during Disasters. Following preparations are essential for management of animals during disasters:

- i) **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 Khawzawl 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.
- iii) Supply of feed ingredients at nominal cost from the Food Corporation of India: Most rain 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.

Khawzawl District Disaster Management Plan, 2022

- 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 areas to unaffected areas 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 immunize livestock against various diseases. The creation of a community-based animal health care 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.

Khawzawl District Disaster Management Plan, 2022

2.6.3 Disposal of Dead animals during Disasters.

Carcasses can be a hazard to the environment and to 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.

2.7 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.

2.7.1 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 in the district and the country are most likely to experience and their consequences on the livestock sector.

Khawzawl District Disaster Management Plan, 2022

- 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 re-organisation in view of emerging epidemics/challenges. The existing animal husbandry policies will be revisited and if required, modified to cater to changing realities.
- iv) Mobilize 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 minimized 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 minimize 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.

Khawzawl District Disaster Management Plan, 2022

- 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) Immunization of all persons who are likely to handle diseased animals such as anthrax infected cattle and animals.

2.7.2 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.

2.8 HAZARD RISK VULNERABILITY ASSESSMENT (HVCRA)

Disasters are a combined result of hazards and vulnerabilities. They occur when the adjustment capacity of the affected communities and individuals exceeds their ability to cope with a crisis. It is an extreme state of everyday life in which the continuity of community structures disrupts temporarily but trailing behind it a long-term infrastructure, economic development to maintain normalcy for years together.

2.8.1 RISK ASSESSMENT RESULTS

Sl. No.	Disaster	Severity of Consequences	Likelihood of Occurrence			
1	2		3			
			Frequent	Likely	Occasional/ Possible	Unlikely
1	Earthquake	Catastrophic			yes	
2	Landslide	Critical/Serious	Yes			
3	Cyclone	Critical/Serious				Yes
4	Flood	Limited			yes	
5	Fire	Limited				yes

CHAPTER – 3

INSTITUTIONAL ARRANGEMENTS FOR DISASTER MANAGEMENT (DM)

3.1 Disaster Management Organizational Structure at the national level

The National Disaster Management Authority, 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.

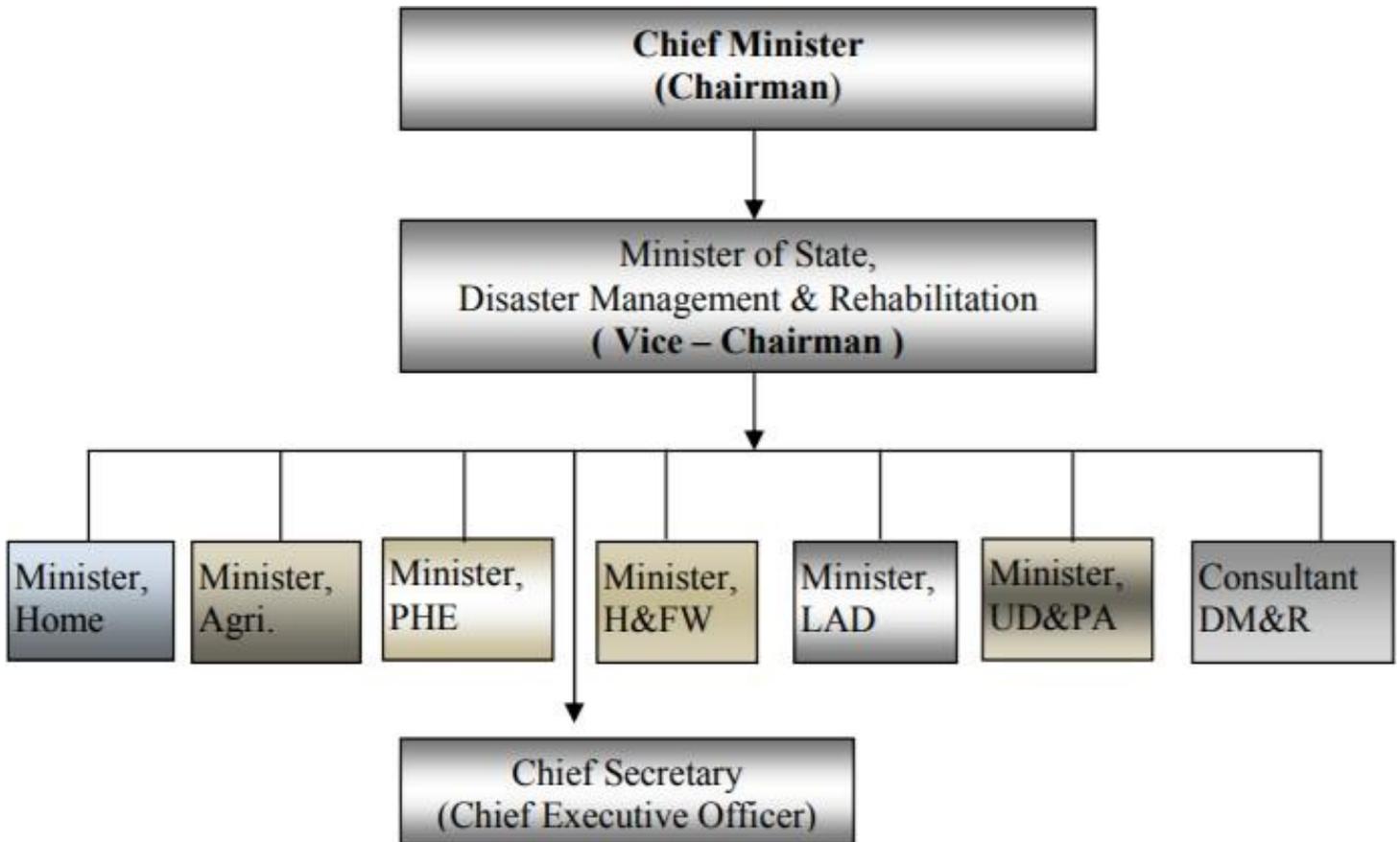
3.1.1 National Executive Committee

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, Defence, 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 Defence 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.

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

The Government of Mizoram in pursuance of the provisions under Sec. 14 of the Disaster Management Act, 2005 constituted the State Disaster Management Authority for Mizoram vide letter No.B.13011/1712006-REH on the 23rd May 2006 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:

Khawzawl District Disaster Management Plan, 2022



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 coordinate actions in accordance with the guidelines by the State Disaster Management Authority.

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.

Khawzawl District Disaster Management Plan, 2022

IRS POSITION	SUITABLE OFFICER
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/Group in charge	Dy. Inspector General (Range)
Task Force/ Strike Team	MAP/MRP/IR (1st-5th Bn) 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/ Unloading-in-charge	Addl. Superintendent of Police
RAIL GROUP	
Group-in-Charge	Superintendent, Railway Out Agency
Coordinator	UDC, Railway Out Agency
Loading-in-Charge/ Unloading-in-Charge	LDC, Railway Out Agency
WATER GROUP	
Group-in-Charge	Engineer in Chief
Coordinator	Chief Engineer
Loading-in Charge/ Unloading-in-Charge	Superintending Engineer
AIR OPERATION GROUP	
Group-in-Charge, Air operation	Principal Consultant
Helibase/Helipad-in-Charge	Dy. Controller
Loading-in-Charge/ Unloading-in-Charge	Executive Engineer
PLANNING SECTION CHIEF	
Resource Unit	Dy. Advisor
Check-in-status Recorder	Sr. Research Officer

Khawzawl District Disaster Management Plan, 2022

IRS POSITION	SUITABLE OFFICER
Situation Unit	Research Officer
Display & Publicity Unit	Joint Secretary
Field Observer	President
Weather Observer	Chief Scientific Officer
Documentation unit	Director
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
Finance Branch Director	Commissioner/Secretary
Time Unit	Director, DM&R
Compensation/Claim Unit	Director, DM&R
Procurement Unit	Director, DM&R
Cost Unit	Director, DM&R

3.3 Disaster Management Organizational Structure at the District level

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

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, DDMA for Khawzawl district has also been constituted, consisting of the following members:

Khawzawl District Disaster Management Plan, 2022

S/N	Officials	Designation
1	Chairperson	Deputy Commissioner
2	Member Secretary/CEO	Additional Deputy Commissioner
3	Member	Superintendent of Police
4	Member	Commandant, 2 nd IR Battalion
5	Member	EE, PWD
6	Member	EE, PHE
7	Member	EE, P&E
8	Member	Medical Superintendent, District Hospital, Khawzawl

3.3.2 Quick Response Team (QRT)

Quick Response Team comprising of 8 personnel was formed under KDDMA in 2020. The team members are volunteers from various branches of Young Mizo Association in the district. The members have undergone Search & Rescue and basic first aid training. During disaster situations, they shall operate under the guidance of DDMA. The team will function as a first verification and response team on behalf of DDMA, Khawzawl in the event of any disaster. They are also to actively participate in Search and Rescue of affected persons and in imparting trainings to the general public as instructed by DDMA or its representative.

Members of QRT, Khawzawl are as follows:

Sl. No.	Name	Father's/ Mother's name	Locality	Mobile no.
1	Lalsiamkima	Lalmangaihi	Khawzawl Hermon Veng	8794537230
2	Lalrothanga	Rohnuna	Khawzawl Electric Veng	7640808901
3	VLMS Zarzova	H. Biakthanga	Kawlkulh	9612335738
4	C. Zoremthuanga	C. Vanhlira	Khawzawl Dinthar	8974575375
5	Lalmangaihsanga	R. Pahlira	Khawzawl Dinthar	9774832488
6	Lalsangpuia	R. Kaphranga	Khawzawl Arro Veng	8257991766
7	K. Lalthazela	K. Tlanglawma	Khawzawl Vengthar	9862010037
8	Michael MS Dawngkima	Vanlalzawna Khiangte	Khawzawl Zuchhip Veng	9612511342

Khawzawl District Disaster Management Plan, 2022

3.3.3 District Crisis Management Group (CMG)

Crisis Management Group, Quick Response Team and DM Teams have been created for Khawzawl District. They will function as a first verification and response team on behalf of the DDMA, Khawzawl District in the event of any disaster.

Nodal department for various disasters

Sl. No.	TYPES OF DISASTER	NODAL DEPARTMENTS
1	Forest Fire	DC, Environment & Forest Department
2	Biological Disasters	Health & Family Welfare Department, PHE
3	Breakdown of Law and Order	DC, Police
4	Major Road Accidents	DC, Police, PWD
5	Large scale refugees from any neighbouring state/country	DC, Police, FCS&CA, Agriculture Department
6	Collapse of structure	PWD, P&E, Police
7	Drought	Agriculture Department, Horticulture Department.
8	Earthquake, Cyclones, Floods etc.	DC, Police, PWD, P&E, PHE
9	Terrorist Outrages	DC, SP
10	Epidemic	DC, H&FW

Khawzawl District Disaster Management Plan, 2022

3.3.4 Emergency Support Functions

ESF	Field	Scope	ESF Team Leader	Primary Agency	Support Agency
ESF 1	COMMUNICATION	Establishing, using, maintaining, augmenting, and providing backup for all the types of communication devices needed during emergency response operations.	SP	Police	Private Telecom / Mobile Operators
ESF 2	EVACUATION	Immediately following a disaster people may need to be evacuated from structures that have been damaged and are likely to receive more damage when hit by one or more.	DC, Khawzawl	Office of the DC, Khawzawl	Police, NCC, PWD, PHE, YMA
ESF 3	SEARCH AND RESCUE	Removal of trapped and injured persons from buildings collapses and other structural collapses, administering first aid, and assisting in transporting the seriously injured to medical facilities. This activity involves the use of professional and volunteer search teams including the use of dog teams.	Commandant, 2 nd IR Bn	Police	2 nd IR Bn (SDRF), H&FW, QRT, P&E, YMA.

Khawzawl District Disaster Management Plan, 2022

ESF	Field	Scope	ESF Team Leader	Primary Agency	Support Agency
ESF 4	LAW AND ORDER	Law and Order enforcement for Public Safety	SP	Police	2 nd IR Bn, DC office, VC/VDP, YMA.
ESF 5	TRAFFIC MANAGEMENT	Control of access to the area severely affected until it is safe. Only those people directly involved in emergency response operations should be allowed to enter. Also determining the appropriate time to allow evacuees and the general public to re-enter the area that was severely impacted.	SP	Police	PWD
ESF 6	PUBLIC EMERGENCY INFORMATION, HELP LINE & WARNING	The flow of accurate and timely emergency information is critical to the protection of lives and property in the wake of a catastrophic event. Preparation and dissemination of Notifications, updates, warnings, and instructional messages, making the help line Operational etc.	SDC	DC office	DDK

Khawzawl District Disaster Management Plan, 2022

ESF	Field	Scope	ESF Team Leader	Primary Agency	Support Agency
ESF 7	MEDICAL RESPONSE AND TRAUMA COUNSELING	Mass fatality management, Public health, Medical, Mental health services	DMS, District Hospital, Khawzawl	H&FW	YMA, MHIP
ESF 8	EQUIPMENT SUPPORT, DEBRIS AND ROAD CLEARANCE	The identification, removal, and disposal of rubble, wreckage, and other material which block or hamper the performance of emergency response functions and procure needed equipment from support agencies using IDRN; should be a high priority action	EE, PWD	PWD	DUDO, UD&PA
ESF 9	UTILITIES RESTORATION				
Sub function of ESF 9	ELECTRICITY	Restoration and repair of electrical power system to minimize the impact on critical service to the Public	EE, P&E	P&E	PWD
	WATER SUPPLY	Restoration and repair of water supply system to minimize the impact on critical service to the public	EE, PHE	PHE	DUDO, UD&PA

Khawzawl District Disaster Management Plan, 2022

ESF	Field	Scope	ESF Team Leader	Primary Agency	Support Agency
ESF 10	MASS CARE				
<i>Sub functions of ESF 10</i>	FOOD	Optimizing Food and Civil Supplies to the needful	Supply Inspector	Dept. of FCS & CA	Agriculture, KVK, Police, YMA
	SHELTER ARRANGEMENT	Accommodating Homeless and affected people and providing mass care	EE, PWD	PWD	Dept. of FCS&CA, YMA
ESF 11	TRANSPORTATION	Provides transportation out of a disaster area for people in need, and provides transportation essential to support emergency response in the event of a disaster, coordinating for resurrection of transport infrastructure.	Commandant, 2 nd IR Bn	2 nd IR Bn/Police	IR PWD
ESF 12	FIRE FIGHTING	Coordination of fire fighting operations	EE, PHE	PHE	SDRF, Police, YMA

Khawzawl District Disaster Management Plan, 2022

ESF	Field	Scope	ESF Team Leader	Primary Agency	Support Agency
ESF 13	PUBLIC WORKS AND ENGINEERING	Infrastructure protection and emergency repair, Infrastructure restoration, Inspection of buildings and other structures to determine whether it is safe to the inhabitant.	EE, PWD	PWD	BDO
ESF 14	ANIMAL CARE	Controlling spread of diseases in animal and providing animal care	District AH & Vety Officer	AH & Vety Dept.	DFO (Wildlife), PHE, DC Office YMA,

3.3.5 Formation of teams at District Level

District Quick Response Team

Chairman : Additional Deputy Commissioner
 Member Secretary : Sub-Deputy Commissioner
 (DM&R). Members : Executive Engineer, PWD
 Executive Engineer, PHE
 Executive Engineer, P&E
 President, Sub-Hqrs YMA, Khawzawl

First Aid Team

Chairman : Medical Superintendent, District Hospital
 Secretary : Medical Officer, District Hospital

Khawzawl District Disaster Management Plan, 2022

Shelter Management Team

Chairman : Executive Engineer, PWD, Khawzawl Division
Secretary : President, Sub-Hqrs YMA, Khawzawl

Food & Water Management Team

Chairman : District Agriculture Officer
Secretary : Supply Inspector, FCS&CA, Khawzawl.

Information Team

Chairman : Sub-Divisional Officer (Sadar)
Secretary : Sub-Deputy Commissioner (DM&R)

Trauma Counseling Team

Chairman : Medical Superintendent, District Hospital
Secretary : President, Sub-Hqrs MHIP.

Relief Coordination Team

Chairman : Principal, Govt. Khawzawl College
Secretary : Supply Inspector, FCS&CA.

Patrolling Team

Chairman : Superintendent of Police.
Secretary : SDPO.

Early Warning & Information Team

Chairman : Deputy Commissioner (DC)
Secretary : Superintendent of Police
Member Departments : DDK Stringer, Private Telecom

Search and Rescue

Chairman : Commandant, 2nd IR Bn.
Secretary : Deputy Commandant, 2nd IR Bn
Member Departments : Police, SDRF 2nd IR Bn, QRT, YMA

Evacuation

Chairman : Additional Deputy Commissioner
Secretary : Sub-Divisional Officer (Sadar)
Member Departments : Police, PWD, PHE, QRT, NCC

Damage and Loss Assessment

Chairman : Deputy Commissioner
Secretary : Chairman, Joint VC
Member Departments : DC's Office, YMA, Police

Khawzawl District Disaster Management Plan, 2022

3.3.6 District Disaster Management Committee and Task Forces

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

Chairperson : Deputy Commissioner, Khawzawl District.
Co-Chairperson : Addl. Deputy Commissioner, Khawzawl District.
Member Secretary: Nodal Officer, DM&R, DC's Office.

Members:

1. Superintendent of Police, Khawzawl District
2. Commandant, 2nd IR Battalion
3. EE, PWD, Khawzawl Division
4. EE, P&E, Khawzawl Division
5. EE, PHE, Khawzawl WATSAN Division
6. Principal, Govt. Khawzawl College
7. DFO (Wildlife), Khawzawl Division
8. DUDO, Khawzawl District
9. District Horticulture Officer
10. District Agriculture Officer
11. District Education Officer
12. Senior Scientist & Head, KVK, Khawzawl
13. Veterinary Officer, Khawzawl
14. President Sub-Hqrs.YMA
15. President, Sub Hqrs.MHIP
16. President, District MUP
17. Representative, MJA

Besides the above-mentioned members, the Chairperson can invite other officer/member to attend the meeting/committee of the DDMAC as per the need of time, as special invitee.

The major functions of this Committee would relate to:

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

Khawzawl District Disaster Management Plan, 2022

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:

- S.P Office, Khawzawl Dintar
- D.C Bungalow, Khawzawl Darngawn

If the chairman is unable to preside over the meeting for any reason, Additional DC will take the chair. If both are unable to preside over the meeting, SP, Khawzawl will take the chair. If none of these officers are present, the senior most member present will take the chair. There will be no quorum.

3.3.7 State Disaster Response Force (SDRF):

MzSDMA, through the Home Department, has created 8 State Disaster Response Force (SDRF) units, each having strength of 100 personnel with a total strength of 800 personnel. The teams are located at Aizawl, Lunglei, Mamit, Khawzawl, Kawnpui, Lawngtlai. Equipment are being procured for use of the SDRF. A training was also imparted to the members of SDRF in collaboration with NDRF Gauhati and Kolkata.

Four Units of SDRF is established with strength of 1 (One) Company each in 4 Battalions of the Mizoram Police Armed Forces and the Indian Reserved Police Force. Its main duty is to conduct Search & Rescue Operation in collapsed structure, Evacuation, Medical First Aid etc. at the disaster site. At present, 1 (one) headquarters of SDRF has been set up at 2nd IR Battalion, Khawzawl Lungvar. The DC/ RO will have the commanding authority to activation & to its deployment.

Khawzawl District Disaster Management Plan, 2022

3.3.8 Village disaster management committee

The village disaster management committee shall consist of the following:

Chairman	-	President, Village Council.
Vice Chairman	-	President, Branch YMA
Secretary	-	Secretary, Branch YMA
Assistant Secretary	-	Secretary, Village Council
Treasurer	-	Treasurer, Village Council
Members:		

- 1) All members of Village Council.
- 2) Office Bearers, Branch YMA
- 3) Two representatives each from MUP, MHIP, Ex-Servicemen
- 4) One representative each from every denomination of local churches
- 5) One representative each from recognized political parties.
- 6) Prominent citizens (Not more than three)

3.3.9 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 POSITION	SUITABLE OFFICER
RESPONSIBLE OFFICER	Deputy Commissioner
INCIDENT COMMANDER (IC)	Addl. Deputy Commissioner
DEPUTY INCIDENT COMMANDER	Superintendent of Police
Information and Media Officer	SDC, i/c DM&R
Liaison officer	SDO (Sadar)
Safety Officer	SDC, i/c DM&R
OPERATIONS SECTION CHIEF	Addl. Superintendent of Police
Staging Area Manager	BDO, Khawzawl
Response Branch Director	SDC

Khawzawl District Disaster Management Plan, 2022

IRS POSITION	SUITABLE OFFICER
Division Supervisor/ Group in charge	Deputy Superintendent of Police
Task Force/ Strike Team	Commander/Leaders of SDRF (2 nd IR Bn), MRP, MAP, IR, PWD, QRT, YMA
Single Resources	DMS-H & FW Dept., SDO-PWD/P&E/PHE, S.O.
Transportation Branch	Assistant Commandant, 2 nd IR Bn.
Road Group	
Group-in-Charge	SDPO, Khawzawl
Vehicle Coordinator	Officer i/c Traffic
Loading-in-charge/ Unloading-in-charge	Officer i/c Thana
Rail Group	
Group-in-Charge	Not relevant in District Level in Mizoram
Coordinator	Not relevant in District Level in Mizoram
Loading-in-Charge/ Unloading-in-Charge	Not relevant in District Level in Mizoram
Water Group	
Group-in-Charge	Executive Engineer, PHE
Coordinator	SDO, PHE
Loading-in-Charge/ Unloading-in-Charge	J.E, PHE
Air Operation Group	
Group-in-Charge Air operation	SDO (Sadar)
Helibase/Helipad-in-Charge	BDO
Loading-in-Charge/ Unloading-in-Charge	SDO, PWD
PLANNING SECTION CHIEF	
Resource Unit	Commandant, 2 nd IR Bn
Check-in-status Recorder	DFO Wildlife, Khawzawl Division

Khawzawl District Disaster Management Plan, 2022

IRS POSITION	SUITABLE OFFICER
Situation Unit	Sub-Divisional Police Officer
Display & Publicity Unit	SDC, i/c DM&R
Field Observer	Representatives of Sub-Hqrts YMA
Weather Observer	DAO, Agriculture Dept.
Documentation unit	DEO, Education Dept.
Demobilization Unit	Additional Superintendent of Police
Technical Specialist	Executive Engineer, P&E Dept.
LOGISTIC SECTION CHIEF	Superintendent of Police
Service Branch Director	Nodal Officer, DM&R Branch, DC's office, Khawzawl
Communication Unit	Deputy Superintendent of Police
Medical Unit	DMS, District Hospital, Khawzawl
Food Unit	Supply Inspector, FCS&CA Dept.
Support Branch Director	Nodal Officer, DM&R Branch, DC's office, Khawzawl
Resource Provisioning Unit	Supply Inspector, FCS&CA Dept.
Facilities Unit	District Horticulture Officer
Ground Support Unit	Executive Engineer, PWD
Finance Branch Director	SDO (Sadar)
Time Unit	Branch Officer, DM&R Branch, DC's Office
Compensation/Claim Unit	Branch Officer, DM&R Branch, DC's Office
Procurement Unit	Deputy Commissioner
Cost Unit	Deputy Commissioner

Khawzawl District Disaster Management Plan, 2022

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

Currently, Khawzawl District does not have a physical EOC. Plan is underway at the State Level to make available money for construction of EOC for Khawzawl District at the Deputy Commissioner's Office. Until then, a dedicated phone is maintained at DC's Office to enable quicker passage of information and action in case of any Disasters. Procurement of equipment for technical support and capacity building of District Emergency Operation Centre is also underway.

Once it is operational, the District Emergency Operation Centre (DEOC) will be the hub of activity in any disaster situation in the district. It should have the flexibility to expand when demand increases and contract when the situation comes to normal. The DEOC shall be 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. It will function automatically from preparedness mode to Emergency mode and will be suitably upgraded from time to time.

3.4.1 EQUIPMENT OF DEOC

Not applicable in respect of Khawzawl District as of now as DEOC is not yet physically constructed. All disaster equipment received from DM&R Department are handed over to State Disaster Response Force at 2nd IR Battalion, Khawzawl Lungvar.

3.4.2 ACTIVITIES OF THE EOC

Once it is built and operational, The District Emergency Operation Centre shall have the activities during Disaster times as well as Non-Disaster times as follows:

i) Non-Disaster time activities of DEOC

- Ensure through appropriate statutory instrument 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.
- Ensure all equipment are 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.

Khawzawl District Disaster Management Plan, 2022

ii) **During Disaster time activities of DEOC**

- 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 if necessary.
- Alert and inform all concerned line departments to post their representatives at the DEOC around the clock with immediate effect.
- Alert and activate all Emergency Support Functions.
- Alert DEOCs of the neighboring districts and state EOC.

3.4.3 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, SDC or any other officers 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.

3.4.4 Alternate EOC and Location

DUDO Building near Deputy Commissioner's Office will function as alternate EOC in case DC's Office is damaged due to disasters. SP Office may also be selected as alternate EOC if the first is non-functional.

3.5 PUBLIC-PRIVATE PARTNERSHIP

Public and Private Emergency Services Available in the District

3.5.1 TRADERS

List of Traders in Khawzawl District including Groceries, Medicine Shops, shops selling Electrical Equipments and House-Building Materials may be seen at **Annexure-V**.

Khawzawl District Disaster Management Plan, 2022

3.5.2 Skilled Human Resource Inventories of Khawzawl District

Having an inventory of Skilled Human Resources that can be readily mobilized in the event of Disaster is paramount to successful Disaster Management, especially in the Recovery phase.

Skilled Human Resource Inventory of Khawzawl District including Electricians, Carpenters, Masonry, Plumbers, Cement Mistiri, Medical Doctors and Engineers may be seen at **Annexure-III**

3.5.3 Maxi Cab Counter

Sl. No.	Name	Address	Contact No.
1	Lalbiaknungi	Khawzawl Vengthar	8014724650
2	Hmingthanzami	Khawzawl Vengthar	9862343401
3	Lalrinengi	Khawzawl Vengthar	9862842783
4	Hrangchungnunga Hmar	Sialhawk	8730925276
5	Chawngnuni	Sialhawk	9615860720
6	K Lianhminga	Kawlkulh	9862329562

3.5.4 VEHICLES IN KHAWZAWL DISTRICT

List of vehicles registered in Khawzawl District and available to be used in case of Disaster incidents including Auto-Rickshaw, Taxi, Truck, Pik-up, JCB and Maxi cab may be seen at **Annexure-VII**

3.5.5 VOLUNTEERS PROFILE

Volunteers profile in respect of Khawzawl District is not yet available.

3.6 FORECASTING AND WARNING AGENCIES

There is no forecasting and warning agency located in the District. DC's office will take it up in partnership with Meteorological Department.

CHAPTER-4

PREVENTION AND MITIGATION MEASURES

An effective and efficient disaster management with minimum vulnerability is possible only by means of adequate preventive, preparedness and mitigation measures. A disaster can neither be prevented nor diverted to any other place. The only possible thing is to try and minimize the effect. Mitigation in fact, is not, a cost. In the long run, it pays for itself and more.

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 the district has planned and implemented. These goals may include (but not limited to):

- i) Provide better early warning methods for flood, storms, cyclone
- ii) Reduce the destruction and loss of life within buildings
- iii) Provide for safer environments for transportation systems
- iv) Eliminate flooding in populated areas
- v) Ensure surplus water supply systems
- vi) Reduce environmental degradation and restoration of livelihood.
- vii) Reduce effects on the natural environment of infrastructure.
- viii) Ensure availability of regular power supply on critical facilities.
- ix) Ensure adequate materials available for road maintenance

4.1.1 Specific projects proposed for preventing the disasters.

1. Establishment of control rooms;

The district administration should ensure proper operation of control rooms. The control rooms presently run by major line department like Police, Hospital etc. at the district level should be functional.

2. Plan updating

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

3. Communication system

Trainings should be given for search & rescue, first aid team of disaster management at the district and village level. These teams will provide timely help to victims in case of disasters.

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

Khawzawl District Disaster Management Plan, 2022

4. Training for disaster management team

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 Khawzawl will conduct a workshop on Community-based Disaster Management in which general public, masons, NGOs members, Students, etc. took participation. Communities are always the first responders. Community participation ensures local ownership, addresses local needs, and promotes volunteerism and mutual help to prevent and minimize damage.

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 DRR in development planning

DDMA has to issue directions time to time in accordance with all stakeholders regarding inclusion of Disaster Risk Reduction (DRR) in developmental Planning. Disaster Risk Reduction (DRR) issues in Development Plans etc. are to be interlinked vertically and horizontally for fail-safe infrastructures in Khawzawl district. Mainstreaming disaster management into the development planning process essentially means looking critically at each activity that is being planned, not only from the perspective of reducing the disaster vulnerability of that activity, but also from the perspective of minimizing that activity's potential contribution to the hazard. Every development plan of a department should incorporate elements of impact assessment, risk reduction, and the 'do no harm' approach. Examples of this approach are urban planning and zoning, upgradation of building codes and their effective enforcement, adoption of disaster resilient housing designs and construction of school and hospitals, flood proofing, response preparedness planning, insurance, establishment of early warning systems for various types of disasters, generating community awareness, creating technical competence and promoting research among engineers, architects, health experts, and scientists. In this district, DDMA has to sensitize officials of PWD, PHE, LAD/UD, RD/DRDA and also masons and community towards DRR issues.

8. Risk Assessment and Vulnerability Analysis

Every department at district level will analyze the specific risks faced by the department in that area or subject on which the department has the jurisdiction. The concerned department will do a risk and vulnerability analysis and prepare a report and present it to DDMA. The NODAL OFFICER of concerned department will be responsible for the said assignment. DDMA will take cognizance of the report and action will be taken accordingly.

Khawzawl District Disaster Management Plan, 2022

9. Construction work

As and when the earthquake resistant features will be incorporated in the building by-laws of the State and adequate zoning laws will be put in place to regulate development away from unsafe locations, the concerned department will be responsible for implementation and raising public awareness about these laws.

10. Infrastructure and Housing Repair and Maintenance

Housing and Roads and Bridges are the two issues which are important in view of disaster. For mitigation of earthquake, retrofitting and renovation of lifeline buildings has paramount importance.

Lifeline buildings represent critical infrastructure for the state, such as schools and hospitals. The Public works department will be the primary agency responsible of conducting structural assessment, retrofitting and renovation of lifeline buildings. Existing development programmes may be examined to incorporate disaster resistant technologies in all existing and new public buildings. PWD will be responsible for preparing a risk and vulnerability analysis report and present it to DDMA. The NODAL OFFICER of PWD department will be responsible for the said assignment. DDMA will take cognizance of the report and action will be taken accordingly.

Embankments/Banks/Dams and water resources, construction, strengthening of micro level protection features need to be identified and taken on priority in areas with recurrent threat of floods, and other water related disasters. PHE will be responsible for preparing a risk and vulnerability analysis report and present it to DDMA. The NODAL OFFICER of PHE department will be responsible for the said assignment. DDMA will take cognizance of the report and action will be taken accordingly.

All the departments will have to ensure that mitigation measures are incorporated into repairs, major alterations, new development, and redevelopment practices, especially in areas subject to substantial risk from hazards. For the rural areas, DRDA will coordinate with the District Authority to ensure that all mitigation measures have been implemented under the National Rural Employment Guarantee Act, provide for strengthening and maintenance of such physical features that may vitally protect/help in rescue of communities during disaster situations. For the urban areas, LAD/the Urban Development department will coordinate with the district authorities to ensure that mitigation measures are included.

12. Research and Technology Transfer

Under the guidance of Science and Environment department, PWD will establish and maintain partnerships between all levels of government, the private sector, community groups, and institutions of higher learning that improve and implement methods to protect life and property.

Khawzawl District Disaster Management Plan, 2022

13. Training and Capacity Building

Training and Capacity Building of Government Officials: At the district level, training programmes will be conducted in coordination with NGOs, PWD and government training/research institutions (ATI, Disaster Management Cell).

14. Community Level Training and Public Awareness Activities:

The community awareness and training activities has been basically carried out in the form of training programmes through NGOs, and Government Training Institutions. Apart from spreading awareness of disasters, the focus will essentially be on community capacity building. Special focus will be given to local contractors and masons, who are the primary people 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 Use Planning and Regulations

The office of Settlement Officer, Khawzawl District will be primary agency to encourage new development to occur in locations avoiding or minimizing exposure to hazards or enhance design requirements to improve resiliency in future disasters. This office should also ensure proper enforcement of existing regulations and acts.

16. Incentives and Resources for Mitigation

The main source for funding will be State Disaster Response Fund to implement the above stated mitigation strategy. The fund will be used to provide incentives to developmental projects where mitigation measures have been adopted. Leveraging of funds from other developmental schemes also needs to be taken into account.

17. Preparedness for schools

Trainings for teachers, students and other stakeholders will be prepared to increase awareness and capacity building. The trainings may be given by Line departments or by State Disaster Response Fund or by experts detailed from State or District Disaster Management Authority such as members of Quick Response Team. Mock drills and demonstrations will be included in the trainings.

18. Commandant, 2nd IR Battalion

The Commandant, 2nd IR battalion shall work in close coordination with the district administration that shall have access to all the available manpower machinery and materials at their respective disposal. They are required to draw contingent plan with all available resources at their command and shall also apprise the Chairman, District Disaster Management Authority with such information. They shall also be responsible for the protection of vital installations and maintaining the supply lines in the event of disasters.

Khawzawl District Disaster Management Plan, 2022

4.1.2 Specific Projects for Vulnerable Groups:

Children under 18 years are protected and guided under the CSS projects 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 groups in events of Disasters.

Disabled Population by type of Disability:

Seeing	Hearing	Speech	Movement	Mental retardation	Other disability	Multiple disability
24	67	22	38	54	41	148

Detail list of disabled persons in respect of Khawzawl District is available in the office of CDPO, Khawzawl

4.2 Mainstreaming DRR in development plans and programs.

In Khawzawl district, all the Heads of Offices have been informed regarding mainstreaming of Disaster Risk Reduction in the development programmes of all the departments, especially to PWD, P&E, PHE and Education 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 through Media and trainings.

4.3.2 Community level – Village Disaster Management Committee (VDMC) is established in all the villages. They are entrusted with preparation of Village Level Disaster Management Plans for their jurisdictions. They are also the first contact points in local level in case of disaster-related events.

4.3.3 District Level – Formation and training of Quick Response Team under Khawzawl District Disaster Management Authority, Purchase of Fire Hydrant and other disaster response materials, active State Disaster Response Force in 2nd IR Battalion at Lungvar, constitution of Road Protection Squad, use of dedicated mobile phone in Deputy Commissioner's office for Disaster related events.

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.

Khawzawl District Disaster Management Plan, 2022

Proper preparedness and mitigation measures help to respond 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.

Khawzawl District Disaster Management Plan, 2022

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 areas 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

- Activation of Incident Response System as issued by the National Disaster Management Authority (NDMA) as provided under Section of 6 of the Disaster Management Act, 2005 to enable comprehensive, composite response to disasters.
- 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.

Khawzawl District Disaster Management Plan, 2022

- 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 Dulte-Khawzawl, Khawzawl – Biate highways 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.
- Strengthening and active engagement of Road Protection Squad under District Disaster Management Authority.

4.4.2 Hazard wise 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, equipment in disaster prone areas.

Khawzawl District Disaster Management Plan, 2022

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 foddors.
- Deployment plan of Veterinary personnel, where it is required and train them to manage emergency situations.

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 to be installed at strategic location in Khawzawl Town.
- Provide water to Fire & Emergency Services/State Disaster Response Force 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 equipment, materials and workers are kept ready to repair broken roads and establish linkages quickly after any disaster.

Khawzawl District Disaster Management Plan, 2022

- 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 equipment 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 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.

l) 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.

Khawzawl District Disaster Management Plan, 2022

m) Rural Development Department

- All construction taken up by the Department should 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 cross 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 District where applicable.

p) Village Councils/Local Councils

- LC/VC level Disaster Management Committee to be formed to look after various aspects of pre- and post-disaster 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) Quick Response Team

- The main task of Quick Response Team will be to plunge into action as soon as there is an alert for any natural calamity or emergency situation as per instruction received from concerned officer.
- Clearance of potential hazards which cannot be done by local volunteers.
- Administration of basic First Aid prior to arrival of medical team.
- Report and receipt of information from incident site to DEOC/concerned officer.

Khawzawl District Disaster Management Plan, 2022

- Assist police personnel in crowd control and cordoning off of disaster incident areas.
- Carry out Search & Rescue operations, especially Alpine style and Community based operations.
- Impart trainings to Village Disaster Management Committees (VDMCs) and local volunteers.

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.

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 rehabilitations. 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 & Information Team

Chairman : Deputy Commissioner (DC)
Secretary : SDPO
Member Departments : SDC, DDK Stringer, Private Telecom

5.2.2 Search and Rescue

Chairman : Commandant, 2nd IR Bn.
Secretary : Additional SP
Member Departments : Police, SDRF 2nd IR Bn, QRT, YMA

Khawzawl District Disaster Management Plan, 2022

5.2.3 Evacuation

Chairman	:	Deputy Commissioner
Secretary	:	Additional SP
Member Departments	:	Police, PWD, PHE, QRT, NCC

5.2.4 Damage and Loss Assessment

Chairman	:	Deputy Commissioner
Secretary	:	Chairman, Joint VC
Member Departments	:	DC's Office, YMA, Police

5.3 Activation of IRS in the District

The Deputy Commissioner 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 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.

5.3.1 Protocol for seeking help from other agencies like Army, Air Force & Central Paramilitary Forces

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.

5.3.1.1 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.

5.3.1.2 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.

Khawzawl District Disaster Management Plan, 2022

5.4 Mechanism for checking and certification of logistics, equipment and stores

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

5.5 Operational check-up of Warning Systems & EOC

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

5.6 Command & 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.

5.7 Community 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 disaster preparedness. IMD is responsible for warning of thunderstorm, cyclone and earthquake and the DDMA/ DEOC will warn the public through 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 Disaster Management are conducted regularly under the supervision of DDMA & BDOs by involving the community at the village levels.

5.8 Community'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 Community through participatory approach along with formation of DM teams.

5.9 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 will be updated in the IDRN website once login credentials are obtained. However, procurement of resources like tents, blankets, tarpaulins, equipment 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.

Khawzawl District Disaster Management Plan, 2022

5.10 Knowledge Management, Networking and Sharing

- Documentation of disasters and to make it available in easily 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.

5.10.1 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 will be uploaded and updated regularly.

5.10.2 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.

5.11 Media Management/information dissemination

Media plays a very important in information dissemination and 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. Members of Mizoram Journalist Association (MJA) may be given the task of responsible reporting and spreading of reliable information.

5.12 Medical 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 equipment, medicines, antidotes, personal protective equipment, 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 centres, 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.

Khawzawl District Disaster Management Plan, 2022

6.2 Capacity Building Plan

6.2.1 Responsibility of Agencies

Task	Activity	Responsibility
Training & Awareness	<ul style="list-style-type: none"> Sensitization to Representatives & law/policy makers Sensitization & training to government officials of different departments 	DM&R, SDMA, DDMA
	<ul style="list-style-type: none"> Training to Civil Defence & Home Guards personnel in various aspect of DM including Search and Rescue & First Aid 	DM&R, SDMA, DDMA
	<ul style="list-style-type: none"> Training to engineers, architects, structural aspect of DM 	DDMA, PWD and all relevant departments
	<ul style="list-style-type: none"> Training of doctors & paramedics on Medical preparedness & Mass Casualty Management 	DDMA, Health Department
	<ul style="list-style-type: none"> Training to educational institutions, teachers etc on College/ School Safety, Search & Rescue, First Aid 	DDMA, Education Department,
	<ul style="list-style-type: none"> Training to Police and Traffic personnel in various aspect of DM 	DDMA, Home Department
	<ul style="list-style-type: none"> Training to Fire & Emergency personnel in various aspect of DM 	DDMA, Home Department
	<ul style="list-style-type: none"> Training to NCC, NSS, NYK & volunteers in various aspect of DM 	DDMA
	<ul style="list-style-type: none"> Training to NGOs/CBOs in various aspect of disaster management 	DDMA
	<ul style="list-style-type: none"> Training to Media in various aspects of disaster management 	DDMA, I&PR
	<ul style="list-style-type: none"> Training to Teachers/Caretakers of 	DDMA & Social Welfare Department

Khawzawl District Disaster Management Plan, 2022

Task	Activity	Responsibility
	PWDs (Persons with Disabilities)	
	<ul style="list-style-type: none"> • Training on Gender & Disaster to all stakeholders 	DDMA
IEC	<ul style="list-style-type: none"> • 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 & Panchayati Raj (SIRD), Durtlang	Director	221521/221523
Mizoram Remote Sensing Application Centre (MIRSAC)	Project Director	0389-2341240
PHQ Khatla, Aizawl	DGP Mizoram	0389-2334682/ 2335146

6.2.2 Medical Expertise

Sl. No.	Name	Designation	Address	Contact
1	Dr. Frank Harris	Medical Superintendent	District Hospital, Khawzawl	9436156794/ 8257806705
2	Dr. Albert Lalhminghlua	Medical Officer	District Hospital, Khawzawl	9862829724
3	Dr. Zozikpuii	Medical Officer	District Hospital, Khawzawl	8729986892
4	Dr. Melody Lalmuanpuii	Medical Officer	District Hospital, Khawzawl	8974212717
5	Dr. Lalnunpuii Renthlei	Medical Officer (Ayush)	District Hospital, Khawzawl	9862127607
6	Dr. Helen Lalnunpuii	Medical Officer	Khawhai PHC	8131824632
7	Dr. Lallawmkimi Chhakchhuak	Medical Officer	Biata PHC	9856853895/ 8729821497
8	Dr. Hilary Remsangpuii	Medical Officer	Kawkulh PHC	9862711900
9	Dr. Lalhminghlua	Medical Officer	Rabung PHC	9862746628
10	Dr. Lalrohlupuii	Medical Officer	Sialhawk PHC	8730835371

Khawzawl District Disaster Management Plan, 2022

Ambulances:

Sl. No.	Name	Address	Vehicle Registration No.	Driver name and Phone no.
1	District Hospital, Khawzawl	Khawzawl Hermon	MZ 04 A 3930	Chawngsangzela 8575568769
2	District Hospital, Khawzawl	Khawzawl Hermon	MZ 01 U 0620	Chawngsangzela 8575568769
3	CH Khawtinlala	Khawzawl Electric	MZ 04 A 0185	CH Khawtinlal 9862461122
4	Kawlkulh PHC	Kawlkulh	MZ 04 A 2870	Marvin Vanlalpeka 9862711900
5	Khawhai PHC	Khawhai	MZ 04 A 3907	K Lalmangaiha 9862838323

6.3 Police, SDRF, QRT

6.3.1 District Police Team 2021

Sl. No.	Name	Designation	Contact No.
1	PC Lalchunglura	Superintendent of Police	9436143491/ 8413935622
2	Lalringliana Pachuau	Additional SP	9862841977
3	PC Lalsiampuii	Deputy SP	8014666081
4	Vanlaltluanga Parte	SDPO	9336788407
5	K Lalhluna	Inspector	8730095501
6	Lalmalsawma	Inspector	9612455065
7	S Lalchhuanawma	Inspector (M)	9856404723
8	Lalrinawmi Sailo	Inspector (M)	9862832949
9	R Lalremruata	Sub Inspector	8731913393
10	H Lalengzama	Sub Inspector	8575564420
11	P Lalkhama	Sub Inspector	9862328462
12	F Lalhuapzauva	Sub Inspector	9612654542
13	Lalhruaitluanga	Asst. Sub Inspector	6909406809
14	B Laltanpuia	Asst. Sub Inspector	8787581155
15	H Lalremruata	Head Constable	9862423314
16	R Laldinpuia	Head Constable	9612132031
17	K Lalmawia	Head Constable	9856718256
18	Vanlalsiama	Head Constable	9612663761
19	F Zodinmawia	Constable	8974214620

Khawzawl District Disaster Management Plan, 2022

Sl. No.	Name	Designation	Contact No.
20	Lalchhuanawma	Constable	9862374140
21	Lalrinchhana	Constable	9862488965
22	Ody Malsawmtluanga	Constable	8259806106
23	PC Lalzarmawia	Constable	8413851570
24	H Lalhmingliana	Constable	9862538416
25	Vanlalnghaka	Constable	7628015292
26	Vanrochhunga	Constable	8414046280
27	C Zoramchhana	Constable	8730835006
28	HB Laltanpuia	Constable	8416075245
29	Lalchhandami	Constable	7640983687
30	B Ramngaihawma	Constable	8794099084
31	K Vanlalhmuaka	Constable	8575324546
32	C Rotluanga	Constable	8729978154
33	KC Lalrochhara	Constable	8974117844
34	Lianbuanga Pachuau	Constable	7628822178
35	V Zarzohmingthanga	Constable	7627994714
36	Liansiama	Constable	9862583367
37	Ngurthansanga	Constable	6909702604
38	C Vanlallawmi	Constable	9862371933
39	F Lalhmingliana	Constable	8794072682
40	Lalnghinglova	DG/SPL	7629971130
41	Thangduha	DG-II	8415848769
42	A Lalrosanga	DG-II	8974835602
43	K Lalrinenga	DG-II	8974255186
44	Lalrinfela	DG-III	8731890486
45	PC Liansangpuia	DG-II	7629878268
46	Lalbiakngheta	DG-III	7629971081
47	H Lalmuanpuia	DG-II	9612762638
48	Lallianmawia	DG-III	9862538332

6.3.2 State Disaster Response Force (2nd IR Battalion)

Sl. No.	NAME	DESIGNATION	CONTACT NO.
1	H. Thanghnuna	Inspector	8730844567
2	J. Lalkamlova	Havildar	8575609688
3	K. Lalsangzuala	Havildar	6909837354
4	Lalthanfela	Havildar	8729958230/ 8014714694
5	R. Liansiama	Havildar	9862761790

Khawzawl District Disaster Management Plan, 2022

Sl. No.	NAME	DESIGNATION	CONTACT NO.
6	Thanghuala	Havildar	8794212943
7	Thangtluanga Sailo	Havildar	7628003597
8	Zatluanga	Havildar	8014783455
9	B. Lalchhanpuia	Naik	8731012301
10	Lalrohlua	Naik	8575708972
11	Lalzarlawma	Naik	8014626703
12	PC Lalhmangaihzuala	Naik	9612326210
13	Nanglamthanga	Constable	8416046753
14	Rozampuia	Constable	9862476347
15	Robert Lalhruaitluanga	Constable	8575407967
16	David Lalduhzuala	Constable	9612027398
17	C. Lalthansanga	Constable	9615700202
18	Lalrawngbawla	Constable	8413098493
19	Lalchhanchhuaha	Constable	8259864414
20	Zoramzauva	Constable	9615491672
21	MS Dawngliana	Constable	9862004093
22	Vanlalliana	Constable	9615584660
23	Lalruatkima	Constable	8259890361
24	Jose Zothankima	Constable	8119962976
25	Michael Laltlanzauva	Constable	7629875655
26	Malsawmtluanga	Constable	6009074418
27	Rosangliana	Constable	8974740699
28	Rodintluanga	Constable	8486391644
29	Malsawmkima	Constable	8014786169
30	Johan Lalliankunga	Constable	8132833515
31	Lalawmpuia Vuite	Constable	9612963791
32	C. Lalrinkima	Constable	8415842106
33	Lalchhuantlinga	Constable	9862933538
34	C. Lallawmawma	Constable	9615992876
35	B. Lalrammawia	Constable	9612477165
36	Vanropuia Colney	Constable	8794418896/ 8256985408
37	Saithangpuia Sailo	Constable	8732066587
38	Benjamin K. Lalduhzuala	Constable	8974638074
39	Laltawmkima	Constable	9862736851
40	VL Kroskawia	Constable	8132833289
41	C. Pahlira	Constable	8575106156
42	Lalduhsaka	Driver	8014351989
43	John MS Tluanga	Driver	9612078438

Khawzawl District Disaster Management Plan, 2022

6.3.3 Quick Response Team under DDMA, Khawzawl

Sl. No	Name	Address	Contact No.
1	Lalsiamkima	Khawzawl Hermon Veng	8794537230
2	Lalrothanga	Khawzawl Electric Veng	7640808901
3	VLMS Zarzova	Kawlkulh	9612335738
4	C. Zoremthluanga	Khawzawl Dinthar	8974575375
5	Lalmangaihsanga	Khawzawl Dinthar	9774832488
6	Lalsangpuia	Khawzawl Arro Veng	8257991766
7	K. Lalthazela	Khawzawl Vengthar	9862010037
8	Michael MS Dawngkima	Khawzawl Zuchhip Veng	9612511342

6.4 Community Based Disaster Management

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 a greater 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.)

Joint YMA, Khawzawl and Group YMA, Khawzawl would perform the following duties within the ambit of its own organizational structure, in association with various NGOs.

In the preparedness stage 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.

Khawzawl District Disaster Management Plan, 2022

In Alert and Warning Stage it will issue warning notice to all YMA branches concerned in the district. It will keep the survey and relief team of headquarters on stand-by in readiness with required transport and equipment. It will mobilize 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.

During disaster 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.

6.5 OFFICER IN CHARGE OF THE DISTRICT CONTROL ROOM:

Office of 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 availability of the following equipment 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).

Khawzawl District Disaster Management Plan, 2022

- 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.

It may be noted that disaster equipment received from DM&R department were handed over to State Disaster Response Force at 2nd IR Battalion, Khawzawl Lungvar. Request for fund to purchase equipment for communication and search & rescue was sent to DM&R department.

Task	Activity	Responsibility
Community Preparedness	Identification of vulnerable community & vulnerable groups keeping in mind the gender Issues	DDMA, SDRF, BDO
	Information on risk & vulnerability	
	Encourage preparation of DM plan through participation	
	Advice and issue direction wherever necessary for community disaster prevention, mitigation and preparedness through local resources	
	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 community	
	Disseminate information to community to deal with any disaster situation	

Khawzawl District Disaster Management Plan, 2022

6.6 Training of Trainers

ATI, Aizawl has been conducting Training of Trainers in Disaster Management for both institutions and for the volunteers. Trained health Professionals like Doctors, Nurses as well as members of Quick Response Team are being identified as trainers of the District.

6.6.1 Disaster Management Education

Disaster Management Education has been given importance in the district. It is planned to give awareness campaign/training on Disaster Management to all the offices and schools in Khawzawl district. Village Level Disaster Management Plans are also prepared by Village Disaster Management Committee.

6.6.2 Schools

Under the Programme of National School safety policy, Schools in Khawzawl district have been requested to prepare Disaster Management Plan consisting of the following features as mandated by National Disaster Management Authority:

- Detailed Hazard Risk profile of the school.
- Construction of School Disaster Management Committee.
- Constitution of various task forces
- Development of Resource Inventory inside and outside of the building.
- Development of floor-wise evacuation maps indication evacuation route and assembly points.

Khawzawl District Disaster Management Plan, 2022

6.7 Skill upgradation and follow up training programmes

Khawzawl District Disaster Management Authority has the following training Programmes:

Sl. No.	Activity	Target Group	Responsibility
1	Community Based Disaster Management Training	Community/VC area within Khawzawl district	DDMA
2	Schools safety training	Schools in Khawzawl district	DDMA, SDEO
3	Search & Rescue Training	NGO/Volunteers at District level	DDMA, QRT
4	Training on First Aid	NGO/Volunteers at District Level	DDMA, Health Department, QRT

Members of Mualvawm Adventure Club, Khawzawl.

Sl. No.	Name	Designation	Address	Contact
1	K. Lalthazela	Leader	Khawzawl Vengthar	9862010037
2	Lalsangpuia	Asst. Leader	Khawzawl Arro	8257991766
3	Lalsiamkima	Secretary	Khawzawl Hermon	8794537230
4	R. Lalhmingangi	Asst. Secretary	Khawzawl Arro	
5	Lalmangaihsanga	Treasurer	Khawzawl Dinthar	9862225490
6	Michael MS Dawngkima	Finance Secy.	Khawzawl Zuchhip	9612511342
7	Lalrothanga	Member	Khawzawl Electric	7640808901
8	VL Malsawmzarzova	Member	Kawlkulh	9612335873
9	C. Zoremthuanga	Member	Khawzawl Dinthar	8974575375
10	K. Vanlalduatbika	Member	Khawzawl Arro	
11	Tlangchhuanawmi	Member	Khawzawl Arro	
12	Rozawla	Member	Khawzawl Vengthar	

6.8 Disabled in the Districts:

Department of Social Welfare, UD&PA, Teachers of all Schools in the District will be responsible for the special needs of disabled persons in the District.

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

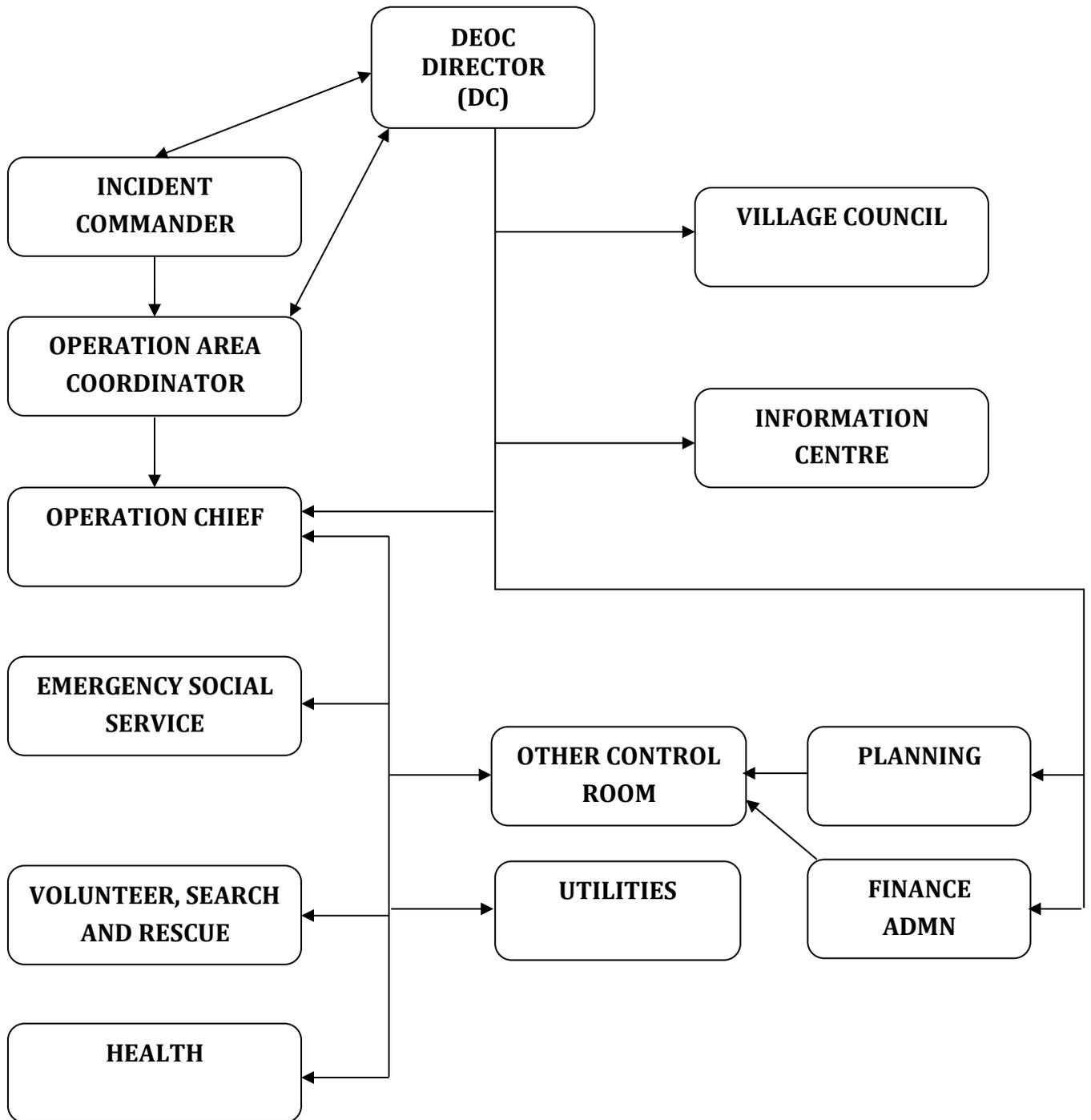
Response planning of Earthquake, Cyclone, Floods, Landslides are different as the nature and effect of the disasters are different.

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.

Khawzawl District Disaster Management Plan, 2022

7.1.2 Response flow chart



Khawzawl District Disaster Management Plan, 2022

7.1.3 Warning and alert

On the receipt of Warning or alert from any such 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 Additional DC will assume the role of Incident commander during the emergency situation.

The details of agencies competent to issue warning or alert pertaining to various 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 villages 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, Morse code Communication/Torchlight Communication is identified as one source of communication between District and a number of villages in the District. Withdrawal of warning should also be done by DDMA. BSNL, Television channels, Doordarshan, Radios and private Telecoms are the primary source of communication between District and villages.

Khawzawl District Disaster Management Plan, 2022

Early Warning Dissemination: Early warning Action Plan

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

Warning to various Stakeholders:

Weather bulletins are broadcasted in local daily newspapers as routine from the AIR station, Doordarshan and Local Cable TVs. When there is a threat of cyclone, special information is 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 is done through print, radio, TV and other media.

Cyclones: In case of cyclones, 72 hours advance warning of various 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 dissemination is the responsibility of state government (DM&R). The DM&R Department 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 sub-divisions. DEOC is to be activated 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 forecasts are classified into:

- 1) Short Range Forecast (Validity for less than 3 days)
- 2) Medium Range Forecast (Validity from 3 to 10 days)
- 3) Long Range Forecast (Validity for more than 10 days)

These forecasts are issued by the Indian Meteorological Department through the All-India Radio, the Doordarshan and various newspapers.

Khawzawl District Disaster Management Plan, 2022

Earthquake and man-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 Central Level - PMO, Cabinet Secretary, Secretary of Home and Defence, NSMA, MHA.

At the state level: Governor, Chief Minister, Home Minister, MLAs and Deputy Commissioners from the affected area.

District Level – All line Department of 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 a priority 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 inform 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.

Khawzawl District Disaster Management Plan, 2022

Alternate EOC and Location

DC's Rest House near Deputy Commissioner's Office will function as alternate EOC in case DC's Office is damaged due to disasters.

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 State Disaster Response Fund. However, these funds may not be adequate to meet DM requirements in the aftermath of large-scale Disasters. 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 Psycho 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. Counseling Team of psychological experts to meet the needs of the affected people needs to be set up at District Level. Real time assistance of financial and other resources also helps 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 an 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.

Khawzawl District Disaster Management Plan, 2022

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 to establish an effective system of collaborating with the media during emergencies, such as creation of special media cell has which will be made operational during emergencies. Both Print and electronic media shall be 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, Khawzawl and SP, Khawzawl 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 be 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 SOC 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 injuries will be immediately sent to hospitals.
- District Quick Response Team and other District DM Teams should be sent to the site of disaster immediately.
- Different aspects of relief and rehabilitation of the affected persons should be started immediately. Eg. Shelter, food, clothing etc.
- The overall 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.

Khawzawl District Disaster Management Plan, 2022

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. Getting pre-contract with vendors and merchant establishments to procure relief materials in times of disaster.

7.2 ACTION PLAN FOR LINE DEPARTMENTS:

The action plans for Emergency Support Functions (ESFs) for disaster management are discussed below. The DDMA shall ensure that these action 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.

Actions to be taken:

1. If felt necessary, cordoning off area to restrict movement of onlookers, vehicular and pedestrian traffic should be done.
2. Quick assessment of law-and-order situation in affected areas.
3. 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.

Khawzawl District Disaster Management Plan, 2022

Equipment to be brought:

1. Search Lights.
2. Electric Generators.
3. Crane-heavy Duty, Fork Type.
4. Recovery van.
5. Stretchers.
6. First Aid Kits.
7. Vehicles: Mini Buses, heavy truck, light ambulance vans, mobilization trucks.
8. Water tanker.
9. Any other.

7.2.2 ACTION PLAN FOR FIRE & EMERGENCY SERVICE

Response Activation:

1. 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:

1. 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.
5. 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

Equipment to be brought:

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

Khawzawl District Disaster Management Plan, 2022

7.2.3 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:

1. 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 in case of any emergency situations.
5. In case of fire, the civil defense team members should do firefighting.
6. First Aid should be provided along with the members of ESF on Medical Response.
7. Demonstrate Search and Rescue.

Equipment to be brought:

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

7.2.4 ACTION PLAN FOR POWER & ELECTRICITY DEPARTMENT

Response Activation

1. Get the power ESF activated.
2. Nodal Officer of primary agency will call nodal officers of supporting agencies.
3. 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.

Equipment to be brought:

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

Khawzawl District Disaster Management Plan, 2022

7.2.5 ACTION PLAN FOR TELECOM SERVICES (BSNL, AIRTEL, JIO etc.)

Goal: The Telecom Services are primarily responsible for restoration of communication facilities. They 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:

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

Actions to be taken:

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

Equipment to be brought:

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

7.2.6 ACTION PLAN FOR LAD

Action to be taken

1. 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 equipment for debris clearance.
2. LAD will assume main role in Equipment support, debris and road clearance, on receiving the intimation of the disaster from State EOC.
3. LAD will coordinate with the supporting agency's officers to mobilize equipment from the ware houses.
4. The respective supporting agencies will contact their respective personal to move the equipment to central warehouse.
5. The equipment like JBC, concrete cutters identified as per the need will be transported to the site.
6. 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.
7. The supporting Agencies nodal officers will call for personal to immediately start debris clearance operation to enable movement to the affected site.
8. All supporting agencies will inspect the road/rail network and structures within the disaster site and surrounding areas.
9. LAD will also ensure proper corpse disposal and post mortem by coordinating with ESF on medical response.
10. Assessment of damage (locations, no. of structures damaged, severity of damage)
11. The QRTs will be deployed at the affected site.
12. Enlisting the types of equipment as compiled from resources inventory required for conducting the debris clearance.
13. The QRTs will report the situation and the progress in response activities to the respective EOCs.
14. Undertake construction of temporary roads to serve as access to temporary transit and relief camps, and medical facilities for disaster victims.
15. 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.
16. Ensure a critical number of medical professionals to reach the site including specialists from outside the state.
17. 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.
18. 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.
19. In case of orthopedic care required in disasters like earthquakes the immediate response would have to be complimented by a follow up

Khawzawl District Disaster Management Plan, 2022

treatment schedule for a majority of the patients in/near their place of residence.

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

Equipment to be brought

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

7.2.7 ACTION PLAN FOR PWD

Action to be taken

1. 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 equipment for debris clearance.
2. Assume role in Equipment support, debris and road clearance, on receiving the intimation of the disaster from State EOC/Nodal Officer of LAD.
3. Coordinate with the LAD officers to mobilize equipment from the warehouses.
4. Contact respective personal to move the equipment to central warehouse.
5. The equipment like JCB, concrete cutters identified as per the need will be transported to the site.
6. 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.
7. 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.
8. All supporting agencies will inspect the road network and structures within the disaster site and surrounding areas.
9. Ensure proper corpse disposal and post mortem by coordinating with ESF on medical response.
10. Assessment of damage (locations, no. of structures damaged, severity of damage).
11. The QRTs will be deployed at the affected site.
12. Enlisting the types of equipment as compiled from resource inventory required for conducting the debris clearance.
13. The QRTs will report the situation and the progress in response activities to the respective EOCs.

Khawzawl District Disaster Management Plan, 2022

14. Undertake construction of temporary road to serve as access to temporary transit and relief camps, and medical facilities for disaster victims.
15. 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.
16. Ensure a critical number of medical professionals to reach the site including specialists from outside the state.
17. 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.
18. Coordinate, direct, and integrate response to provide Equipment support, relief camps establishment, and sanitation health assistances.
19. Mobilizes different modes of transportation eg. Trucks, etc to be put on stand-by
20. Assist timely re-establishment of the critical transportation links.
21. Establish temporary electricity supplies for relief material go downs and relief camps.
22. Compile and itemized assessment of damage, from reports made by various receiving centers and sub-centers.

Equipment to be brought

1. JBC, concrete beakers, cranes, Grader, bulldozers, Gas Cutter, Jack Hammer, Tipper, folkanes, dumper, Aeromatic Hammer for debris/road clearance, supporting rescue operations.
2. Vehicles (Trucks), Earth movers, rescue equipment, Mobile medical vans.
3. Other disaster management related equipment.

7.2.8 ACTION PLAN FOR HEALTH DEPARTMENT (SERVICES)

Response Activation:

1. Nodal Officer will call nodal officers of supporting agencies.
2. In coordination with the transportation ESF, it will ensure a critical number of medical professionals to reach the sites including specialists.
3. In coordination with the transportation ESF, it will ensure a critical number of medical professionals to reach the sites including specialists.
4. 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.
5. Also ensure the provision of medicine and other medical facilities required at the disaster site and the hospital health centers catering to disaster victims.
6. 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.
7. Ensure setting up of temporary information centers at hospitals with the help of ESF on help lines and warning dissemination.
8. Coordinate, direct, and integrate state level response to provide medical and sanitation health assistances.

Khawzawl District Disaster Management Plan, 2022

Action to be taken

1. Ready all hospitals (including private hospitals) for managing large no. of casualties and severely injured population.
2. Sufficient stock of required medicines, vaccines, drugs, plasters, syringes, etc.
3. Provide systematic approach to patient care (Mass Casualty Management).
4. Triage done to determine who needs to be taken to a medical facility on a priority basis and who can be treated on-site:
 - a. First-aid provided as required.
 - b. Patient Stabilized before transport
 - c. Patients transported to nearest available medical facility having the required facilities.
 - d. Trauma counseling provided to the victims and their relatives at the site and in the hospital.
 - e. In the hospital emergency department, triage carried out again to prioritize treatment, and appropriate care provided.
 - f. Maintain patient tracking system to keep record of all patients treated.
 - g. Deploy mobile hospitals as needed
5. Arrange for additional blood supply: organize blood donation camp for additional blood requirement.
6. Provide for sending additional medical personnel equipped with food, bedding and tents.
7. Send vehicles and any additional medical equipment.
8. QRTs will report the situation and the progress on action taken by the team to the respective EOCs.
9. QRTs Quickly asses type of injuries, no. of people affected, and possible medical needs
10. QRTs will ensure timely response to the needs of the affected victims.
11. Establish health facility and treatment centers at disaster sites.
12. The district civil surgeon with district/state control room should coordinate the provision of medical services.
13. Procedures should be clarified between
 - a. Peripheral hospitals
 - b. Private hospitals
 - c. Blood banks
 - d. General hospitals and
 - e. Health service established at transit camps, relief camps and affected villages.
14. 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.

Khawzawl District Disaster Management Plan, 2022

Equipment to be brought:

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

7.2.9 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 damaged 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.

Equipment/Materials to be brought to site

- Water tankers.

7.2.10 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).

7.3 Responsibility Matrix

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

Khawzawl District Disaster Management Plan, 2022

7.3.1. Hazard specific Responsibility matrix for emergency response function for sudden disasters where early warning is available

Time	Task	Department/Agency	Activity
1	2	3	4
D-72 Hr	Warning Dissemination	DC, Media, NGO	Warning of disaster and preparedness activity and activation of DEOC
D-48 Hr	Identification of safe place and Food Stock	DC, Agriculture Department, PWD, NGO	Give instruction 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	PWD, P&E, NGOs and DM Teams	Checking the availability of resources in DEOC, line departments and volunteers
D 0 Hr	Quick Response of Disaster including meeting of CMG	DC, QRT, NGO and line departments	Assessment of Disaster effect, search and Rescue and First Aid
D + 30 min	Evacuation, First Assessment Report and Collection of Resources	DC, Police, PWD, PHE, I&PR, Radio and Television, Search and Rescue Team	Evacuate Disaster Site and Triage
D+2	Damage Assessment	DC, Police, Media, VDMC, NGO	Give out assessment report to concerned authorities.
D+3	Temporary shelter and transportation of victims	PWD, NGOs, DC, Police	Provide temporary shelter for affected people.
D+6	External aid and pay out assistance	DC, DM&R Dept.	Assistance paid to affected people in the District.
D+12	Trauma Counseling	Trauma Counseling team, 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.	PWD, DUDO, Health Department, Media,	Clearance of debris and road blocks, access of communication with all possible means

CHAPTER- 8

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 coordination 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 given to the needs of food- insecure households and towards promoting sustainable livelihoods.

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 phase shall be in accordance with the reconstruction and Rehabilitation plans framed by DDMA in conjunction with implementing authorities.

8.1 Relief and Recovery co-ordination: 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.

8.2 Damage and Loss assessment: Damage Assessment is a precondition for effective Disaster Management. 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.

8.3 Restoration 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.

8.3.1 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.

8.3.2 Economic Rehabilitation

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

8.3.3 Social Rehabilitation

Restoration of educational institutions, cultural places, community resources and infrastructure come under Social Rehabilitation.

8.4 Reconstruction/Repair of-

8.4.1 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.

8.4.2 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.

8.4.3 Promote 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 Khawzawl District like YMA, MUP, MHIP, etc and other religious institutions are helpful in recovery program of the damage areas of a disaster.

8.5 Recovery Program

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.

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.

8.5.1 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.

8.5.2 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, public roads, connectivity, water resources and Electricity etc. could be restructured better than before.

8.6 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.

CHAPTER- 9

FINANCIAL RESOURCES FOR IMPLEMENTATION OF DDMP

As mandated by Section 48 of the Disaster Management 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.

9.1 State Allocation

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

9.1.1 State Disaster Response Fund

The State Disaster Response Fund (SDRF) is a fund constituted under Section 48(1) (a) of the Disaster Management Act, 2005. The SDRF may be used only for meeting the expenditure for providing immediate relief to the victims of cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloud burst, pest attack, and frost & Cold wave.

SDRF is constituted with the nomenclature “State Disaster Response Fund” in the Public Account under the Reserve Fund bearing interest in the Major Head: 8121- General and other Reserve Fund in the accounts of the State Governments concerned. The closing balance for one financial year shall be the opening balance for the next financial year. For Disaster of severe nature, 50% of the SDRF Balance, as on 31st March of the preceding financial year, will be adjusted while releasing the assistance from NDRF for the first disaster in a financial year. In case the same states face another severe disaster during the same year, no adjustment will be made while releasing NDRF assistance. For the year 2019-2020, Khawzawl District was offered SDRF to the tune of 65 lakhs.

9.1.2 State Disaster Mitigation Fund (SDMF)

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

9.2 District Fund Allocation

9.2.1 District Disaster Response Fund (SDRF)

As per Section 48 (1)(b) of the DM Act, 2005, District Disaster Response Fund (DDRF) may be created for post-disaster activities and made available to the DDMA.

Khawzawl District Disaster Management Plan, 2022

9.2.2 District Disaster Mitigation Fund (DDMF)

As per Section 48 (1) (d) of the DM Act, 2005, DDMF may be created for pre-disaster activities and made available to the DDMA.

9.2.3 Departmental Fund

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.

9.2.4 Contributions to the Fund

The aggregate size of the State Disaster Response Fund of each State for each of the financial years 2020-2021 to 2025-2026, would be as recommended by the 15th Finance Commission. Of the total size of SDRF indicated, Government of India will contribute 75% for general category States and 90% for Special category States of the total yearly allocation in the form of a non-plan grant. The balance 25% in general category states and 10% in special category states will be contributed by the State Government concerned. The share of the Government of India to the SDRF shall be paid as Grant-in-Aid.

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.

9.3 Flexi Funds in Centrally Sponsored Schemes

Guidelines have been issued for 10 % of Flexi-fund within the Centrally Sponsored Schemes (CSS) is to be utilized inter alia for mitigation, restoration activities in the event of natural calamities in the sectors covered by the CSS. Request have been made to take necessary steps toward inter-departmental co-ordination so that the resources of flexi-funds can be put to use effectively in due course for disaster mitigation and for medium/ long term restoration in different sectors.

DDMA may also look at other options of new financial tools like catastrophic risk financing, risk insurance, micro-insurance etc. to compensate for massive losses on account of disasters. Opportunity of CSR investments may also be explored and elaborated under this section by the DDMA for increasing District resilience.

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.

CHAPTER- 10

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 organizations 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.

CHAPTER- 11

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. Khawzawl District EOC has linkage with the NGOs, CBOS, Neighbouring Districts and Task forces like NDRF, SDRF, QRT and 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 to co-ordinate with other departments as per their responsibility in the DM. Frequent Meetings/Trainings for all stakeholders on IRS position and DM Plan make the EOC familiar/well connected with all departments in the District.

11.2 Co-ordination mechanism with NGOs, SHGs, industries, private school and hospitals

Soon after Khawzawl District started functioning, the Primary Health Center in Khawzawl was upgraded to District Hospital. Medical Superintendent was recently posted in the hospital, taking the strength of the hospital to

NGOs, especially YMA play an important role in the Disaster Management Plan as leaders and members of Village Disaster Management Committee and its teams such as Search and Rescue team, Information team, Response and Rehabilitation team etc. at Village/Town level.

Khawzawl District Disaster Management Plan, 2022

11.3 Coordination with block, Village level task force

All Village Disaster Management Committees (VDMCs) in the district have submitted their Disaster Management Plans to District Administration. Village Task Force would be on call at the occurrence of Disaster. VCP/Chairman of VDMC is also responsible for his/her village disaster situation.

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

Training Institutes like ATI, SIRD, DRC, DIET have linkages with the District Authority as well as the DEOC.

11.5 Coordination with Village Council

The District DM Plan included all Village Councils and NGOs/CBOs within the District for preparedness, mitigation and response measures. SDRF plays an important part in connecting people together at the District level.

CHAPTER- 12

STANDARD OPERATING PROCEDURES (SOPs)

AND CHECKLIST

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 and which is beyond the coping capacity of the affected area.

12.1 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/ Agency	Line Department/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	3 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	DDMA I&PR, PWD, P&E, PHE, LR&S, VDMC
7	Cyclone	24 hrs	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.

Khawzawl District Disaster Management Plan, 2022

- 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

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

STANDARD OPERATING PROCEDURE 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.

12.2.1 ESF 1: 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.

Khawzawl District Disaster Management Plan, 2022

Team Leader : SP, Khawzawl

Nodal Agency : Police

Supporting Agencies: Private Telecom/Mobile Operators, MJA

12.2.1.1 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 equipment and other resources.

12.2.1.2 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.

Khawzawl District Disaster Management Plan, 2022

- vi) Identify requirements of man power, vehicles and other materials and equipment. 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.
- Carry out temporary building repairs to establish a secured storage area for the equipment 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 equipment and salvage materials.

12.2.2 ESF 2: 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.

Team Leader : DC, Khawzawl District

Nodal Agency : Office of the Deputy Commissioner, Khawzawl

Supporting Agencies: Police, PWD, PHE, NCC, YMA

12.2.2.1 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 routes and identifying alternate routes.

12.2.2.2 SOP for Quick Response Team

- 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.

Khawzawl District Disaster Management Plan, 2022

- 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.

12.2.3 ESF 3: 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

Team Leader : Commandant, 2nd IR Bn.

Nodal Agency : Police

Supporting Agencies: SDRF, H&FW, P&E, QRT, YMA

12.2.3.1 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.

12.2.3.2 SOP for 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

12.2.4 ESF 4: 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 Assumptions:

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.

Khawzawl District Disaster Management Plan, 2022

Team Leader : SP, Khawzawl District

Nodal Agency : Police

Supporting Agencies: 2nd IR Bn., DC office, VC/VDP, YMA

12.2.4.1 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 off of area to restrict movement of onlookers, vehicular and pedestrian traffic should be done.
- Any additional requirements at site to be taken care of.

12.2.4.2 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 of the law-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

12.2.5 ESF 5: TRAFFIC MANAGEMENT

Situation Assumption

1. There may be a chaos in the affected area.
2. People may rush without properly following instructions which may increase the damage.
3. Traffic may become out of control and lead to jams.

Team Leader : SP, Khawzawl District

Nodal Agency : Police

Supporting Agencies: PWD

Khawzawl District Disaster Management Plan, 2022

Immediate actions of traffic police:

- Control and monitor traffic movements.
- To detail traffic staff to reach the place of occurrence.
- To coordinate and communicate with concerned functionaries.
- Provide traffic diversions so as to ease movement of response vehicles to incident site.
- Gather and disseminate information about the traffic flow on alternate routes for decongestion.
- To give directions whenever necessary to ensure free passage for fire tender, ambulance, police vehicles and vehicles of other respondents.

12.2.6 ESF 6: EMERGENCY PUBLIC INFORMATION, HELPLINE & WARNING

The ESF on Emergency Public Information, help lines and warning dissemination should process and circulate information about the welfare of citizens in the affected area and manage the flow of correct and needed information. The help lines will be responsible for providing as and where required information and the warning messages would communicate all important information for safeguards to avoid any further damages.

Situation Assumptions:

1. There may be an ambiguity and confusion about the injured population.
2. The communication networks in the affected area may be partially impaired.

Team Leader : SDC, Khawzawl
Nodal Agency : DC office
Supporting Agencies : DDK

12.2.6.1 SOP for Nodal agency:

The ESF would be activated on receiving order from the Incident Commander (IC) to the Team Leader (TL) of Primary Agency for ESF activation.

- TL of primary agency will call Nodal officers of support agencies and get their system activated.
- The QRTs will be deployed at the affected site.
- QRTs will report the situation and the progress in response activities to the respective EOC.
- Sending Warning messages/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 at the District level.
- Setting up of toll-free numbers for emergency information assistance.

Khawzawl District Disaster Management Plan, 2022

12.2.6.2 SOP for Quick Response Team on emergency public information, help lines and messages

- The QRT 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 site IC and their counter parts.
- The QRTs will coordinate, collect, report and display essential elements of information and facilitate support for planning efforts in response operations.

12.2.7 ESF 7: 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 those affected by the disaster.
2. Likely outbreaks of epidemic diseases after the disaster.
3. Hospital services would be affected

Team Leader : Medical Superintendent, District Hospital, Khawzawl

Nodal Agency : H&FW

Supporting Agencies: YMA, MHIP

12.2.7.1 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, equipment, 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.

Khawzawl District Disaster Management Plan, 2022

- 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 :
 - Send required medicines, vaccines, drugs, plaster, syringes, etc.
 - Arrange for additional blood supply, send additional medical personnel equipped with food, bedding and tents etc.
 - Send vehicles and any additional equipment.

12.2.7.2 SOP for Quick Response Team:

- 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:
 - 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.
 - 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.

12.2.8 ESF 8: 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.

Khawzawl District Disaster Management Plan, 2022

Team Leader : EE, PWD, Khawzawl Division
Nodal Agency : PWD
Supporting Agency : DUDO (UD&PA)

12.2.8.1 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 equipment from the warehouse through IDRN database.
- The respective supporting agencies will contact their respective personal to move the equipment to central warehouse.
- The equipment 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.

12.2.8.2 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 equipment 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 metalling, patching and failure of surface, foundations in the affected areas by maintenance engineer's staff and keep monitoring their conditions.

Khawzawl District Disaster Management Plan, 2022

12.2.9 ESF 9: ELECTRICITY AND WATER SUPPLY

12.2.9.1 ELECTRICITY SUPPLY

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.

Team Leader : EE, P&E, Khawzawl Division

Nodal Agency : P&E

Supporting Agency: PWD

12.2.9.1.1 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

12.2.9.1.2 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 equipment, 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.

Khawzawl District Disaster Management Plan, 2022

12.2.9.2 WATER SUPPLY:

Situation Assumptions:

1. There may be a need of supplying water for firefighting operation.
2. There may be a need for drinking purpose.
3. Rehabilitation site might be requiring temporary/mobile toilets.
4. There may be need to ensure clean environment.

Team Leader : EE, PHE, Khawzawl WATSAN Division

Primary Agency : PHE

Supporting Agencies: DUDO (UD&PA)

Immediate tasks on water supply:

- TL will ensure that QRTs are on the site along with the required resources.
- He shall be ensuring uninterrupted supply of water for fire-fighting to all the brigades in operation.
- He shall coordinate with the transport coordinator for replenishing the depleted stock of fire water at the incident site through water tanks.
- Carry out repairing task of all damages to water supply system.
- Arranging alternate storage of potable water at temporary shelters.
- Ensure restoration of potable water as per standards and procedures laid down under 'Standards for Potable Water'.
- Plan for emergency accommodation of water supply in or near temporary shelters.

12.2.10 ESF 10: 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. Shortage of critical resources.
2. Necessity of immediate assistance to the community at the time of resource shortage particularly when affected area is larger.

Team Leader : Supply Inspector (Food), EE, PWD (Shelter)

Nodal Agency : FCS&CA (Food), PWD (Shelter)

Supporting Agency: Agriculture, KVK, Police, YMA

12.2.10.1 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.

Khawzawl District Disaster Management Plan, 2022

- 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.

12.2.10.2 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.

12.2.11 ESF 11: 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.

Team Leader : Commandant, 2nd IR Bn.

Nodal Agency : Police/2nd IR Bn

Supporting Agencies: PWD

Khawzawl District Disaster Management Plan, 2022

12.2.11.1 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).

12.2.11.2 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.

12.2.12 ESF 12: FIRE FIGHTING

Situation Assumption

1. There may be a massive fire.
2. Expect more aggressive fire explosions.
3. There may be a need of repairing leakages to reduce fire explosions.
4. Situation can aggravate due to mishandling or carelessness

Team Leader : EE, PHE, Khawzawl WATSAN Division

Primary Agency : PHE

Supporting Agencies: SDRF, Police, YMA

12.2.12.1 SOP for Nodal Agency

- TL will activate the ESF and give instructions to the QRTs to reach at incident site to conduct rescue operations.
- TL will coordinate with the EOCs (on site and off site) to judge the situation.
- TL will coordinate in deputing rescue team to enter in hazardous areas.
- TL will coordinate with technical experts, safety coordinators and material coordinator for quick response in case of any requirement in conducting rescue operations.

Khawzawl District Disaster Management Plan, 2022

12.2.12.2 SOP for Quick Response Team on Fire Fighting

Firefighting teams will undertake these services:

- On-scene Assessment:
 - First fire vehicle to reach at incident site will contact the site controller and collect the necessary information regarding chemical leak, action taken, current status and type of equipment required.
 - Driver will park their vehicle in a manner to prevent exposure to air-borne chemical contaminants and fire explosions.
 - Each crewmember will wear the necessary PPEs (Personnel Protective Equipment) before entering in the “hot zone”. They will work in pairs and coordination.
 - The situation will be communicated to the Dist. Control Room/EOC to provide the update of additional resource and manpower requirement
- Plugging/Stopping of Leaks:
 - Few crew members having good knowledge of basic tools and knowledge to limit the losses from punctured or leaking tanks will work for plugging holes.
- Suppression of Hazardous Gas or Vapor Releases:
 - Based on the guidance of technical coordinators, the response team shall take rapid measures to reduce the rate of number of hazardous vapors or gases entering in the atmosphere using one or combination of the following measures.
 - Physical restriction of liquid pool surface areas.
 - Transfer to an alternate or standby container if available.
 - Use of fire-fighting or specialized hazardous material foams.
 - Dilute or coverage of liquid pools with water or other compatible liquids.
 - Use of water sprays or fogs.
 - Neutralization of spilled liquids.
 - Cooling of spilled liquids or venting tanks.
- Search and Rescue Operations.
 - According to the instructions of rescue coordinators QRTs should enter into the hazardous areas and rescue injured and trapped people.
 - For common safety practice, QRTs should work in pairs.
 - QRT should initiate search and rescue operations of trapped people under the guidance of technical experts.
 - QRT of rescue operations should carry a self-contained breathing apparatus (SCBA) to carry out their mission without falling victim. They should also carry a spare SCBA unit which will help them to escape people trapped in the hazardous areas and also sometimes rescue workers require extra air supplies to accomplish prolonged rescue.

Khawzawl District Disaster Management Plan, 2022

12.2.13 ESF 13: PUBLIC WORKS AND ENGINEERING

The ESF would include the identification of critical infrastructure problems, shortcomings and damages, and the mobilization and coordination of Quick Response Teams (QRTs) to fix and improve them.

Situation Assumptions

1. There may be major and minor damages in critical infrastructures, public and private infrastructures.
2. Inspection of buildings and other structures may be required to determine whether it is safe to inhabit or use them after a disaster has occurred.

Team Leader : EE, PWD, Khawzawl Division

Primary Agency : PWD

Supporting Agencies: BDO

12.2.13.1 SOPS for Nodal agency

- When an emergency is imminent, the TL will assess the potential impact of the threat on the state's infrastructure and work with other authorities to ensure that any necessary immediate repairs or arrangements for critical state structures and facilities are initiated.
- The TL will work with all district and local authorities to support the evacuation of people in the threatened area(s).
- As the emergency progresses, the TL will monitor the status of the infrastructure and effect emergency repairs where needed and feasible.
- The TL will monitor the status of debris on critical state evacuation routes and initiate emergency debris clearance and repairs to save lives where needed and feasible.
- When an emergency has passed, the TL of Inspection, Condemnation, Demolition will assess damages to critical state infrastructure and initiate debris clearance and repairs.

12.2.14 ESF 14: ANIMAL CARE

Situation Assumption:

1. Public health during disasters is directly related to the safety of animals. Owners may fail to evacuate because they cannot take their animals with them, or owners who left their animals behind will later try to re-enter the disaster area to rescue them.
2. Deceased animals may create a threat to the public health and safety.

Team Leader : District AH&Vety Officer

Primary Agency : AH & Vety Dept.

Supporting Agencies: DFO(Wildlife), PHE, DC Office, YMA

Khawzawl District Disaster Management Plan, 2022

12.2.14.1 SOP for Nodal agency:

The TL will coordinate with:

- The district level and block level Veterinarians.
- Animal related organizations and individuals to provide assistance in the affected site.
- Coordinate with the Shelter TL on the sheltering of companion animals.
- In case of Animal Disease Outbreak immediate actions to control and quarantine the disease to be made, the advisory for safeguarding one self and others to be issued.
- Injuries and death of animals will be documented.
- Deceased, diseased or contaminated animals will be dispensed.
- Documentation of all expenses incurred will be maintained.
- Continue response activities as needed.

12.3 Norms of Relief and Rehabilitation, Emergency Response and Functions

Sl. No.	Type of Function	Nodal Agency	Line Departments
1	Evacuation	DDMA	Home, PWD, PHE, VDMC, YMA
2	Search & Rescue	DDMA, Home	Home, SDRF, P&E, H&FW, QRT, VDMC. YMA
3	Cordoning/ Traffic/ Law & Order	Home Dept.	DDMA, PWD, SDRF, VDMC, YMA
4	Dead Body Disposal	Home Dept.	H&FW, UD&PA, RD, VDMC
5	Carcass Disposal	AH & Vety	PHE, DDMA, YMA

12.4 Humanitarian Relief and Assistance

Sl. No.	Type of Relief	Nodal Agency	Line Departments/Agencies
1	Food	FCS&CA	Agriculture, KVK, Police, YMA
2	Drinking Water	PHE	DUDO (UD&PA), VDMC
3	Medicine and Nutrition	H&FW	YMA, MHIP
4	Psycho Social care and trauma care	H&FW	VDMC, YMA, MHIP
5	Clothing	DDMA	Industry, VDMC
6	Public Health & Sanitation	H&FW	PHE, AH& Vety, DUDO (UD&PA), VDMC
7	Helplines	DDMA	I&PR, Home Dept, P&E, ICT, H&FW, MJA
8	Shelter Management & Repairs & Restoration of basic amenities	PWD	UD&PA, P&E, PHE, H&FW, DDMA, VDMC
9	Management of VIP Visits	DDMA	DDMA, Police, VDMC

Khawzawl District Disaster Management Plan, 2022

Annexure – I

LIST OF VCPS/CHAIRMAN, VDMCS IN KHAWZAWL DISTRICT

Sl. No.	Town/Village	Name of VCP/Chairman, VDMC	Contact No.
1	Aiduzawl	Laldinthara	9856262356
2	Arro	Zoliansanga	9383301696
3	Biate	C. Lalrinliana	9856284991
4	Chalrang	Thangtinsiana	8415966063
5	Chawngtlai	H. Lalremsanga	7629970663
6	Chhawrtui	Lalremruata	9366962342
7	Dulte	H. Lalduhawma	9863230952/ 8014421894
8	Hmuncheng	Rosangliana	9383301751
9	Kawlkulh	R. Vanlalhruaia	961241525/ 6009322700
10	Kawlkulh 'N'	Lalduailova	8974122459/ 6009192648
11	Khawhai	Daksiamliana	8014421614
12	Khawzawl Darngawn	Lalnunpuia	8131985492
13	Khawzawl Dinthar	Rosangpuia	9862223611
14	Khawzawl Electric	M. Kaptluanga	9862539101
15	Khawzawl Hermon	Zarzomawia	7085484404
16	Khawzawl Kawnzar	Vanlalduhi	6909702480
17	Khawzawl Vengthar	Lalfakzuala	9862532877
18	Khawzawl Zuchhip	Vanlalzawna Khiangte	9862538261
19	Khualen	Zoramchhana Pautu	8067337200
20	Lungtan	Laldinpuia	9383176702
21	Khawzawl Lungvar	Lalzahminga	9612704972
22	Neihdawn	Rolungmuana	9612347655
23	New Chalrang	FB. Ramtharngaka	7629971234
24	Ngaizawl	Chin Gokimi	8730977693
25	Pamchung	Lalzamluaia	9366429594

Khawzawl District Disaster Management Plan, 2022

Sl. No.	Town/Village	Name of VCP/Chairman, VDMC	Contact No.
26	Puilo	K. Lalremruata	6009592021/ 8731914517
27	Rabung	Vanlalrova Khiangte	8575187579
28	Riangtlei	R. Lalnghinglova	8413098504
29	Sialhawk	Laltlankimi	8014118613
30	Tlangmawi	Lalringzuala	6909408373
31	Tlangpui	Lalbiakluanga Hauhnar	8131990138
32	Tualpui	Kawlnithanga	9862090480
33	Tualte	JH. Lalmazawia	9383102431
34	Vangtlang	Khawtinkhuma	8014345590
35	Vanchengpui	Lalthanngura	7085740208
36	Vankal	K. Lalchhungliana	6009360158
37	Khawzawl Arro Veng	K. Vanlalsiama	9862392168
38	Khawzawl Zaingen	K. Thangliana	9862538275

Khawzawl District Disaster Management Plan, 2022

Annexure II

TABLE OF ABBREVIATIONS

Sl.No	Abbreviation	Full Form
1	DEOC	District Emergency Operation Centre
2	EOC	Emergency Operation Centre
3	DDMP	District Disaster Management Plan
4	ESF	Emergency Support Functionaries
5	RO	Responsible Officer
6	IRS	Incident Response System
7	COR	Commissioner of Relief
8	DDMA	District Disaster Management Authority
9	HVRCA	Hazard Vulnerability Capacity & Risk Assessment
10	F & CS	Food and Civil Supplies
11	H & FW	Health & Family Welfare
12	PHED	Public Health Engineering Department
13	DM&R	Disaster Management & Rehabilitation
14	IDRN	Indian Disaster Resource Network
15	IRT	Incident Response Team
16	IC	Incident Commander
17	SDRN	State Disaster Resource Network
18	CDRN	Corporate Disaster Resource Network
19	SOC	Site Operation Centre
20	CIKR	Critical Infrastructure & Key Resources
21	DRR	Disaster Risk Reduction
22	CBDM	Community Based Disaster Management
23	EQ	Earthquake
24	S&R	Search & Rescue
25	VDMC	Village Disaster Management Committees
26	OSC	Operation Section Commander
27	QRT	Quick Response Team

Khawzawl District Disaster Management Plan, 2022

Annexure III

SKILLED HUMAN RESOURCE INVENTORIES IN KHAWZAWL DISTRICT

ELECTRICIANS				
Sl. No.	Contact Person	PF=Professional/ P = Private	Address	Contact No.
1	Lalrinpuia	PF	Khawzawl Hermon	9612100425
2	Lalramdika	PF	Khawzawl Darngawn	7085620634
3	Zoremsanga	PF	Khawzawl Vengthar	9862012727
4	Biakthanga	PF	Khawzawl Lungvar	9862967813
5	Lalbiaa	PF	Khawzawl Darngawn	9612739037
6	Lalduha	PF	Khawzawl Zuchhip	8974138126
7	Lungmuana	PF	Khawzawl Vengthar	9615326467
8	John Lalzuia	PF	Khawzawl Electric	9862506218
9	Thangmawia	PF	Khawzawl Hermon	8119941967
10	Rodinmawia	P	Khawzawl Vengthar	9862609887
11	FK Vanlalhriata	P	Khawzawl Vengthar	9862380731
12	C Vanlalena	P	Khawzawl Dinthar	8119940844
13	Lalnunmawia	PF	Hmuncheng	9383302171
14	Edenthara	PF	Tualte	8014243401
15	Malsawmdawngkima	P	Vankal	6009946022
16	HM Lalrindika	P	Dulte	8837386729
17	PC Lalhriatpuia	P	New Chalrang	8575569327
18	R Vanlalsiama	P	New Chalrang	9615855813
19	Zosiama	P	Puilo	6009552251
20	C Zamvela	P	Kawlkulh	8974118126
21	H Hmingliana	P	Kawlkulh	9862533365
22	Joseph Hmangaihzuala	VL PF		
			Chawngtlai	8014422319
23	C Rothanga	PF	Chawngtlai	8575184439
24	Rothanga	PF	Neihdawn	7629880515
25	Remnalalfakzuala	P	Neihdawn	9862108321
26	Lalsangzuala	P	Khawhai	8415852965
27	Vanlalpana	P	Tualpui	7628875325
28	Chawnghmingliana	P	Chalrang	8730040374
29	Isak Lallawmzuala	PF	Tlangmawi	7085892765
30	Lalrinchhana	P	Tlangmawi	8729802065
31	Lamthanga	PF	Khualen	9862575041
32	R Lalthawmmawia	P	Biate	9862004095

Khawzawl District Disaster Management Plan, 2022

ELECTRICIANS				
Sl. No.	Contact Person	PF=Professional/ P = Private	Address	Contact No.
33	R Lalpianga	PF	Biate	8974305972
34	Hmingthantluanga	P	Tlangpui	8416047237
35	PB Lalbiaksanga	PF	Rabung	9383177198
36	Lalhuanmawia	P	Vanchengpui	6009288769
37	Hauhnuna	PF	Vangtlang	6909140571
38	Lalthua	P	Aiduzawl	8014369481
39	Muankhuma	P	Lungtan	9862423508
40	Lalngakliana	P	Lungtan	9615462837
41	C Lallawmthanga	P	Chhawrtui	9862344578
42	F Lalngaihawma	P	Chhawrtui	9862906998
43	H Lalenglina	PF	Riangtlei	9615027673
44	Lalsangpuia	P	Riangtlei	9836012511

COMPUTER TECHNICIANS				
Sl. No.	Contact Person	PF=Professional/ P = Private	Address	Contact No.
1	K Laltlanchhuaha	PF	PHE, Khawzawl WATSAN Division	9862541675
2	Lalengkawla Ralte	PF	PWD, Khawzawl Division	9862113343
3	K Lalrinawma	PF	DC's Office, Khawzawl	8259887295
4	Thangrosiama	P	Khawzawl Vengthar	9862127895
5	Lalremruata	PF	BDO's Office, Khawzawl	8131805004
6	Lalremsanga	P	Khawzawl Zuchhip	9862364609
7	K Vanlalawmawia	PF	P&E, Khawzawl Division	8575608645
8	Lalrinawma	P	Tualte	8974898933
9	Rosiamkima	P	Vankal	6909139454
10	PC Laldawngzela	P	Dulte	8787527856
11	Zarzoliana	P	New Chalrang	8575324404
12	R Saprohmingthanga	P	Puilo	8731914256
13	Isak Lahmingmawia	P	Kawlkulh	9856021007
14	H Lalrosanga	P	Kawlkulh	9612564313

Khawzawl District Disaster Management Plan, 2022

COMPUTER TECHNICIANS				
15	Vanawmawia	P	Chawngtlai	9862732092
16	SP Lalremntluanga	P	Neihdawn	9612763164
17	Zothantluanga	P	Khawhai	8119865757
18	LPC Lalruatkima	P	Chalrang	9862060067
19	Jacob Lalrinawma	P	Tlangmawi	7005616773
20	Lalrinliana	P	Tlangmawi	8537336592
21	Zoramchhana Pautu	P	Khualen	9862538286
22	Lalchhanhima Kawlni	P	Sialhawk	8731001894
23	Lalngaihawma Khiangte	P	Sialhawk	8730928116
24	C Lalngaihzuuala	P	Sialhawk	9862531678
25	Lalmachhuana	P	Tlangpui	9366426304
26	Vanramhluna	P	Vanchengpui	9612199014
27	Zoremsanga	P	Vangtlang	9856551504
28	Thanzama	P	Aiduzawl	7630081646
29	Biakhluna	P	Lungtan	8731914280
30	Lalrochhana	P	Chhawrtui	6009426195
31	Vanrohlua Renthlei	P	Chhawrtui	8132812387

PLUMBERS				
Sl. No.	Contact Person	PF=Professional/ P = Private	Address	Contact No.
1	Hranglawma	PF	PHE, Khawzawl WATSAN	9615439698
2	R Lalruatkima	PF	PHE, Khawzawl WATSAN	8118910376
3	C Lalrosanga	PF	PHE, Khawzawl WATSAN	9862925727
4	Lalthangkima	PF	PHE, Khawzawl WATSAN	9862646350
5	Zosangliana	PF	PHE, Khawzawl WATSAN	9862432861
6	David Lalbiaksanga	PF	PHE, Khawzawl WATSAN	8132802829
7	Lalduhsaka	PF	PHE, Khawzawl WATSAN	8837821468
8	Ramdingsanga	PF	PHE, Khawzawl WATSAN	9774129573

Khawzawl District Disaster Management Plan, 2022

PLUMBERS				
Sl. No.	Contact Person	PF=Professional/ P = Private	Address	Contact No.
9	Lalhriatrenga	PF	PHE, Khawzawl WATSAN	9383314768
10	Laldinkima	PF	PHE, Khawzawl WATSAN	9612861322
11	Jacob Lalmalsawma	PF	PHE, Khawzawl WATSAN	9862009920
12	Lalhmuliana	P	Hmuncheng	7629851357
13	Lalhmachhuana	P	Tualte	9615581256
14	Lalsangliana	P	Vankal	6909837223
15	K Lalsiamkima	P	Dulte	6009709910
16	Lalhriatpuia	P	New Chalrang	8575569327
17	Ramhnehzauva	P	New Chalrang	8974958482
18	C Zothantlinga	P	Puilo	6009415842
19	HVL Lawmzuala	P	Kawlkulh	9612559751
20	Lalluahpuia	P	Kawlkulh	8974235380
21	Tlahununa	PF	Chawngtlai (PHE)	8014671253
22	H Lalrinpuia	P	Neihdawn	9612124380
23	Hmingthanzauva	PF	Khawhai (PHE)	8794860946
24	Ralkapvela	P	Tualpui	6909883110
25	David RT Khuma	P	Chalrang	9856926441
26	Rosiana	P	Tlangmawi	9862423785
27	Vanneihluanga	P	Tlangmawi	8729833121
28	Lamthanga	P	Khualen	9862575041
29	Lalchamliana	P	Sialhawk	9612763819
30	Lalnunhlua	P	Tlangpui	8974957963
31	K Rongheta	P	Rabung	7627994874
32	Lalhruaitluanga	P	Vanchengpui	7085847308
33	Tlanghlimthanga	P	Vangtlang	7085118051
34	Lalrinzuala	P	Aiduzawl	8131955763
35	Ramdinthara	P	Lungtan	9383078103
36	Lalbiaktluanga	P	Lungtan	8794010865
37	Ngursailova	P	Chhawrtui	8575273104
38	Lalsangkima	P	Riangtlei	7085615441

Khawzawl District Disaster Management Plan, 2022

MEDICAL DOCTORS				
Sl. No.	Name	Designation	Address	Contact
1	Dr. Frank Harris	Medical Superintendent	District Hospital, Khawzawl	9436156794/ 8257806705
2	Dr. Albert Lalhminghlua	Medical Officer	District Hospital, Khawzawl	9862829724
3	Dr. Zozikpuii	Medical Officer	District Hospital, Khawzawl	8729986892
4	Dr. Lalnunpuii Renthlei	Medical Officer (Ayush)	District Hospital, Khawzawl	9862127607
5	Dr. Melody Lalmuanpuii	Medical Officer	District Hospital, Khawzawl	8974212717
6	Dr. Helen Lalnunpuii	Medical Officer	Khawhai PHC	8131824632
7	Dr. Lallawmkimi Chhakchhuak	Medical Officer	Biate PHC	9856853895/ 8729821497
8	Dr. Hilary Remsangpuii	Medical Officer	Kawlkulh PHC	9862711900
9	Dr. Lalhminghlua	Medical Officer	Rabung PHC	9862746628
10	Dr. Lalrohlupuii	Medical Officer	Sialhawk PHC	8730835371
11	Dr. Philip Lawmsangzuala	Veterinary Officer	District AH&Vety Hospital, Khawzawl	8974419361

ENGINEERS				
Sl. No.	Name	Designation	Address	Contact
1	Zosangliana Zote	EE, PWD	Khawzawl Vengthar	9436141081
2	K. Laldusanga	EE, P&E	Khawzawl Electric	8118910161
3	Lalzakhama	EE, PHE	Khawzawl Electric	9436153813
4	M. Lalrammawia	SDO, PWD	Khawzawl Vengthar	8974036080
5	F. Lalrintluanga	SDO, PWD	Kawlkulh	9383073646
6	V Lalamvela	SDO, P&E	Khawzawl Hermon	9436154704
7	Lalnunfela	SDO, PHE	Khawzawl Electric	8131959905
8	C Chawngsangliana	JE, PWD	Khawzawl Vengthar	8974137845
9	F Lianhmingthanga	JE, PWD	Khawzawl Vengthar	9863370703
10	Malsawmtluanga	JE, PWD	Khawzawl Vengthar	7085848097
11	James Lalbiakthanga	JE, P&E	Khawzawl Hermon	8731889015
12	C Thangrikhuma	JE, P&E	Khawzawl Hermon	8730974618
13	Lalramchhani	JE, PHE	Khawzawl Electric	81361959827

Khawzawl District Disaster Management Plan, 2022

CARPENTERS			
Sl. No.	Contact Person	Address	Contact No.
1	K Lalchuhvela	Khawzawl Electric	7628895160
2	C Lalhmingthanga	Khawzawl Dinthar	8014075885
3	FC Lalsiamliana	Khawzawl Electric	8575324684
4	Lorence Ropara	Khawzawl Electric	9366939317
5	Rosangliana	Hmuncheng	9383301751
6	Rokhuma	Tualte	9862423351
7	Lalhrila	Vankal	8974135385
8	HM Lalrindika	Dulte	8837386729
9	Lalbiakkima	New Chalrang	8014225710
10	Lalthlanthanga	Puilo	8787664058
11	C Lalbiaknia	Puilo	6009587387
12	Chawngchhuana	Kawlkulh	9615541054
13	R Lalnghakliana	Kawlkulh	8414011965
14	R Tlangthianghlima	Chawngtlai	9862732092
15	Chawngkhuma	Neihdawn	8729819122
16	R Lallungmuana	Khawhai	8014006165
17	VL Hmuchhuaka	Tualpui	9862183986
18	Khiangthanpuia	Chalrang	7628969323
19	Vanlalduata	Tlangmawi	7630978912
20	Lallawmkima	Khualen	9414895215
21	Pumsianpau	Ngaizawl	6909813916
22	R Lalthantluanga	Sialhawk	9774271157
23	Darkhuma	Tlangpui	9612559707
24	Zampuia	Rabung	8731890209
25	Lalropuia	Vanchengpui	7628805268
26	Kapliana	Vangtlang	7085482615
27	Thanzama	Aiduzawl	7630081646
28	Lalthankima	Lungtan	9774329784
29	PC Vanlalauva	Chhawrtui	8974367881
30	R Lalnghinglova	Riangtlei	8413098504

Khawzawl District Disaster Management Plan, 2022

CEMENT MISTIRI			
Sl. No.	Contact Person	Address	Contact No.
1	Lianchhawna	Khawzawl Vengthar	9862531890
2	PC Chuauhnuna	Khawzawl Dinthar	9862311437
3	R Lalramthara	Khawzawl Vengthar	8014724701
4	R Lalpianthanga	Khawzawl Kawnzar	6909702508
5	Lalnilawma	Hmuncheng	6909498989
6	RK Lalbiakchhunga	Tualte	7630088568
7	Malsawmkima	Vankal	8731999030
8	H Lalbiakkima	Dulte	8787376490
9	Lalhriatpuia Sailo	New Chalrang	8415063762
10	C Lalbiaknia	Puilo	6009587387
11	C Hrangthankima	Puilo	6009150592
12	Chawngchhuana Sailo	Kawlkulh	9862533780
13	B Rodawla	Kawlkulh	8413008616
14	H Siamhluna	Chawngtlai	8974239479
15	HS Lalremmawia	Neihdawn	9862423130
16	Lalremruata	Khawhai	8014530018
17	C Lalrinmuana	Tualpui	8974742511
18	Lalramchhana	Chalrang	9383199800
19	Biakrinpuia	Tlangmawi	9366706714
20	Chawngdingliana	Khualen	9863057721
21	Paulamchin	Ngaizawl	8413063184
22	Thankima	Sialhawk	8259851349
23	Lalnunsanga	Tlangpui	9863104893
24	Lalkrosmawia Ralte	Rabung	9862424100
25	Lallianpuia	Vanchengpui	7628895427
26	Lalramthara	Vangtlang	8014005667
27	Lalnunzuala	Aiduzawl	8131955763
28	Lalremsiama	Lungtan	8259982167
29	Malsawmkima Sailo	Chhawrtui	6009073381

MASONRY			
Sl. No.	Contact Person	Address	Contact No.
1	H Dengmawia	Khawzawl Hermon	8974135543
2	TBC Lalmuanzuala	Khawzawl Electric	9615486358
3	R Biaklala	Khawzawl Vengthar	8974136260
4	Zohmingthanga	Khawzawl Kawnzar	9862935003

Khawzawl District Disaster Management Plan, 2022

MASONRY			
Sl. No.	Contact Person	Address	Contact No.
5	Lalremruata	Hmuncheng	9618971453
6	Rotluangkima	Tualte	9612131817
7	K Zonunthara	Vankal	9366696515
8	PC Laltanpuia	Dulte	7085077165
9	Lalawmpuia	New Chalrang	8014345799
10	C Lalbiaknia	Puilo	6009587387
11	H Lalrinmawia	Kawlkulh	9612074832
12	C Ramhmingthanga	Kawlkulh	9612004533
13	C Malsawmtluanga	Chawngtlai	7629878865
14	Lalsangzuala	Neihdawn	9383009168
15	Laltlangvela	Khawhai	7085616971
16	Andy Zoramsanga	Chalrang	9774476517
17	Lalbiakzuala	Tlangmawi	7085178300
18	Zoramchhana	Khualen	9862305772
19	Lalthanpuia	Sialhawk	8729812488
20	Laltlanhlua	Tlangpui	8119887072
21	Lalkrosmawia Ralte	Rabung	9862424100
22	Lalneihkima	Vanchengpui	9862419237
23	Vanlalngaia	Vangtlang	6909498166
24	Malsawmtluanga	Aiduzawl	8575300978
25	Lalchungnunga	Lungtan	8132907913
26	C Lalropuia	Chhawrtui	7229073943
27	Zoramawia	Riangtlei	7085355792

Khawzawl District Disaster Management Plan, 2022

Annexure IV

LIST OF DISASTER MANAGEMENT EQUIPMENT IN THE DISTRICT

Department/Office/Agency	Equipment	Quantity
2nd IR Battalion, Khawzawl Lungvar	Surgical Gloves	800
	Walkie Talkie	3
	First Aid Kits	2
	Aluminium ladder	1
	Rope ladder	7
	Life Jackets	4
	Search Lights	2
	Electric Generator (10 kv)	1
	Rope	5
	Axe	5
	Helmet	50
	Spade	6
	Sledge Hammer	5
	Chipping Hammer	1
	Circular Saw with Diamond Blade (Electric)	1
	Electric Drill	1
Bolt Cutters (Shears)	2	
District Agriculture Office, Khawzawl Electric Veng	Sprayer	2
	Sanitizer Spray	5
	Hand Gloves	5 pairs
	Mask	10
	Water Tank	7
District Horticulture Office, Khawzawl	Sprayer	2
	Sanitizer Spray	2
	Mask	20
	Water Tank	1
Environment, Forest & Climate Change Dept., Khawzawl Hermon	Clothing Chemical protective (A,B,C)	2
	Rope	1
	Spade	1
Irrigation and Water Resources Department, Khawzawl Darngawn	Sanitizer Spray	5
	Hand Gloves	5
	Mask	10
	Soaking Kit	5
Government Khawzawl College, Khawzawl Darngawn	Life Jackets	4
	First Aid Kits	1 Box

Khawzawl District Disaster Management Plan, 2022

Department/Office/Agency	Equipment	Quantity
	Stretcher	1
	Electric Torch	1
	Search Lights	1
	Circular Saw with Diamond Blade (Electric)	1
	Electric Drill	1
	Bolt Cutters (Shears)	2
Khawzawl Higher Secondary School	Axe	1
	Spade	1
	Iron Shod levers (10 ft. long)	1
Power & Electricity Department, Khawzawl Electric Veng	Walkie Talkie	2 sets
	VHF Sets Static	2
	First Aid Kits	2
	Aluminium ladder	2
	Electric Torch	2
	Electric Generator (10 kv)	1
	Rope	5
	Hacksaw	5
	Helmet	30
	Spade	15
	Shovel	15
	Rubber gloves (tested upto 25,000 volts)	10 pairs
	Electric Drill	1
	Steel Cutter/Grinder	1
District Education Office, Khawzawl Vengthar	Surgical Gloves	50
	Surgical Masks	50
	N95 Masks	5
	Sprayer	1
	Sanitizer Spray	10
	Electric Generator (10 kv)	1
	Crow bar	1
	Spade	1
	Shovel	1
	Police Department, Khawzawl	Surgical Gloves
Surgical Masks		60
PPE Kit		25
Sanitizer Spray		15
Hand Gloves		8

Khawzawl District Disaster Management Plan, 2022

Department/Office/Agency	Equipment	Quantity
	Walkie Talkie	15 sets
	Electric Generator (10 kv)	1
	Rope	1
District Hospital, Khawzawl Hermon	Water Resistant Gown	50
	Ventilator Adult	2
	Goggles	103
	Surgical Gloves	50 pairs
	Masks	300
	Sanitizer Spray	10
	PPE Kit	200 sets

Annexure V

LIST OF FLOOD/CYCLONE SHELTERS IN THE DISTRICT IDENTIFIED BY VDMC.

Locality	Identified Halls	Capacity
Khawzawl Arro	Branch YMA Hall	150
	The Salvation Army Hall	150
	The Salvation Army Y.P.Hall	50
	United Penticostal Church (NEI)	150
Pamchung	Community Hall	250
	Biak In	250
Khawzawl Dinthar	Presbyterian Kohhran Hall	50
	YMA Hall	50
	Village Council Hall	10
	PWD I.B.	5
Khawzawl Zaingen	Zaingen Branch YMA Hall	50
	Venglai Presbyterian Biak In	50
	Govt.Primary School - I	50
	Govt. Khawzawl College	50
	Khawzawl Higher Sec.School	50
	Far-East Experimental School	30
Dulte	Community Hall	450
	Presbyterian Kohhran Biak In	400
	PCI Centenary Hall	380
	IKK Biak In	300
	IKK Kohhran Biak In	200
	Seventh Day Adventist Hall	100
	BNRGSK Hall	80
	Govt. Middle School	150

Khawzawl District Disaster Management Plan, 2022

Locality	Identified Halls	Capacity
	Govt. Primary School	150
	Anganwadi Centre I & II	100
Zuchhip	YMA Hall	100
	Kohhran Hall - 2 Nos.	70+100
	BNRGSK Building	50
	High School	150
Sialhawk	Community Hall	350
	RL Memorial House	60
	BNRGSK Building	60
	Sialhawk 'S' Presbyterian Biak In	250
	Zion Church of God(Israel) Biak In	100
	Christ Redemtion Church Biak In	60
	The Salvation Army Biak In	150
	Village Council House	20
	Sialhawk Kohhran Sande Sikul Hall	80
Puilo	Community Hall	250
	Biak In	150
Rabung	Community Hall	500
	BNRGSK Building	50
	Govt. High School Building	150
	Govt. Middle School Building	160
	Govt. P/S-I Building	180
	Govt. P/S-II Building	160
	Presbyterian Biak In 2 Nos.	900
	UPC NEI Biak In	400
	UPC Mz Biak In	500
Khawzawl Vengthar	Vengthar Branch YMA Hall	1000
	Vengthar Presbyterian Biak In & Hall	1500
	Vengthar North Presbyterian Kohhran Biak in	250
	UPC, NE Kohhran Biak In	200
	UPC, Mizoram Kohhran Biak in	200
	FBC Kohhran Biak In	200
	BRC Hall	50
New Chalrang	Community Hall	350
	Presbyterian Biak In	300
	Isua Krista Kohhran Biak In	200
	UPC (NEI) Biak In	250
	Library Building	150
	Govt. Primary School	200
	Govt. Middle School	200
Lungvar	YMA Hall	300

Khawzawl District Disaster Management Plan, 2022

Locality	Identified Halls	Capacity
	Tourist Lodge	300
	Community Hall (2nd IR)	400
Hmuncheng	Community Hall	88
	BNRGSK Hall	50
Khawzawl Electric	Electric Veng YMA Hall	100
	Electric Veng VC House	20
Kawlkulh	Kawlkulh Town Hall	350
	Kawlkulh Centenary Hall	100
	Kawlkulh Presbyterian Kohhran Hall	300
	Kawlkulh Presbyterian Kohhran Biak In	600
	UPC, Vengthar Biakin	500
	Kawlkulh Higher Secondary School	200
	Govt. Kawlkulh High School	200
	Govt. Middle School-I	150
Arro Village	Govt. Primary School - III	100
	BNRGSK Hall	40
Khawhai	Sub-Centre	30
	Town Hall	350
	Indoor Stadium	150
	Khawhai Biak In	250
	Khawhai South Biak In	400
	Khawhai Venglai Biak In	280
	Khawhai North Biak In	550
	UPC (Mz) Biak In	200
UPC (NEI) Biak In	350	
Tualpui		
	Prebyterian Biak In	350
	UPC NEI Biak In	60
	Cerntenary Hall	200
	Govt. Middle School	200
Chalrang	Govt. Primary School	150
	Community Hall	400
	Presbyterian Biak In	300
	Isua Krista Kohhran Biak In	250
Tlangmawi	UPC (NEI) Biak In	150
	Community Hall	300
	Govt. Middle School	100
	Govt. Primary School	100
Vanchengpui	Sunday School Hall	400
	Community Hall	600
	Presbyterian Biak In	500

Khawzawl District Disaster Management Plan, 2022

Locality	Identified Halls	Capacity
	Isua Krista Kohhran Biak In	200
	Roman Catholic Biak In	100
	UPC Biak In	300
	Salvation Army	100
	Primary School	500
	Middle Scool	500
	High School	600
	St.Anthony School	100
	Anganwadi Centre I	100
	Angawadi Centre-II	100
	Anganwadi Centre III	100
Lungtan	Community Hall	300
	Govt. Middlle School	100
	YMA Library House	50
	Prebyterian Biak In	400
	Roman Catholic Biak In	250
	Prebyterian Kohhran Hall	300
Tlangpui	Primary School	100
	Middle Scool	120
	High School	80
	BNREGSK Building	60
	Presbyterian Sunday School Hall	150
	UPC (Mz) Biak In	200
	UPC (Mz) Sunday School Hall	100
Riangtlei	Community Hall	250
	Primary School	300
	Middle Scool	400
Khawzawl Kawnzar	Presbyterian Kohhran Hall	50
	YMA Hall	150
	BNRGSK Hall	30
	UPC (NEI) Kohhran Hall	40
Chhawrtui	Community Hall	1000
	Govt. Middlle School	300
	Govt. Primary School	200
Kawlkulh North	Community Hall	400
	Govt. Primary School	150
	Govt. Middle School	160
	BNRGSK Building	40
Darngawn	Darngawn Branch YMA Hall	100
	YMA Library Hall	30
	New Comprehensive Middle School	100

Khawzawl District Disaster Management Plan, 2022

Locality	Identified Halls	Capacity
	Vengsang Presbyterian Kohhran Hall	100
Khualen	BNRGSK Building	30
	UPC Biak In	100
	UPC Sunday School Hall	30
	Presbyterian Biak In	100
	Presbyterian Sunday School Hall	30
Chawngtlai	Nikuala Hall	200
	BNRGSK Building	20
	Anganwadi Centre 1,2,3,&4	60
	Govt. Primary School I, II & III	150
	Govt. Middle School	100
	Govt. High School	100
	Presbyterian Church with PES Building	300
	UPC (Mizoram)	60
	Prebyterian Church - Phaiveng	150
	Isua Kohhran	50
	Catholic Church	60
Aiduzawl	BNRGSK Building	50
	Anganwadi	10
	Govt. Primary School	50
	Govt. Middle School	50
	Presbyterian Church	70
	UPC (NEI) Church	70
	MUPC Church	70
Khawzawl Hermon	Presbyterian Biak In	500
	Presbyterian Hall	300
	UPC (NEI) Biak In	150
	UPC (MZ) Biak In	150
	Community Hall	200
	Supply Godown building ruak	300
	Primary School -VI	200
	Hermon Middle School	200
	Hermon High School	150
Vangtlang	Community Hall	100
	Govt. Primary School	50
	Govt. Middle School	50
	BNRGSK Building	50
Ngaizawl	Niza In	30
	Presbyterian English School	50
	St. Joseph's School	50
	Community Hall	100

Khawzawl District Disaster Management Plan, 2022

Locality	Identified Halls	Capacity
	Primary School	100
	Middle School	50
	High School	50
	Anganwadi 1,2 & 3	60
Vankal	Community Hall	150
	BNRGSK Hall	100
	Anganwadi Centre	30
	Middle School	50
	Primary School	50
	Isua Krista Kohhran Biak In	100
	Presbyterian Kohhran Biak In	50
	Pathian Kohhran Biak In	100
Tualte	UPC Biak In	80
	Vanhnuailiana Hall	500
	Primary School	300
	Middle School	300
	High School	300
	Biak In 3 Nos.	1000
Biate	BNRGSK House	20
	Zialung Community Hall	200
	BRNSK Building (Ni 100 In)	50
	Anganwadi Centre 1,2,3, &4	80
	Govt. Primary School	50
	Govt. Middle School	50
	Govt. Eastern High School	150
	Presbyterian Church, Biate	400
	Presbyterian Church, Biate North	400
	CM English School	150
	PES School Biate North	150
	UPC (NEI) Biak In	100
Neihdawn	UPC (MZ) Biak In	100
	7th Day Biak In	80
	Community Hall	200
	Presbyterian Biak In	300
	Mizoram UPC Biak In	100
	Presbyterian Building (PES)	300

Khawzawl District Disaster Management Plan, 2022

Annexure VI

LIST OF TRADERS IN KHAWZAWL DISTRICT

House Building Materials			
Sl. No.	Contact Person	Address	Contact No.
1	Liankhuma	Khawzawl Vengthar	9612705350
2	Lalmuanpuia	Khawzawl Vengthar	9612714664
3	H. Lalsangluaia	Khawzawl Zuchhip	9612612381
4	K Lalremsiama	Khawzawl Zuchhip	9612597422
5	Rodingliana	Khawzawl Zuchhip	9862856810
6	Vanlalduhsaka	Khawzawl Dinthar	9612358690
7	Hp Ramhluna	Khawzawl Zaingen	9862465419
8	Rodingliana	Dulte	8837051995
9	Zarzoliana	New Chalrang	8575324404
10	Joshua Chawngthu	New Chalrang	9862808389
11	PC Rosangliana	New Chalrang	8014242806
12	K Lianhminga	Kawlkulh	9862329562
13	Vanlaldawngkima	Chawngtlai	9378095250
14	JH Lalremruata	Chawngtlai	9862610977
15	R Vanlalhruaia	Khawhai	9862012113
16	RS Vanlalpeka	Chalrang	9641037093
17	Zemawia	Sialhawk	8974400823
18	Lalnunthara	Sialhawk	6909711913
19	RH Zachhunga	Sialhawk	8974719934
20	H Zionmawia	Biata	8414894561
21	H Lallawmsiami	Biata	9612310581
22	C. Lalramchhuana	Rabung	8014158601

Groceries			
Sl. No.	Contact Person	Address	Contact No.
1	Chuauthuama	Khawzawl Zuchhip	9612176778
2	VL Siamhmuna	Khawzawl Zuchhip	8014224995
3	Pazawna	Khawzawl Zuchhip	9862538430
4	Civil Pensioner (Durga Prasad)	Khawzawl Dinthar	8974966105
5	Lalventluangi	Khawzawl Vengthar	8132803057
6	F Lalchhanchhuaha	Khawzawl Vengthar	8575184250
7	Rosanga	Khawzawl Vengthar	8014244485

Khawzawl District Disaster Management Plan, 2022

Groceries			
Sl. No.	Contact Person	Address	Contact No.
8	Mimi Lalthazuali	Khawzawl Hermon	9366917776
9	Lalhunmawia	Khawzawl Vengthar	8974137314
10	TC Lalramenga	Khawzawl Vengthar	9862541674
11	C Lalliansanga	Khawzawl Vengthar	9774471652
12	Lalvuana	Khawzawl Kawnzar	7629971316
13	JH Rothianga	Khawzawl Kawnzar	8131989130
14	Laldingpuia	Hmuncheng	9612230267
15	Lalrengpuii	Tualte	7085485628
16	Thanrumi	Vankal	9383247757
17	Lalmuanpuii	Dulte	7005917035
18	K Siamliana	Puilo	8730973433
19	K Lianhminga	Kawlkulh	9862329562
20	C Zarzoliana	Kawlkulh	8413063001
21	B Thanliana	Chawngtlai	9856624857
22	Lallianthangi	Chhawrtui	9862680344
23	Lalropari	Chalrang	8131989632
24	Hrangkimi	Chalrang	8415842213
25	R Malsawmtluanga	Biate	7085214360
26	Vanlalnemi	Biate	9862230074
27	Lalhuma	Tlangpui	9863197876
28	Chanchinmawia	Rabung	8575185694
29	Laldingliani	Vanchengpui	9612181677
30	Vanlalfaki	Vangtlang	9615298366
31	Lalengmawii	Lungtan	6909882148
32	Saitawni	Tlangmawi	9612218687
33	V Paukhanmang	Ngaizawl	9862787110
34	Lalnunthari	Sialhawk	8730922105
35	Malsawmtluanga	Sialhawk	6909488213
36	Laltlankimi	Sialhawk	8014118613
37	Suakhnuna Kawlni	Khawhai	7628030858

Medicine/Drug Stores			
Sl. No.	Contact Person	Address	Contact No.
1	Vanhlupuii	Khawzawl Zaingen	9612522339
2	David Lalnunmawia	Khawzawl Zaingen	9612739241
3	Lalmangaihi	Khawzawl Zaingen	8014227627
4	Lalmangaihsangi	Khawzawl Zuchhip	9612113554

Khawzawl District Disaster Management Plan, 2022

Medicine/Drug Stores			
Sl. No.	Contact Person	Address	Contact No.
5	PC Zasiama	Khawzawl Dintar	9612576951
6	PC Malsawmtluangi	Khawzawl Vengthar	9612358525
7	H Lalrinmawia	Khawzawl Vengthar	9612495412
8	Lalengkawli	Khawzawl Vengthar	9612964578
9	Lalhmimgmawia	Khawzawl Vengthar	9862127607
10	C Lalawmpuii	Khawzawl Hermon	7640837177
11	C Lalrinzama	Tualte	9366863954
12	Vanlalhriata	Vankal	9862738784
13	R Chawiliana	Dulte	9862449675
14	F Chalkima	New Chalrang	9612700095
15	Biakveli	Kawlkulh	9862712168
16	R Lalremzauva	Kawlkulh	9615051619
17	Rosa Laltlanhlua	Chawngtlai	8974166399
18	Lalrinchhani	Chawngtlai	8731989021
19	Suakhnuna	Khawhai	7628030858
20	Laldinpuii	Khawhai	8729981541
21	B Malsawmtluanga	Tualpui	8414007667
22	F Zaithantluanga	Chalrang	9862339690
23	Lalzawngliana	Chalrang	9862538358
24	Laltlanthanga	Tlangmawi	8729820217
25	David GK Tuang	Ngaizawl	9862958520
26	Timothy LD Pau	Ngaizawl	9862163275
27	VL Muanpuia	Sialhawk	9862421505
28	Lalnunthara	Sialhawk	6909488213
29	Lalpiandengi	Sialhawk	8730094690
30	K Lalfakawma	Biate	8414963994
31	TC Lalduhkima	Biate	8575175330
32	Tlangchungnunga	Tlangpui	7085532361
33	Vanlalawma	Rabung	8132811312
34	Laltlanthangi	Vanchengpui	9856998822
35	Lalrinfela	Vangtlang	9383077355
36	Ramchhanthangi	Lungtan	
37	Lalnilawmi	Chhawrtui	9863003265

Khawzawl District Disaster Management Plan, 2022

Electrical Equipment			
Sl. No.	Contact Person	Address	Contact No.
1	K Lalngurpuia	Khawzawl Vengthar	9862223598
2	Lalsanglura Hnamte	Khawzawl Vengthar	8413933371
3	Aibuangi	Tualte	8729818983
4	Vanlalmawii	Dulte	9862971318
5	C Zamvela	Kawlkulh	8974118126
6	B Thanliana	Chawngtlai	9856624857
7	Lallianthangi	Chawngtlai	9862680344
8	Suakhnuna	Khawhai	7628030858
9	Zemawia	Sialhawk	8974400823
10	Lalnunthara	Sialhawk	6909711913
11	RH Zachhunga	Sialhawk	8974719934
12	H Lallawmsiami	Biate	9612310581
13	H Zionmawia	Biate	8414894561
14	V Khualluna	Rabung	8014673114
15	C Lallawmthanga	Chhawrtui	8974122683

Khawzawl District Disaster Management Plan, 2022

Annexure-VII

VEHICLES IN KHAWZAWL DISTRICT

1. AUTO-RICKSHAW

Sl. No.	Name of owner & Phone number	Address	Motor Number	Driver's Name & Phone Number
1	2	3	4	5
1	R Lalremlenga 7629879302	Khawzawl Electric	Mz-04 7062	Same as col-2
2	JH Lalbiakzuala 9856941051	Khawzawl Electric	Mz-04 5763	Same as col-2
3	R Lalthianghlina 9615673523	Khawzawl Zuchhip	Mz-04 5320	Same as col-2
4	Lalfakawma 8415969060	Khawzawl Dinthar	Mz-04 6038	Same as col-2
5	B Lalrohlupeua 9774904459	Khawzawl Lungvar	Mz-04 8277	Same as col-2
6	C Lalbiakenga 9862175194	Khawzawl Dinthar	Mz-04 A 0232	C Lalramlawma 8132935798
7	HMS Dawngliana 9862647753	Khawzawl Vengthar	Mz-04 9885	Same as col-2
8	Lalduhsaka 8794406571	Khawzawl Arro	Mz-04 7217	Same as col-2
9	Lalropeka 9612938800	Khawzawl Kawnzar	Mz-04 A 1282	Same as col-2
10	Lalsawithanga 8974389717	Khawzawl Kawnzar	Mz-04 1065	Same as col-2
11	Rotlinga 8731881142	Khawzawl Darngawn	Mz-04 1171	Same as col-2
12	Lalrinmuana 7629880910	Khawzawl Vengthar	Mz-04 A 0168	Same as col-2
13	Malsawma 8974669283	Khawzawl Vengthar	Mz-04 6687	Same as col-2
14	Chawngsangzela 8575568769	Khawzawl Hermon	Mz-04 9916	Same as col-2
15	Chawiliana 9615336904	Khawzawl Electric	Mz-04 A 4202	Same as col-2
16	S Lalthanmawia 8731915604	Kawlkulh	MZ-04 9963	Same as col-2
17	PS Lalhuthanga 8118914546	Kawlkulh	MZ-01 J 8952	Same as col-2
18	PC Biakdawna 7640865885	Lungtan	MZ-06 6221	Lalhriatsanga 8259079471

Khawzawl District Disaster Management Plan, 2022

2. JCB IN KHAWZAWL DISTRICT AS REGISTERED BY JCB OWNERS' ASSOCIATION, KHAWZAWL

Sl. No	Owner's Name & Phone Number	Address	Vehicle Number	Operator's/Driver's Phone Number
1	2	3	4	5
1	Rodingliana	Khawzawl Zuchhip Veng	Mz-04 A 1223 Mz-04 A 4142	9862859682
2	R Liankunga	Khawzawl Zaingen Veng	Mz-04 A 1031 Mz-04 A 1141	9862935270
3	R Lalkhawngaiha	Khawzawl Vengthar	Mz-04 A 0299	8415064642
4	T Kaphranga	Khawzawl Vengthar		9612248585
5	Lalruatkimi	Khawzawl Vengthar	Mz-04 A 4058	8416044958
6	Joseph Zonunmawia	Khawzawl Zuchhip	Mz-01 Q 5066	9612131818
7	Lalbiaknia	Khawzawl Vengthar	Mz-04 9308	8118907281
8	Lalrammawia	Khawzawl Arro Veng	Mz-04 A 2247	8413848092
9	Ruatpuii	Khawzawl Hermon	Mz-04 N 2146	8014614326
10	Zuimawia	Khawzawl Vengthar	Mz-01 P 3230	9615948409
11	Lalhuliana 6009123989	Chhawrtui	MZ-04 0591	Caleba Lalrinnggheta 6009582911
12	TBC Lalsangzuala 9615673363	Biate	MZ 04 5485	Same as Col-2
13	Lalbiakzuala Hrahsel 8837045150	Dulte	MZ 01 K 1315	Lalhriatpuia 9366045150
14	H Lalremsanga 7629970663	Chawngtlai	MZ 01 Q 2749	Lalnimawia 6909482305
15	R Laldingliana 8014705971	Kawlkulh	MZ 04 A 1664	Dawngliana 6009989894

Khawzawl District Disaster Management Plan, 2022

3. TRUCK IN KHAWZAWL DISTRICT AS REGISTERED BY TRUCK OWNERS' ASSOCIATION, KHAWZAWL

Sl. No	Owner's Name & Phone Number	Address	Vehicle Number	Driver's Name & Phone Number
1	2	3	4	5
1	Lalengpuia 8730907345	Khawzawl Arro		Same as col-2
2	Vanlalthakima	Khawzawl Zaingen		Same as col-2
3	K Lalchhuanmawia 8732838634	Khawzawl Zaingen	Mz-04 A 1239	Same as col-2
4	Rodingliana (Valtea)	Khawzawl Zuchhip	Mz-04 0199	Same as col-2
5	C Lalremruata 8730906508	Khawzawl Zaingen	Mz-04 A 2393	Same as col-2
6	Joseph Zonunmawia 9612131818	Khawzawl Zuchhip	Mz-04 A 0200	Same as col-2
7	R Laltlanthanga 8014008962	Khawzawl Dinthar	Mz-04 A 0924	Roney-a
8	Rohmingthanga 9862541642	Khawzawl Kawnzar	Mz-01 F 3083	Same as col-2
9	Thlengkima 8731001815	Khawzawl Vengthar		Same as col-2
10	Rothangpuia 8731001815	Khawzawl Vengthar		Same as col-2
11	R Lalthasiamia 9862194789	Khawzawl Vengthar	Mz-04 A 0922	Same as col-2
12	Khawtea	Khawzawl Vengthar		Same as col-2
13	Kaphranga 9612248585	Khawzawl Vengthar		Same as col-2
14	Lalliansanga 9774471652	Vengthar	Mz-04 A 0335	Same as col-2
15	Hmingsangzuala 9862813139	Khawzawl Zaingen	Mz-04 4920	Same as col-2
16	R Liankunga 9862935270	Khawzawl Zaingen	Mz-01 D 9602	Same as col-2
17	R Lalremmawia 8794852859	Khawzawl Electric		Same as col-2
18	PC Lalbiakngheta	Khawzawl Hermon	Mz-01 D 4872	Same as col-2
19	Lahmingmawia	Khawzawl Arro		Same as col-2
20	Lalruatdika	Khawzawl Vengthar	Mz-04 A 1293	Same as col-2

Khawzawl District Disaster Management Plan, 2022

Sl. No	Owner's Name & Phone Number	Address	Vehicle Number	Driver's Name & Phone Number
21	K Lalarliana 9862982795	Khawzawl Vengthar	Mz-04 3861	Same as col-2
22	MS Dawngliana 7629971084	Khawzawl Hermon	Mz-04 3861	Same as col-2
23	C Biaktluanga 6009010724	Chawngtlai	MZ-04 A 4117	Same as col-2
24	C Lalchhandama 6009038621	Chawngtlai	MZ-04 3420	Same as col-2
25	R Vanlalhluna 9612522283	Chawngtlai	MZ 04 2635	C Vanlalremruata 9862684040
26	K Lallianhminga 9862329562	Kawlkulh	MZ 01 T 7977	Lallawmsanga 9615478597
27	R Lalfakzuala 8413838631	Kawlkulh	MZ 04 A 3492	Same as Col-2
28	H Lalbiakthanga 8837483354	Kawlkulh	MZ 09 1094	Lalherliana 8837483354
29	Lalrinliana Sailo 9862017457	Kawlkulh	MZ 04 5144	Same as col-2
30	C Lalchhuankima 6009459310	Puilo	MZ 04 3602	Vanlalfaka 6009287852
31	Robert Malsawmzuala 8413097174	Rabung	MZ 04 A 4392	Same as col-2
32	Rinsangzuala 7005058568	Rabung	MZ 04 A 3176	Same as col-2
33	S Lalsawma 9856856659	Rabung	MZ 01 J 6962	Lalhlimpuia 9383301814
34	Hmingthansanga 9366304479	Chhawrtui	MZ 04 7248	Same as col-2
35	Lalmachhuana 6009465877	Chhawrtui	MZ 01 H 8275	Same as col-2
36	Lalchamzuala 8259830494	Biate	MZ 04 A 1821	Same as col-2
37	J Kawlliana 9612079122	Biate	MZ 04 7160	Same as col-2
38	H Lalthianghlina 9383180244	Biate	MZ 06 7913	Same as col-2
39	Lalramhlua 9862409298	Tlangpui	MZ 01 F 3082	Same as col-2
40	Vanhnuaailiana 9612662984	Lungtan	MZ 01 R 9462	Same as col-2
41	Siamkunga 7629973595	Dulte	MZ 01 V 2423	R Lalramdina 8730926154
42	Rodingliana 8837051995	Dulte	MZ 01 V 4287	Same as col-2
43	Lalparliana 9856140597	Chalrang	MZ 01 H 2335	Same as col-2

Khawzawl District Disaster Management Plan, 2022

4. PIK-UP IN KHAWZAWL DISTRICT AS REGISTERED BY PIK-UP OWNERS' ASSOCIATION, KHAWZAWL

Sl. No	Owner's Name & Phone Number	Address	Motor No.	Driver's Name & Phone Number
1	Hmangaihsanga 897481086	Khawzawl Hermon	Mz-04 9374	Same as col -2
2	R Lalnienga 9612764960	Khawzawl Darngawn	Mz-01 T 7097	Same as col -2
3	H Lalhmachhuana 985658022	Khawzawl Hermon	Mz-04 9574	Same as col -2
4	Lalthaa 9862194789	Khawzawl Vengthar	Mz-04 9291	Same as col -2
5	C Lalsanglura 9383181055	Tualte	Mz-04 1214	Same as col -2
6	Malsawmkima 7085485571	Khawzawl Vengthar	Mz-04 A 2121	Same as col -2
7	F Lalchhanchhuaha 8575184250	Khawzawl Vengthar	Mz-04 1967	Same as col -2
8	B Zonunthara 8414006587	Khawzawl Zaingen	Mz-04 0440	Same as col -2
9	B Lalbiaknia 60093696792	Khawzawl Vengthar	Mz-01 T 5355	Same as col -2
10	David Lalmuanpuia 9862769644	Neihdawn	Mz-01 L 3154	Same as col -2
11	R Lalchhandama 9862716823	Khawzawl Vengthar	Mz-01 L 8393	Same as col -2
12	Rodinmawia 9862606988	Khawzawl Vengthar	Mz-06 4572	Same as col -2
13	C Lalnuntluanga 9862326651	Khawzawl Arro	Mz-06 4572	Same as col -2
14	C Vanramnghaka 9856037312	Khawzawl Arro	Mz-04 0432	Same as col -2
15	Romingthanga 8731013090	Khawzawl Lungvar	Mz-04 A 0432	Same as col -2
16	B Vanlalbiakzara 9862495606	Khawzawl Darngawn	Mz-04 7551	Same as col -2
17	Tawklinga 9862423334	Khawzawl Dinthar	Mz-04 5234	Same as col -2
18	PC Lalnunmawia 9862508943	Khawzawl Electric	Mz-01 J 7481	Same as col -2
19	Ralzama Ralte 9862495894	Khawzawl Dinthar	Mz-04 7816	Same as col -2
20	Laldinthara 7085243553	Arro Village	Mz-01 K 0638	Same as col -2

Khawzawl District Disaster Management Plan, 2022

Sl. No	Owner's Name & Phone Number	Address	Motor No.	Driver's Name & Phone Number
21	R Malsawmtluanga 986254945136	Khawzawl Vengthar	MZ-04 2539	Same as col -2
22	Lalbiaknia Sailo 9862546489	Khawzawl Zuchhip	MZ-04 A 1325	Same as col -2
23	Lalramsanga Ralte 8413958836	Khawzawl Vengthar	MZ-01 T 8874	Same as col -2
24	Lalchungnunga 825901934	Khawzawl Dinthar	MZ-04 A 0721	Same as col -2
25	Vanlalruata 8415852355	Kawlkulh	MZ 04 A 6441	Same as col -2
26	R Thanzuali 9862344653	Kawlkulh	MZ 01 K 1007	John Lalnunsanga 8415853457
27	H Malsawmtluanga 936699956	Puilo	MZ 01 M 7161	Same as col-2
28	H Lalnunmawia 6009557903	Puilo	MZ 01 F 5494	Same as col -2
29	Robert Malsawmzuala 8413097174	Rabung	MZ 04 A 2981	Same as col -2
30	Lalthakima 8413009285	Rabung	MZ 01 G 9158	Same as col -2
31	B Lalbiaknghinglova 8415848184	Rabung	MZ 09 0038	PB Lalnunzira 8415848186
32	Lalsawikhuma 8787735751	Chhawrtui	MZ 06 5613	Same as col -2
33	Lalhingpuii 8413832122	Chhawrtui	MZ 04 A 4678	Ramnunmawia 6009218118
34	R Manliana 6009152748	Chhawrtui	MZ 04 7961	Laltlanzova 9366429048
35	Rothanga 8974244551	Neihdawn	MZ 04 A 3504	Rolungmuana 9612347655
36	Lalengmawia 7085485571	Neihdawn	MZ 04 A 2121	Biaknunga 8575764481
37	H Chawngkhuma 8974415297	Biате	MZ 01 U 1287	Same as col -2
38	H Lalthianghlina 9383180244	Biате	MZ 04 6896	Same as col -2
39	Lalchamzuala 7085932221	Biате	MZ 04 6342	R Lalmuanpuia 7085616890
40	Ronguri 8131990183	Tlangpui	MZ 01 R 9895	Lalbiakthuama 9862536599
41	F Ramthanga 8974124181	Tlangpui	MZ 01 J 6441	Laldingngheta 8974638049

Khawzawl District Disaster Management Plan, 2022

Sl. No	Owner's Name & Phone Number	Address	Motor No.	Driver's Name & Phone Number
42	Lalmuankima 8974638049	Lungtan	MZ 01 R 7904	Same as col -2
43	Lalmangaiha 9378095307	Lungtan	MZ 09 0466	Lalnuntluanga 8413859413
44	H. Rotluanga 8730922135	Tlangmawi	MZ 04 7051	Same as col -2
45	Joseph Lalvawng 8974742620	Tlangmawi	MZ 01 R 7938	Same as col -2
46	Laltlanthanga 8413824099	Vanchengpui	MZ 06 3001	Same as col -2
47	J Vanlalsawma 8729874864	Vanchengpui	MZ 01 K 9755	Same as col -2
48	Vanhkira 9856511345	Dulte	MZ 01 U 7093	J Lalmalsawma 9366250386
49	Lalawmpuia 9862214708	Dulte	MZ 04 A 2619	Same as col -2
50	R Rohlupuia 6909022259	Chawngtlai	MZ 01 U 3735	R Zonunmawia 9862576060
51	Hmingthansanga 6009275355	Chawngtlai	MZ 01 T 6524	Same as col -2
52	Chanchinmawia 8974426244	Chalrang	MZ 04 A 0549	Same as col -2
53	Ramhlunmawia 7629971231	Chalrang	MZ 04 9351	Same as col -2
54	Romangpuia 9366122601	Tualpui	MZ 04 7556	Same as col -2
55	Lalremtluanga 8974223635	Tualpui	MZ 01 K 0258	H Sangrimawia 8730974994

Khawzawl District Disaster Management Plan, 2022

5. TAXI IN KHAWZAWL DISTRICT AS REGISTERED BY TAXI OWNERS' ASSOCIATION, KHAWZAWL

Sl. No	Owner's Name and Phone Number	Address	Vehicle Number	Driver's Name & Phone Number
1	2	3	4	5
1	Lalthantluanga 9862423662	Khawzawl Dinthar	Mz-04 -6931	Same as col-2
2	C Sangmawia 9862325255	Khawzawl Dinthar	Mz-04 -8397	Same as col-2
3	Ramhlimawma 6909836954	Khawzawl Dinthar	Mz-04 -8930	Same as col-2
4	Lalthangliana 9612062951	Khawzawl Dinthar	Mz-04 -7907	Same as col-2
5	Lalthangliana 9378094329	Khawzawl Dinthar	Mz-04 -A 0618	Same as col-2
6	C Lalhmingthanga 8258913022	Khawzawl Dinthar	Mz-04 -7798	Same as col-2
7	C Lallawmmawia 8415843478	Khawzawl Dinthar	Mz-04 -A-4052	Same as col-2
8	Lalrohlupeua 8974669634	Khawzawl Dinthar	Mz-04 -A-4237	Same as col-2
9	Kamlova 8575609688	Khawzawl Dinthar	Mz-04 -7190	Same as col-2
10	Vanlaldika 9862174997	Khawzawl Dinthar	Mz-04 - 6972	Same as col-2
11	J Tharmawia 9862769690	Khawzawl Dinthar	Mz-04 -6546	Same as col-2
12	Lalhriathlua 8575408100	Khawzawl Dinthar	Mz-04 5129	Same as col-2
13	Lalrinawma 9562596938	Khawzawl Dinthar	Mz-04 - A 2005	Same as col-2
14	R Lalrokhuma 9856971847	Khawzawl Dinthar	Mz-04 -A 1949	Same as col-2
15	Vanlalhuma 9612552394	Khawzawl Dinthar	Mz-04 -6291	Same as col-2
16	Lalnunenga 8974772039	Khawzawl Zuchhip	Mz-04 -A 4069	Same as col-2
17	PC Vanrammawia 9862174803	Khawzawl Zuchhip	Mz-04 -A-0435	Same as col-2
18	Zorammuana 8974232578	Khawzawl Zuchhip	Mz-04 -A-4008	Same as col-2
19	K.Ms.Dawngliana 8974389502	Khawzawl Zuchhip	Mz-04 - 5505	Same as col-2
20	Lalthakima 8974389502	Khawzawl Zuchhip	Mz-04 -7186	Same as col-2

Khawzawl District Disaster Management Plan, 2022

Sl. No	Owner's Name and Phone Number	Address	Vehicle Number	Driver's Name & Phone Number
1	2	3	4	5
21	Lalbiakmawia 9856872414	Khawzawl Zuchhip	Mz-04 -8305	Same as col-2
22	Vanlalhriata 8575183855	Khawzawl Zuchhip	Mz-04 -6985	Same as col-2
23	Vanlaldawnga 7629970989	Khawzawl Zuchhip	Mz-04 -6775	Same as col-2
24	Vanlalrindika 9862330792	Khawzawl Zuchhip	Mz-04 -A-3724	Same as col-2
25	PC Vanlalremruata 9383301780	Khawzawl Zuchhip	Mz-04 -A-3909	Same as col-2
26	Zahrangpuia 8730907594	Khawzawl Vengthar	Mz-04 -A-0598	Same as col-2
27	J Lalnunmawia 9862653663	Khawzawl Vengthar	Mz-04 -9436	Same as col-2
28	VL Hmangaihzuala 9077497309	Khawzawl Vengthar	Mz-04 -8209	Same as col-2
29	F Laldinsanga 8416076833	Khawzawl Vengthar	Mz-04 -5982	Same as col-2
30	Lalmuanpuia 7085359319	Khawzawl Vengthar	Mz-04 -5972	Same as col-2
31	Lalruatpuia 6009128289	Khawzawl Vengthar	Mz-04 -A-0803	Same as col-2
32	Andrew Lalhmingzauva 7640086478	Khawzawl Vengthar	Mz-04 -7482	Same as col-2
33	H Lalrinkima 8575883829	Khawzawl Vengthar	Mz-04- A-0717	Same as col-2
34	Lalthasanga 9862355331	Khawzawl Vengthar	Mz-04 -7283	Same as col-2
35	Lalrammawia 6009822796	Khawzawl Vengthar	Mz-04 -A-3995	Same as col-2
36	H Lalnithanga 9862789677	Khawzawl Vengthar	Mz-04 -A-3818	Same as col-2
37	Lalchhanhima 9856168020	Khawzawl Vengthar	Mz-04 -A-4219	Same as col-2
38	Lalrinchhana Ralte 9856984159	Khawzawl Vengthar	Mz-04 -A-4074	Same as col-2
39	Lorrain Vanlalbela 9612763599	Khawzawl Electric	Mz-04 -7572	Same as col-2
40	CH Khawtinlala 9862461122	Khawzawl Electric	Mz-04 -6220	Same as col-2
41	Ramluahpuia 6009482243	Khawzawl Electric	Mz-04 -A-3813	Same as col-2
42	Andria Lalnunzia 8119957436	Khawzawl Electric	Mz-04- A-3811	Same as col-2

Khawzawl District Disaster Management Plan, 2022

Sl. No	Owner's Name and Phone Number	Address	Vehicle Number	Driver's Name & Phone Number
1	2	3	4	5
43	T Zomuanpuia 085622230	Khawzawl Electric	Mz-04- A-0257	Same as col-2
44	PC Lalhmingthanga 9383076851	Khawzawl Electric	Mz-04- A-6776	Same as col-2
45	Lallawmawma 8731881889	Khawzawl Electric	Mz-04 6776	Same as col-2
46	Vanenga 8014274934	Khawzawl Electric	Mz-04 -7148	Same as col-2
47	H Lalfamkima 8413835479	Khawzawl Hermon	Mz-04 -A-1846	Same as col-2
48	TC Zorammuana 9089319225	Khawzawl Hermon	Mz-04 6035	Same as col-2
49	Lalengkima 7423000163	Khawzawl Hermon	Mz-04 -A-3994	Same as col-2
50	H Zaihmingthanga 9862354442	Khawzawl Hermon	Mz-04- A-3588	Same as col-2
51	R Lalremruata 8731913393	Khawzawl Hermon	Mz-04 -A-3913	Same as col-2
52	R Lalruatsanga 8259883234	Khawzawl Hermon	Mz-04 -3926	Same as col-2
53	Ngursiama Khiangte 8014534930	Khawzawl Hermon	Mz-04 -9765	Same as col-2
54	Hmingmawibera 8575570322	Khawzawl Zaingen	Mz-04- A-3704	Same as col-2
55	Zoremawia 9615408589	Khawzawl Zaingen	Mz-04- A-3976	Same as col-2
56	Samuel Lalnunthara 8131984427	Khawzawl Zaingen	Mz-04- A-3819	Same as col-2
57	Vanlalnghena 8132801405	Khawzawl Darngawn	Mz-04- A-0838	Same as col-2
58	Lalbiaknia 8731880643	Khawzawl Darngawn	Mz-04 -7957	Same as col-2
59	Ramchhantluanga 9612513754	Khawzawl Darngawn	Mz-04 -5291	Same as col-2
60	K Lalchhuanmawia 9862657589	Khawzawl Darngawn	Mz-04 -6592	Same as col-2
61	Lalropuia 7628016010	Khawzawl Darngawn	Mz-04 -6970	Same as col-2
62	Lalmalsawma 8257892346	Khawzawl Darngawn	Mz-04 -6069	Same as col-2
63	Lalthlengliana 9388301896	Khawzawl Darngawn	Mz-04 -A-3641	Same as col-2
64	Zodawla 9615523524	Khawzawl Lungvar	Mz-04 -7131	Same as col-2

Khawzawl District Disaster Management Plan, 2022

Sl. No	Owner's Name and Phone Number	Address	Vehicle Number	Driver's Name & Phone Number
1	2	3	4	5
65	LT Sanga 9612118413	Khawzawl Lungvar	Mz-04 -A-2159	Same as col-2
66	Johny K Lalvenhima 9612854266	Khawzawl Lungvar	Mz-01 -K-5234	Same as col-2
67	F Lalrinawma 8425843088	Khawzawl Lungvar	Mz-04 -6752	Same as col-2
68	Lalrinhlua 8132812319	Khawzawl Lungvar	Mz-04 -7075	Same as col-2
69	Lalranpuia Varte 8014123080	Khawzawl Kawnzar	Mz-04 -5594	Same as col-2
70	R Lalpuia 9774702684	Khawzawl Kawnzar	Mz-04- A-2171	Same as col-2
71	K Vanlalsiama 9862392168	Khawzawl Arro	Mz-04 A-4016	Same as col-2
72	Thangchhuanmawia 7005235955	Chawngtlai	MZ 04 A 4575	Same as col-2
73	Lalthakhuma 8413834782	Chawngtlai	MZ 04 A 6764	Same as col-2

6. MAXI CAB IN KHAUZAWL DISTRICT AS REGISTERED BY MAXI CAB ASSOCIATION, KHAUZAWL

Sl. No	Vehicle Name	Name of owner & Phone number	Address	Motor Number	Driver Name & Phone Number
1	2	3	4	5	6
1	Duhsangi	Zahawma 9856868079	Khawzawl Kawnzar	Mz-04 6137	Same as col-3
2	Sangtei	Lalchhanhima 9862967763	Khawzawl Darngawn	Mz-04 7133	Same as col-3
3	Sangtei	Lalchhanhima 9862967763	Khawzawl Darngawn	Mz-01 H 8323	Zonunsanga 8259840445
4	Emanuel	Lalawmpuia Zote 9862315484	Khawzawl Electric	Mz-01 3734	Same as col-3
5	Go Go-a	Biakhmingliana 9862808606	Khawzawl Zaingen	Mz-01 H-5131	Vanlalrawna 9862009353
6	Arintei	Zoramstatethara 7629878795	Khawzawl Darngawn	Mz-06 - 4658	Same as col-3
7	Mami	Biakhmingthanga 9862763782	Khawzawl Dinthar	Mz-01 K-4604	Same as col-3
8	Kim Kimi	Vanlalruata 7629971161	Khawzawl Kawnzar	Mz-04 7297	Same as col-3

Khawzawl District Disaster Management Plan, 2022

Sl. No	Vehicle Name	Name of owner & Phone number	Address	Motor Number	Driver Name & Phone Number
1	2	3	4	5	6
9	Nutei	HP Chhawntluanga	Khawzawl Zaingen	Mz-01 R-1944	Hrangthankima 9612385073
10	RBI Hlondo	HL Nikunga 9612102090	Khawzawl Lungvar	Mz-04 8150	Same as col-3
11	RZ	Lalthlamuana 8731979991	Khawzawl Vengthar	Mz-04 6901	Same as col-3
12	Benny	Lalhruaitluanga 6909494841	Khawzawl Darngawn	Mz-04 8175	Same as col-3
13	Ruthi	Lalduhawma 8974836607	Khawzawl Zuchhip	Mz-04 4063	Same as col-3
14	Josua	Lalramnunsanga 8014422406	Khawzawl Vengthar	Mz-04 4248	Same as col-3
15	V & R	Vanlalsiama 8787413118	Khawzawl Hermon	Mz-06 3990	Same as col-3
16	Materema	Laldingngheta 8257991764	Khawzawl Zaingen	Mz-04 7257	Same as col-3
17	K & M	Robert Kham Khan Pau 9862575211	Ngaizawl	Mz-04 4005	Lalbiakluanga 9436756289
18	Ngurtea	Ngurthanpuia 8974739473	Chawngtlai	Mz-06 6385	Same as col-3
19	Mama	Phaironghaka 8414009037	Tualte	Mz-01 J 2952	Same as col-3
20	LMS	Francis Lalmuansanga 7638936487	Tualte	Mz-08 1407	Biaktea 8014834837
21	Sangbawih i	K Lallianhminga 9862329562	Kawlkulh	MZ 04 A 1235	Ropuia 9862343942
22	KT	Khawtinthanga 8014775429	Kawlkulh	MZ 01 E 5480	Thanglura 9612132767
23	LS Tlau	Vanlallawma 8132811312	Rabung	MZ 04 6754	Robert-a 8119965433
24	RLS	Philip Lalthianghlina 9366171037	Chhawrtui	MZ 01 J 1911	Same as col-3
25	Kavin	Malsawmtluanga 9366757964	Chhawrtui	MZ 01 H 6921	Same as col-3
26	Dorothy	F Lahmingsanga 9862881088	Biate	MZ 01 M 2121	Lalramdinga 7085616726
27	Vantawl	V Lalbiakzuala 9862004095	Biate	MZ 04 A 1597	B Lalngaihzuala 9862085772
28	-	Kapzuala 9366176220	Tlangpui	MZ 04 A 2415	Kapsanga 6909098082

Khawzawl District Disaster Management Plan, 2022

Sl. No	Vehicle Name	Name of owner & Phone number	Address	Motor Number	Driver Name & Phone Number
1	2	3	4	5	6
29	Bawiha	R Lalhmingliana 8014532295	Vanchengpui	MZ 01 H 6202	Lalrinthara 7628004722
30	Johan & Gabriel	Lawmkima 7085454699	Vanchengpui	MZ 04 9619	Same as col-3
31	Dingpuia	Laldingpuia 8731004561	Sialhawk	MZ 01 P 0438	Same as col-3
32	Zachhunga	Zachhunga 8974759031	Sialhawk	MZ 06 7827	Same as col-3