DISASTER MANAGEMENT PLAN

DEPARTMENT OF POLICE

GOVERNMENT OF HIMACHAL PRADESH

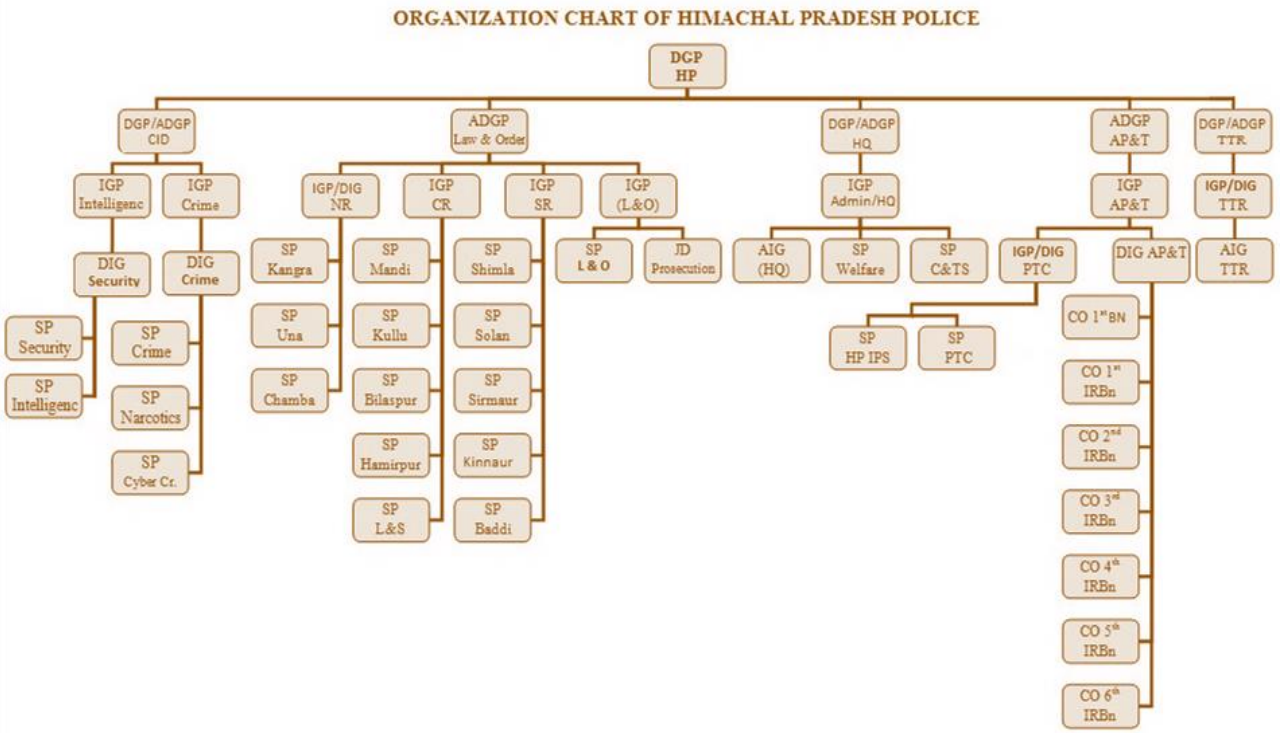
CONTENTS

1. INTRODUCTION

1.1 OVERVIEW OF THE DEPARTMENT

Police as an organization perceives itself as a major player in disaster management. It will continue to have the first responder role given its proximity to the incident site and relationship with the people. It must adopt disaster management function as one of its primary functions. State & district level authorities cannot afford to wait for response specialized forces such as NDRF all the time. Moreover, on many occasions, it might not be advisable or feasible to obtain/deploy armed forces and NDRF. Hence state police must be prepared as a response force. The police are among first responders during any disaster because

Organizational structure of the Police Department



There are 114 Police Stations in the State including 12 PSs of SVACB, 2 PSs of TTR and 1 PS of CID. 112 Police Posts located in the 12 Districts and 1 Police District Baddi of the State. The present strength of Himachal Pradesh Police includes 89 IPS officers, 169 State Police Services officers, 2051 NGOs grade-I, and 14794 NGOs grade-II.

1.2 PURPOSE OF THE PLAN

Every department of the State Governments is legally mandated under Section 40 of Disaster Management Act 2005 to prepare its disaster management plan in accordance with the guidelines laid down by the State Disaster Management Authority. The Act stipulates that while preparing the plan, every Department shall make provisions for financing the activities specified therein

- The plan shall be reviewed and updated annually
- A report on the status of implementation of the plan must be furnished to the State Executive Committee.

The overall aim of the plan is to make the department resilient enough to deal with any unlikely events. The plan will also provide guidance to attached and subordinate offices to manage the risks of disasters before, during and after a disaster.

1.3 SCOPE OF THE PLAN

The plan will clarify the significance of various disaster management activities which are needed to be performed for making Police Department premises safer. It gives comprehensive information regarding hazards, their probability and methods to reduce their impact on planning, mitigating and building the capacity of structural and non-structural components of the complex.

Objective of the Plan

The main objective of this plan is:

- To reduce the risk level through preparedness at various levels.
- To bring together the information related to equipment, skilled manpower and critical supplies.
- To know the standard operating procedures of the department at the time of disaster.
- To fix the role and responsibility of each and every officer for disaster preparedness.
- To help the Department to assess its own capacity in terms of available resources and get ready to mitigate and unexpected disaster effectively and to prevent the loss of human lives and property through preparedness, prevention & mitigation of disasters.
- To assist the line departments, block administration, communities in developing compatible skills for disaster preparedness and management.
- To disseminate factual information in a timely, accurate and tactful manner while maintaining necessary confidentiality.
- To develop immediate and long-term support plans.

The police department has been given a very specific role as primary support agency:

Search and Rescue	Department of home through Police, Home Guard & Fire Brigade will provide specialized life-saving assistance to district and local authorities in locating, extricating and providing on-site medical treatment to victims trapped in collapsed structures.

1.4 AUTHORITIES, CODES, POLICIES

Functioning of Disaster Management in Himachal Pradesh is governed as per the Disaster Management Act 2005 and Himachal Pradesh Disaster Management Plan 2012. Apart from that, various policies and schemes funded by state and central both also contain disaster risk mitigation measures. As per Section 23 of the DM Act 2005, there shall be a DM plan for every state and within the state, there must be departmental plans for the concerned agencies to deal with disastrous situation smoothly. It provides for the departments of the state governments to draw up their own plans in accordance with the state plan. It also provides for annual review and updating of the departmental plan every year and enjoins upon the state governments to make provisions for financing the activities to be carried out under the departmental plans.

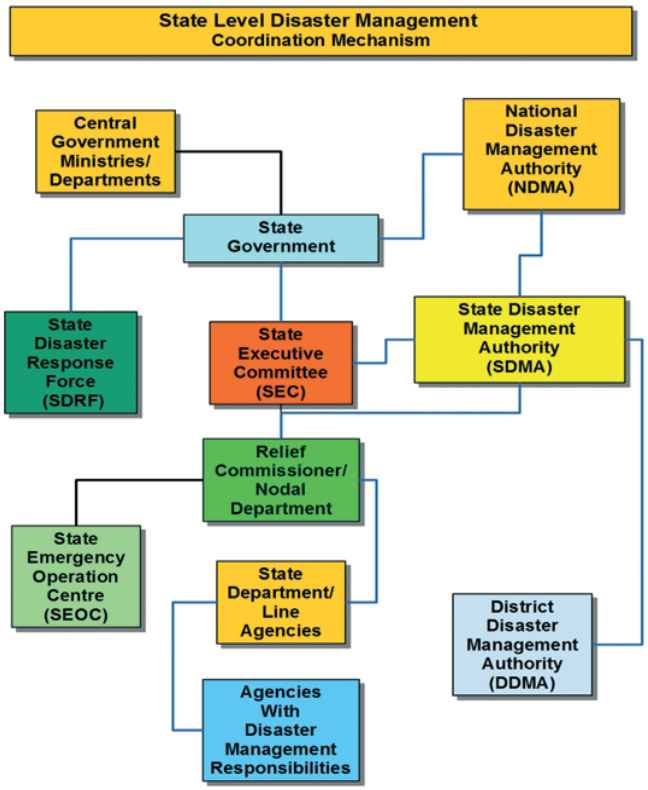
Apart from that, there is guideline and provision for State Disaster Response Fund (SDRF) and National Disaster Response Fund (NDRF) which can be claimed by the departments at any stage of the disaster management. Department of Police will be guided by the following:

i. Disaster Management Act 2005
ii. Himachal Pradesh Disaster Management Plan 2012
iii. Himachal Pradesh Disaster Management policy
iv. National Disaster Management Plan 2016
v. National Guidelines issued by the NDMA
vi. Guidelines and provision for State Disaster Response Fund (SDRF)
vii. Guidelines for administration of the National Disaster Response Fund (NDRF).

1.5 INSTITUTIONAL ARRANGEMENT FOR DISASTER MANAGEMENT

1.5.1 HIMACHAL PRADESH STATE DISASTER MANAGEMENT AUTHORITY

The HPSDMA is the apex body for disaster management at State level is headed by the Chief Minister. It lays down policies, plans and guidelines for Disaster Management and coordinates their enforcement and implementation for ensuring timely and effective response to disasters. It takes other measures which are considered necessary, for the prevention of disasters, or mitigation, or preparedness and capacity building, for dealing with a threatening disaster situation or disaster.



It oversees the provision and application of funds for mitigation and preparedness measures. HPSDMA has the power to authorise the Departments or authorities concerned, to make emergency procurement of provisions or materials for rescue and relief in a threatening disaster situation or disaster. The members of the HPSDMA are as under

#	Member	Designation in HPSDMA
1	Hon'ble Chief Minister	Chairman
2	Hon'ble Revenue Minister	Co-Chairman
3	Chief Secretary	CEO
4	Principal Secy.(Rev)	Member
5	Principal Secy (Home)	Member
6	Principal Secy (PWD)	Member

7	Principal Secy (Health)	Member
8	Director General of Police	Member
9	Secretary/Additional Secretary (Revenue)	Member Secretary

1.5.2 STATE EXECUTIVE COMMITTEE

State Executive Committee (SEC), Himachal Pradesh assists the HPSDMA in the performance of its functions. The SEC will be headed by the Chief Secretary (CS) to the State Government. SEC coordinates and monitors the implementation of the National Policy, the National Plan and the State Plan. The SEC coordinates and monitors management of disasters in the state. It monitors the implementation of disaster management plans prepared by the departments of the Government of the State and District Authorities. Following are the member of SEC.

S.No.	Officials	Designation
1	Chief Secretary	Chairman
2	Additional Chief Secretary/ PS (Forest)	Member
3	Principal Secretary Revenue)	Member
4	Principal Secretary (Home)	Member
5	Principal Secretary (Health)	Member
6	Principal Secretary (PWD)	Member
7	Principal Secretary (Finance)	Member
8	Principal Secretary (I&PH)	Member
9	Secretary(GAD)	Member
10	Director, HIPA, Fairlawns,Shimla-12	Member
11	Secretary/ Add. Secy.(Revenue)	Member Secretary

1.6 SPECIFIC HAZARDS AND NODAL DEPARTMENTS IN HP

#	Hazards	Primary Agency / Department	Supporting Agencies / Departments
Water and Climate-Related Disasters			
1	Hailstorm	Department of Agriculture and Horticulture	IMD, Home, insurance and Revenue
2	Snow Avalanches	Snow and Avalanche Study Establishment (SASE), Manali (DRDO) / Deptt. of Home / ES&T	Tribal Admin, IMD, Health, Home and Revenue, Mountaineering Institute / S&T / GSI
Chemical, Industrial and Nuclear			

3	Chemical and Industrial Disasters	Department of Industries / Department of labour and employment	HPSEB, Department Of labour & employment, Home, Admn, DMI Bhopal, and NDRF
4.	Nuclear Disasters	Department of Home	DEST, Admn, Central Ministry of Atomic Energy & Defence
Accident Related Disasters			
5.	Forest Fires	Forest Department	Fire Department, ES&T, Home and Admn
6.	Urban Fires	Department of Home (Fire)	IPH, Health, TCPI, Admn and Home
7.	Major Building Collapse	Department of UD	PWD, Health, Home and Admn
8.	Serial Bomb Blasts	Department of Home	Admn, Health and Family Welfare
9.	Festival related disasters	Department of Home	Admn, Health and Family Welfare / Department of Art language and culture
10.	Electrical Disasters and Fires	HPSEB / MPP and Power	Home, Health and Revenue
11.	Air, Road and Rail Accidents	Department of Transport, Indian Railway and Civil Aviation / GAD	Home, Health and Family welfare and Admn / Revenue
12.	Boat Capsizing	MPP and Power / IPH	BBMB, Home, Health and Family Welfare and Admn.
13.	Village Fire	Department of Home	Home, Revenue, Health and Family Welfare
Biologically Related Disasters			
14.	Biological Disasters and Epidemics	Department of Health	Home, Revenue and NDRF
15.	Pest Attacks	Department of Agriculture and Horticulture	Home, Revenue. and NDRF
16.	Cattle Epidemics	Department of Animal Husbandry	Home, Revenue. and NDRF
17.	Food Poisoning	Department of Health	Home, Revenue and NDRF

18.	Biological Disasters and Epidemics	Department of Health	Home, Revenue and NDRF

Specific Hazards and Nodal Departments in Himachal Pradesh For Early Warning System

#	Hazards	Nodal Department	Supporting Agencies / Departments / For Early Warning System
1	Fire	Fire Department	IPH, Health and Admn., Home
2	Forest Fire	Forest Department	Fire Department, RS, Home and Admn
3	Road Accidents	Concerned DA	Transport, PWD, BRO, home and Health, District Road Safety Committees.
4.	Civil Aviation Accidents	GAD	Health and Family welfare, Admn. and Home, Department of Tourism and Civil Aviation
5.	Rail Accidents	Indian Railway	Health and Family welfare, Admn. and Home
6.	Boat capsizing	MPP & power(HPSEB)	District DDMA, Home and Health and Family Welfare
7.	Stampede	Home	Admn, Health and Family Welfare & Art Language and Culture
8.	Industrial	Department of Industry	Labour & Employment, Admin, Home, Pollution Control Board
9.	Biological	Health and Family Welfare	Home, Admn, NDRF
10.	Radiation	Environment and Science	Home, Admn, NDRF
11.	Nuclear	Environment and Science & Tech.	Home, Admn, NDRF, Central Ministry of Atomic Energy and Defense
12.	Wind Storms	Revenue	IMD, Agriculture and Horticulture, home
13.	Hailstorms	Agriculture and Horticulture	IMD, home and Insurance, Admn
14.	Extreme Cold	Department of Revenue, District AC	IMD, Forest, Electricity, Health, Home
15,	Snow Storms	Revenue	IMD, IPH, Health and Admn, Home, PWD
16.	Avalanches	SASE, ES&T	Tribal Administration, IMD, IPH, Health and Home and Revenue

1.7 PLAN MANAGEMENT

Implementation of the Plan

Director General of Police shall be responsible for implementation of the Plan. The Nodal Officer shall coordinate with all stakeholders for implementing the Plan. Annual Progress on implementation of the Plan will be submitted to HPSDMA.

Revision of the Plan

The Disaster Management Plan is a living document. As per it will be revised on annual basis as per provisions of the DM Act-2005. Any changes in guidelines under the NDRF and SDRF shall be incorporated in the plan as and when such changes are made. The introduction of new technology for hazard risk mitigation shall also be incorporated as when the same is tested and found feasible and acceptable geographical area of the State.

System of Updation

The Plan shall be updated by Director General of Police with the help of State Disaster Management Authority at least once in a year or as and when felt necessary. Consultations will be held with the stakeholders for making changes in the Plan. The Nodal Officer shall be responsible for holding consultations and updating the Plan.

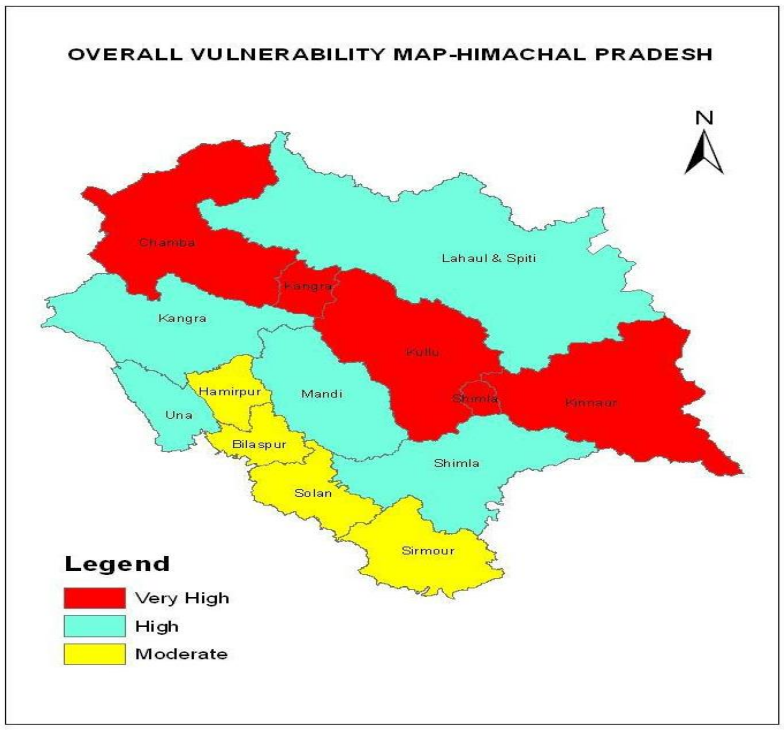
Dissemination of Plan

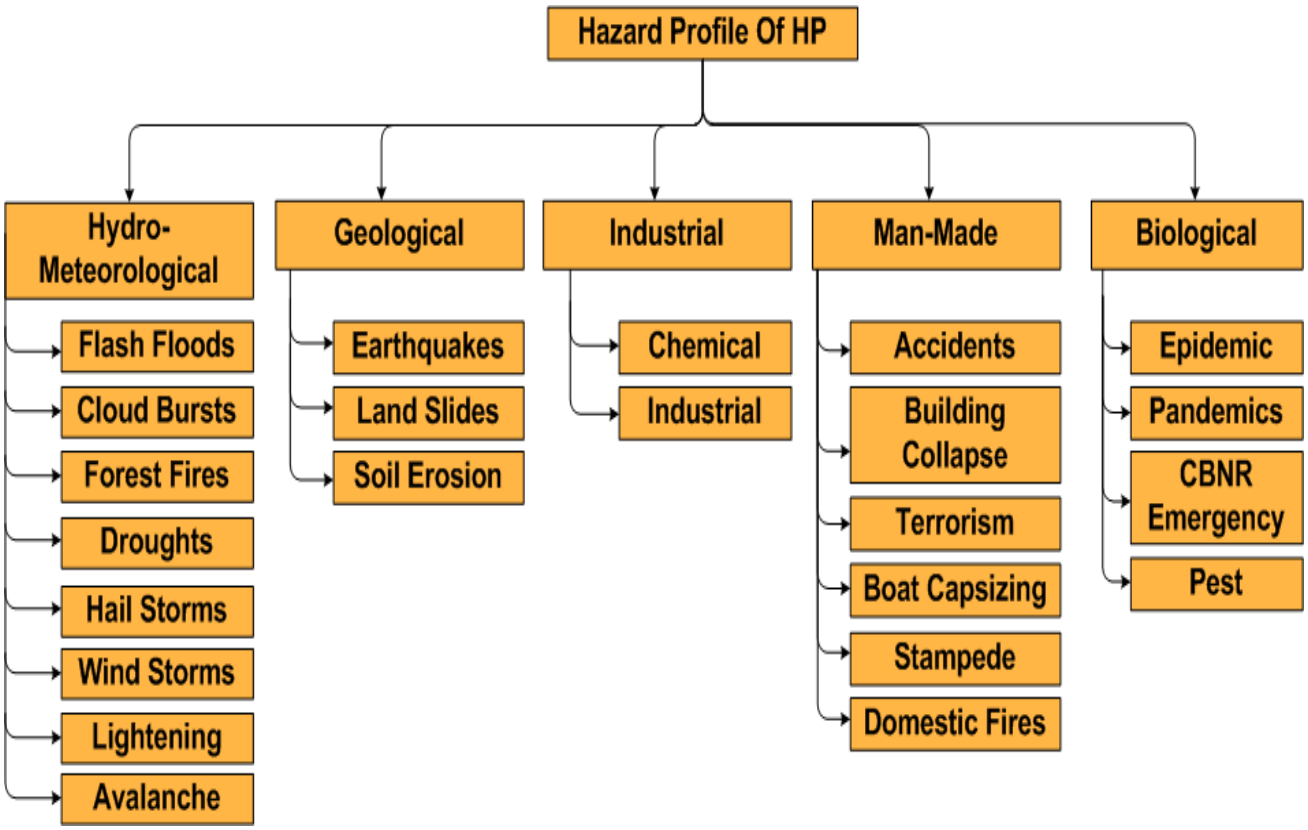
After finalization of the Plan, a copy will be submitted to the HPSDMA for approval. After approval, it shall be disseminated to all agencies, field offices and other stakeholders. Further, whenever it revised/updated, it shall be submitted to HPSDMA for endorsement of changes. The revised Plan shall be shared with all concerned.

2. HAZARD RISK AND VULNERABILITY ANALYSIS

2.1 HAZARD PROFILE OF STATE

The State of Himachal is prone to various hazards both natural and man-made. Main hazards consist of earthquakes, landslides, flash floods, snowstorms and avalanches, droughts, dam failures, fires - domestic and wild, accidents - road, rail, air, stampedes, boat capsizing, biological, industrial and hazardous chemicals etc. The hazard which, however, poses the biggest threat to the State is the earthquake hazard. The State has been shaken by more than 80 times by earthquakes having a magnitude of 4 and above on the Richter scale as per the recorded history of earthquakes. The state is vulnerable to many hazards. These are summarized as under:





2.1.1 EARTHQUAKES

Himachal Pradesh is located in the north-western part of Himalaya. Himalaya came into being due to inter-a continental collision between Indian Plate and Eurasian Plate. The inter-continental collision caused volcanism, folding, faulting, underthrusting, uplift, crustal shortening and accumulation of seismic energy. There are several faults viz. Himalayan Frontal Thrust (HFT), Jawalamukhi Thrust (JT), Barsar Back Thrust (MCT), Kullu Thrust (KT), Vailkrita Thrust(VT) etc. The release of accumulated energy along these fault lines has resulted in some devastating earthquakes and great losses to the State. Every year state is experiencing a number of earthquakes. The whole of the state is either in seismic zone IV of the high-risk zone or in seismic zone V of the very high-risk zone.

District-wise occurrence of Earthquakes (1800-2008)

No.	District	Number of earthquakes	Percentage of Total
1	Chamba	186	33.63
2	Lahaul & Spiti	99	17.90
3	Kinnaur	93	16.82
4	Mandi	53	9.58
5	Shimla	49	8.86
6	Kangra	39	7.05
7	Kullu	19	3.44
8	Sirmaur	8	1.45
9	Solan	4	0.72
10	Hamirpur	2	0.36
11	Bilaspur	1	0.18
12	Una	0	0.00
	Himachal Pradesh	553	100

Source: Vishwa, B. S. Chandel & Karanjot Kaur Brar

2.1.2 FLOOD

Himachal Pradesh receives heavy rainfall during the months of July to September. Himalayan rivers are heavily loaded due to steep sloping river course, landslides and easily available loose debris due to development activities. These rivers have more power of incision and Valley widening in the presence of tools of erosion. Landslides from valley sides choke rivers and form a lake due to the accumulation of river water. This lake bursts when the pressure of accumulated water on dam becomes more than the dam strength. It leads to great losses because of a sudden increase in the volume of water in the downstream m of the lake formed. A sudden increase in the volume of water with little or no warning causes immense loss of life and property which is called as a flash flood.

All the major rivers of the state have their sources in glaciers. One common feature of the flakier area is the presence of flakier lakes. When these lakes burst causes flash floods. Sudden discharge of a huge volume of water from the glacial lake is known as Glacial Lake Outburst Cloud bursting is another cause of flash flood during the monsoon period. The state has harnessed its hydro electric potential owing to perennial rivers. This has produced several hydroelectric dams. These dams and natural lakes may get damaged

especially during an earthquake. The sudden release of water by opening floodgates of hydroelectric power project also increases the volume of water in the downstream. This poses a great threat due to floods in the downstream.

2.1.3 CLOUDBURST

Cloud bursts are associated with convective clouds. Vertical development of clouds in the Himalayan region is associated with its topography and southwestern monsoon wind direction. Himalaya is arch shape mountain located in the east-west direction in the northernmost part of India. The average elevation of Himalaya is about 6100 meters above mean sea level. Himalayan river valleys are open towards the south and are closed in the north. Summer monsoon winds enter in the river valleys and are forced to rise vertically along the valley slopes. Vertical development of clouds can extend up to 15 kilometres above the earth surface. Sometimes a very heavy rainfall occurs of equal to or greater than 10 centimetres per hour which are called cloudbursts. Cloudbursts are usually associated with landslides and flash floods.

2.1.4 LANDSLIDE

Downward movement of rocks primarily under the influence of gravity is called a landslide. Besides gravity, there are factors that build a specific subsurface condition to make area prone to slope failure. However, the actual landscape often requires a trigger before the event. Earthquake and rainfall trigger the rocks downwards movement. It is both natural and manmade phenomena and varies spatially with variation in altitude, geology and topography. The controlling factors of the landslide are steepness of slope, type of rocks, change in vegetation and developmental activities.

2.1.5 DROUGHT

Meteorologically if an area receives 75% less rain it is said drought

2.1.6 AVALANCHE

The sudden slide of a large mass of snow along the slopes of the mountain is called avalanche. They occur in high altitude area with steep valley slopes and are common in Kinnaur, Lahaul and Spiti, Kullu, Chamba and Kangra districts.

2.1.7 FOREST FIRE

Forest fires are common in the month of May and June when the State has dry conditions. A major cause of forest fire intention to exploit the forests for livelihood. Fires are natural as well as man-made.

2.1.8 ROAD ACCIDENTS

Roads in the State are along the former river beds or by cutting the mountains and are curving. Common causes of accidents are poor visibility due to fog, ignorance of horns especially on curves, use of alcohol, over speeding, overtaking on curves and poor maintenance of the vehicle.

Hazard Wise Vulnerability

#	Districts	Earthquake	Landslide	Floods	Avalanche	Forest Fire	Drought	Cloud Burst
1	Kangra	VH	L	M	M	H	H	M
2	Chamba	VH	VH	H	M	H	M	H
3	Hamirpur	H	L	L	-	VH	M	L
4	Mandi	VH	H	H	-	VH	M	H
5	Kullu	VH	VH	H	H	H	M	VH
6	Bilaspur	H	M	L	-	VH	M	L
7	Una	H	L	H	-	M	M	L
8	Sirmour	H	L	L	-	VH	M	M
9	Solan	H	M	L	-	M	M	L
10	Kinnaur	H	H	H	VH	M	M	VH
11	Lahaul- Spiti	M	M	M	VH	M	M	H
12	Shimla	VH	H	H	M	H	M	H

2.2 CAPACITY ANALYSIS

Capacity for disaster can be understood as any man or material resource that can reduce the impact of the disaster. This can be in the form of equipment, training, awareness, systems, plans, etc. The following are the capacities installed in the building:

- Fire Alarm System
- Fire extinguishers
- Communication System
- Trained Human Resource System, etc.

Apart from these, there are various external infrastructures, facilities and capacities which could be requisite from nearby localities, districts etc. during the disaster situation.

3. RISK PREVENTION AND MITIGATION PLAN

3.1 RISK PREVENTION

3.1.1 DEPARTMENTAL RISK PREVENTION

Risk prevention is preventing the creation of new risks of disasters. Such risks may be created unwillingly by the Departments directly through public investments or indirectly through the facilitation of private investments that are vulnerable to the risks of disasters. Therefore, every investment should go through HRVA to check if new programmes, activities or projects have the potential to create new risks of disasters. If such investments cannot be avoided these must be protected by safeguards through adequate structural and non-structural prevention measures so that the benefits of investments are fully protected from risks of disasters. For example, assets of the department like offices, equipment's and others should be located at places which have lesser chances of getting affected by a hazardous event. Prevention can be understood as an activity to provide an outright avoidance of the adverse impact of hazards and related environmental, technological and biological disasters. Depending on social and technical feasibility and cost/ benefit considerations, investing in preventive measures is justified in areas frequently affected by the disaster. In the context of public awareness raising and education, prevention refers to attitude and behaviour leading towards a culture of prevention.

Disaster impact can be prevented for by strict adherence to the safety norms and practices given below:

1. Building Codes: The Bureau of Indian Standards (BIS) has been publishing seismic hazard maps of India since 1962. Following the building bye-laws while construction of any new departmental asset
2. Construction of earthquake resistance structure
3. Fire Safety Norms
4. Electrical Safety Norms

3.2 DEPARTMENTAL RISK MITIGATION

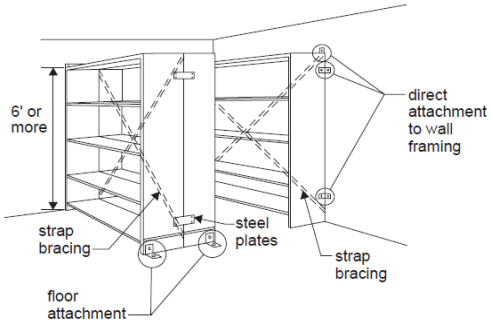
Risk mitigation is reducing the risks of disasters that are already there due to exposure of vulnerabilities to the hazards. Mitigation projects reduce the level of exposures or the depth of vulnerabilities or both through a combination of various structural and non-structural measures. Mitigation projects are always costly and therefore these have to be planned with proper Cost Benefit Analysis (CBA) to ensure that the benefits of the projects outweigh the costs. Structural mitigation refers to any physical construction to reduce or avoid possible impacts of hazards, which include engineering measures and construction of hazard-resistant and protective structures and infrastructure. Non-structural mitigation refers to policies, awareness, knowledge development, public commitment, information sharing which can reduce risk. Following are the mitigation measures need to be incorporated strict.

3.2.1 STRUCTURAL & NON-STRUCTURAL MEASURES

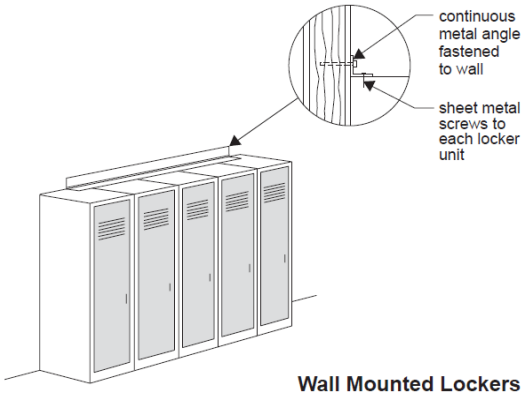
Both structural and non-structural measures shall be taken as part of the mitigation plan. Structural mitigation refers to any physical construction to reduce or avoid possible impacts of hazards, which include engineering measures and construction of hazard-resistant and protective structures and infrastructure. Non-structural mitigation refers to policies, awareness, knowledge development, public commitment, information sharing which can reduce risk.

3.2.2 FIRE MITIGATION MEASURES:

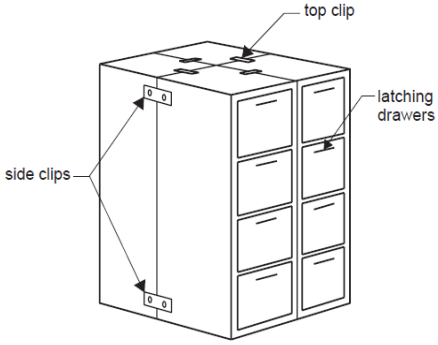
1. **Replacement of Electrical wires:** During Electrical safety audit of Mini Secretariat building, it was found that the electrical fittings (Wires) have become obsolete and need an immediate replacement to avoid any short-circuit which may arise due to the excessive power load. Such kind of safety audits can help in avoiding a mishap.
2. **Transparency of Electrical Ducts:** Instead of Wooden doors, electrical ducts should be covered with transparent sheets so that any sparking could be timely traced.
3. **Opening Emergency Exits:** There is no provision of fire exits at first and second floor of the building. There is no mounted signage for fire exits at ground floor. Fire exits are recommended at each floor.
4. **Display of Floor Wise Evacuation Maps:** Evacuation maps are required on each floor to assist people visiting the building so as to have a safe emergency evacuation.
5. **Dry Sand filling**: Dry sand filling is required at main Electrical Panel. This sand filling will reduce the chances of hazard transfer in the wiring.
6. **Exhaust in Main Panel Room**: The Electricity Panel at Ground Floor Room No 111 is highly congested and therefore there should be proper exhaust system to exhaust the air. This will also help in keeping the system cool.
7. **Relocation:** All the cupboards that pose a risk should be relocated to such a place where it poses minimum chances of falling on individual and minimum blockage to any kind of exit.
8. **Immobilization:** All such cupboards should be fixed to the wall or attach to each other so as to avoid free fall at the time of the earthquake
9. **Non-Structural Mitigation Measures:** Various awareness programs can be organized at the department level to make the personals aware of the mitigation measures.



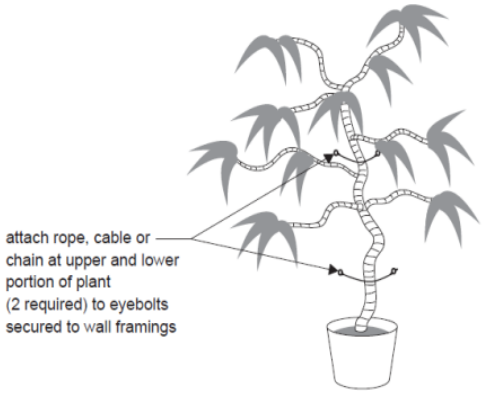
Bookcases - floor anchorage option
(6' or more in height)



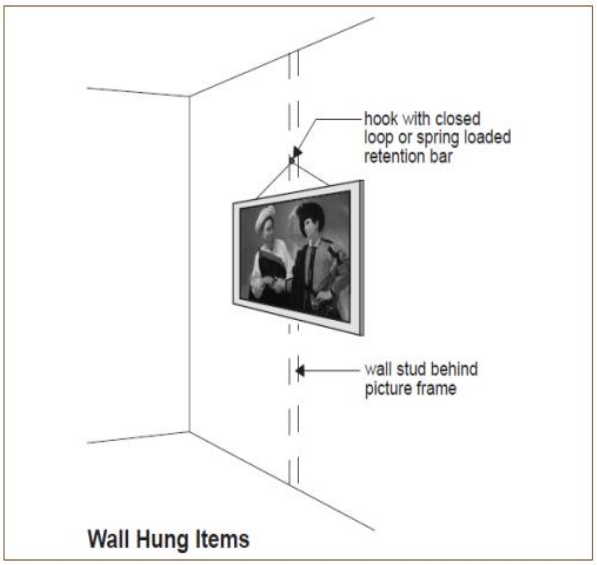
Wall Mounted Lockers

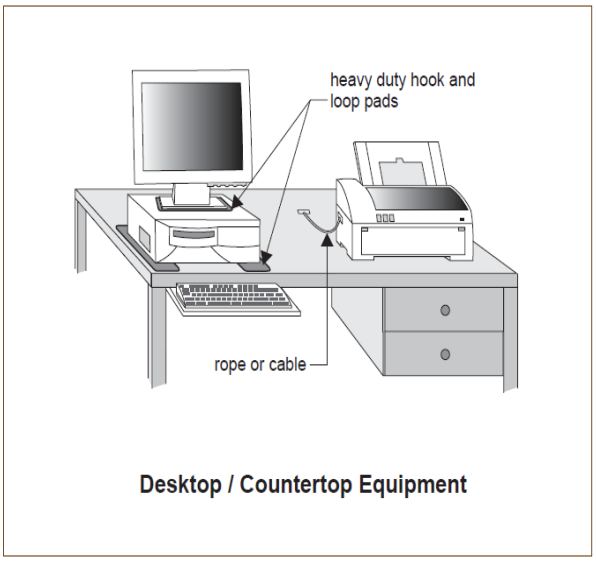


Interconnected File Cabinets



Potted Plants





3.2.3 TRAINING OF HUMAN RESOURCES

The organizations like Home Guards / Civil Defence have thousands of volunteers from every corner of the distinct. The district must train their volunteers and the wardens of these bodies in the district, thus people from various corners will be trained and sensitized in disaster management. The strengthening of Home guards & Civil Defence in the district is yet another important prospect. The Civil Defence and Home Guards are indeed quite a helpful resource in times of emergency. They can be given awards, identity cards, honorarium, and certificates for their work so that number of people volunteer themselves and participate in such works.

3.2.4 RETROFITTING

Retrofitting means reinforcement of structures to become more resistant and resilient to the forces of natural hazards. This involves consideration of changes in the mass, stiffness, damping, load path and ductility of materials, as well as radical changes such as the introduction of energy absorbing dampers and base isolation systems. For example, consideration of wind loading to strengthen the structures to minimize the impact of the wind force or the strengthening of structures in earthquake-prone areas. For an existing building, retrofitting or seismic strengthening is the only solution to make it disaster resistant. The lifeline buildings should primarily be retrofitted followed by other significant buildings. Retrofitting should be carried out along with a panel of experts for assessing the structure and to suggest the type of retrofitting required.

3.2.5 ENFORCING EXISTING CODES AND LAWS

The list of codes and laws are and must be enforced to prevent and mitigate the effects of the hazards. Bureau of India Standards, National Building Codes of India (2005), Factories Act (1948) and subsequent amendments in various acts provides sufficient legal protection to the enforcing agencies for safe construction practices. The National Building Codes must be strictly followed in lifeline structures and should be immediately implemented wherever necessary. In construction work, the civil engineers must follow Bureau of Indian Standards (BIS) to construct resistant structures.

3.3 MATRIX OF HAZARD SPECIFIC MITIGATION MEASURES

HAZARD	MITIGATION MEASURES
Earthquake	• Launching public awareness campaigns on seismic safety risk reduction and by sensitizing all stakeholders to earthquake mitigation measures. • Undertaking mandatory technical audits of structural designs of major department buildings. • Strengthening the EOC network and flow of information. • Streamlining the mobilization of communities, civil society partners, the corporate sector and other stakeholders. • Introducing earthquake safety education in schools, colleges and universities and conducting mock drills in these institutions. • Preparing documentation on lessons learnt from previous earthquakes and their wide dissemination. • Making the local companies of Home Guards and Police operational for disaster response. • Strengthening the medical preparedness for effective earthquake response, etc.
Landslide	• Training of trainers in professional and technical institutions. • Launching public awareness campaigns on landslide hazard and risk reduction, and sensitizing all stakeholders on landslide hazard mitigation. • Preparing an inventory of existing landslides, active or inactive, in the State. • Preparedness of educational and health institutes / organizations, government offices, etc., and carrying out mock drills for enhancing preparedness in vulnerable areas. • Strengthening the EOC and communication network. • Preparing community with specific reference to the management of landslides.
Chemical, Biological, Radiological and Nuclear Emergencies - Contamination of Water Supply	**Managing** To manage an incident of CBRN contamination of water supply, a model SOP as given under will be followed. **Incident Reporting** Any breach of security or suspected event of accidental or intentional contamination will be communicated to the Executive Engineers or any other function of IPH Department officer of the water facility through quickest possible means. Subsequently, he will inform the same to local police, law enforcement and intelligence agencies, and request for physical quarantine of the contamination site. The incident would also be reported to Secretary Deptt. of Home, SEC, SDMA with a request to remain on standby. **Site Characterization** Water supply in charge along with law enforcement agencies would visit the site and make an onsite inspection for identification of physical evidence to confirm the incident. Police & Law enforcement agencies would collect and preserve physical evidence for further investigation and necessary action. Water facility in charge will

	also make an initial hazard assessment based on available evidence for determining the potential need for specialized men, material, techniques or equipment. Based on the findings of initial site evaluation, both to and fro water supply should be stopped immediately. **Preliminary Screening** Especially, trained personnel of IPH department would be deployed for sample collection and spot-testing. The sample would be collected from the nearest point. Sample collected would be divided into two, one for spot testing and another for laboratory testing. The first set would be subjected to spot testing by prescribed methods. Once the incident and nature of contamination are established the same would be communicated to the district administration in precise and clear language for activating their crisis management plan. Following the positive screening, the second half of the sample would be immediately sent to pre-identified reference laboratories in consultation with SDMA / NDMA. **Risk Communication** District administration in association with disaster management authority will make a public pronouncement of contamination event in the clear and precise language along with requisite precautions to be taken. All care must be taken by the police department to avoid the undue panic situation. **Alternate Supply** The concerned Executive Engineer in association with district administration would make alternate supply arrangements. In absence of alternate supply, water would be decontaminated through the technique of reverse osmosis and mobile water purification van developed by DRDO for which contact will be established with NDMA. **Decontamination** Supply lines and storage facilities would be decontaminated using appropriate and available technology such as Reverse Osmosis, Carbon Columns and other Water Purification System (WPS) suitable for purification of water contaminated by CBRN agents. State Pollution Board shall advise on this issue. **Restoration of supply** Following repair and decontamination of the facility, a freshwater sample would be retested and certified for public consumption.

4. MAINSTREAMING DISASTER RISK REDUCTION IN DEVELOPMENT

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 in the state would require incorporating elements of impact assessment, risk reduction, and adoption the 'do no harm' approach. The measures such as urban planning and zoning, up gradation of building codes their enforcement, adoption of disaster-resilient housing designs and flood proofing, response preparedness planning, insurance and establishment of early warning systems generating community awareness, To make the future environment free from construction risk, To utilize the funds of the govt. to mitigate the vulnerability to any disaster, thus progressing towards physical, socio-economic and environmental vulnerability free era. To make sure that all the government plans should be integrated with disaster risk reduction programmes by integrating such elements in these plans so that disaster risk-free environment can be created.

To ensure disaster risk reduction is mainstreamed in key activities of the department following actions can be taken:

Key Activities of the Department Mainstreaming DRR Actions	Key Activities of the Department Mainstreaming DRR Actions
Protect the life and property from fire break and other disasters like a flood.	• Ensure to install fire safety measures like a fire alarm, hydraulic pump, sprinkler etc. • Training of the staff on basic first aid. • Training staff on various disaster management component so that they are ready to face any situation • Identify the vulnerable areas, buildings etc and make an action plan to reduce its risk.
Promotion of fire safety standards	• Assess the risk vulnerability of the areas and promote fire safety measures according to the need.
Organising awareness and training	• Conduct regular mock drill, training and awareness camp on fire safety measures and DRR to the personals from the department and among the masses

4.1 DISASTER RISK REDUCTION (DRR) PRIORITY ACTIONS

- Establish an emergency warning cell in the department and a nodal officer for disaster management.
- Maintenance of law and order to protect the rights of the citizen.
- Establish coordination and liaison with other relevant departments, ESF nodal and support agencies, community-level committees, other districts, state and national agencies to develop early warning information.

- Establish and practice protocols for Early Warning approval and dissemination.
- Assess the vulnerable areas, people to safeguard their interest.
- Scope the budget for the maintenance of law and order.
- Define standards / benchmarks to measure departments' performance on risk reduction activities and emergency response capacities.
- Build awareness among the departmental staff, communities and the key stakeholders engaged with the department on potential disaster risks and measures to reduce the risk.
- Conduct regular mock drill and ensure sufficient preparedness is there for an emergency response.

4.2 CAPACITY BUILDING ACTIONS

Objective

To build sufficient capacities within the department staff and other stakeholders to be able to better perform the roles and responsibilities for disaster risk reduction and emergency response and achieving desired objectives.

- Maintain the roster of all resources (Human, Programs, Finances and Materials) of the department that could be used for disaster risk reduction and emergency response activities.
- Coordinate with DDMA, IAG's and other agencies for the nomination of the department staff in the specialist training being organized from time to time by different agencies.
- Organise periodic mock drills of the Department Staff and key stakeholders for different contingency situations.
- Take part in block and district level mock drills and capacity building programs organized by District authorities from time to time.
- Analyse past experiences of the Department to know what went well and what could have been done better for risk reduction and emergency response by the department. Document it as lessons learnt annually and after every disaster.
- Creating work environment and work ethic Organise mass campaign to promote humanism, work ethics to reduce the risk the of exploitation of poor and other vulnerable groups.
- Develop a minimum inventory list required for achieving desired performance standards and develop a plan to acquire it over next few years.
- Create a mechanism for regular Inspection and maintenance of equipment acquisition of new equipment as per your minimum inventory list for disaster risk reduction.

5. DISASTER PREPAREDNESS

Disaster preparedness has been defined as "the state of readiness to deal with a threatening disaster situation or disaster and the effects thereof". The Department may review their "state of readiness" and prepare a strategic action plan to deal with possible disaster situations.

5.1 STRATEGY FOR DISASTER PREPAREDNESS

Police as an organization are perceived as a major player in disaster management. It will continue to have the first responder role given its proximity to the incident site and relationship with the people. It has to adopt disaster management function as one of its primary functions. State & District level authorities cannot afford to wait for response specialized forces such as NDRF all the time. Moreover, on many occasions, it might not be advisable or feasible to obtain/deploy armed forces and NDRF. Hence state police must be prepared as a response force. The police are among first responders during any disaster because:

- Local police arrive first
- Possess well-developed communication system
- Familiar with local terrain
- Wider reach, every village covered
- Better knowledge of local people feelings and mindsets
- People recognise police as the first responder
- Uniformed, disciplined
- Readily available trained human resource for immediate response

5.2 ROLES AND RESPONSIBILITIES AS DEFINED IN THE STATE DISASTER MANAGEMENT PLAN

Department of Police has an important role in providing security, logistics, and if necessary, assistance in distribution of relief items and provision of equipment for emergency response during a disaster situation. Following are the defined roles and responsibilities of the department:

- To maintain law and order.
- To facilitate the evacuation of affected people.
- To undertake search and rescue.
- To ensure the safety of relief & rehabilitation efforts.
- To designate one liaison officer in the department as a nodal officer.
- To prepare an operational plan for responding to any type of disaster
- To impart training to the members of the police force in first aid, evacuation, rescue and relief operations.
- To maintain a human resource account of such trained personnel and their deployment.
- To install radio communication at the affected site.
- To keep the police vehicles and other transport in readiness for deployment.
- To make an inventory of resources.
- To identify most vulnerable areas / pockets in each district.
- To identify alternative routes in hotspots.
- To prepare a deployment plan for police force based on the needs of the most vulnerable areas.

- To ensure that a sufficient number of the police force is available for responding to a disaster situation.
- To organize training for police officers to handle disaster/crisis situation.
- To maintain the communications with the police establishments in the areas likely to be affected by the disaster.
- To use police station resources for early warning.
- To designate an area within police station to be used as helpline centre for the public.
- To send task forces in disaster-affected areas.
- To carry out search and rescue operations.
- To maintain law and order.
- To guide NDRF troops if deployed.
- To provide security where ever needed.
- To ensure patrolling for checking incidents of looting by anti-social elements.
- To review and draw the traffic plan.
- To assist local administration in removing dead bodies and debris in affected area.
- To arrange security of government property and installations damaged in the disaster.
- To provide security in transit and relief camps, affected villages, hospitals and medical camps.
- To provide security arrangements for visiting VVIPs.
- To assist district authorities to take necessary action against Hoarders, black Marketers.
- To make officers available to inquire into and arrange conduct of post-mortems.

5.3 CHECKLIST: PREPAREDNESS MEASURES

- Prepare a deployment plan for police forces
- Check the availability and readiness of the search and rescue teams within the district police.
- Check adequacy of the wireless communication network and set up links with the SEOC DEOC and at a Sub-divisional level to reach out the affected area.
- Develop a traffic plan for contingencies arising out of disasters - alternative routes and traffic diversion etc
- Develop a patrolling plan for controlling the activities for controlling the activities of anti-social elements, critical infrastructure and affected villages / locality / shelters / relief camps.
- Keep the police vehicles and other modes of transport available in readiness.
- Prepare a Plan for VIP movements to the disaster-affected areas.
- Identify anti-social elements that could take undue advantage and take suitable preventive actions.
- Coordinate with NGOs and provide them with adequate security.

6. DISASTER RESPONSE AND RELIEF

6.1 RESPONSE PLAN

The response plan of the Department includes the design of actions based on Standard Operating Procedures and tested through mock drills and exercises that would be initiated by a trigger mechanism based upon the impending or actual occurrence of an event of a disaster. Many Departments and agencies of the State Governments will be required to perform important functions relating to relief and rehabilitation. The response plan of the Department should provide detail with the logistic, financial and administrative support necessary for discharging these functions and the manner in which these functions shall be discharged. The following are the roles and responsibilities of the department in the response phase:

1. Call for an emergency meeting to take stock of the situation. Develop an action plan.
2. Designate an area, within Police Station to be used as help line centre for the public.
3. Send task forces in disaster-affected areas.
4. Carry out search and rescue operations.
5. Maintain law and order, especially during relief distribution.
6. Keep a close watch for any criminal and anti-state activity in the area.
7. Keep direct contact with different officers like District EOC for taking any steps to combat any situation.
8. Dispatch situation reports to the DEOC and SEOC.
9. Provide guards wherever needed particularly for staging area of cooperative food etc. food stores and distribution centres.
10. Provide convoys for relief materials.
11. Establish coordination with the Fire Services.
12. Coordinate with military service personnel in the area.
13. Evacuation will be ordered by Deputy Commissioner, Addl. Commissioner and Superintendent of Police.
14. Patrolling for checking looting by anti-social elements.
15. Dispatch Police to systematically identify and assist people and communicate in a life-threatening situation.
16. With the assistance of health professional, help injured people and assist the community in organizing emergency transport of seriously injured to medical treatment centres.
17. Assist and encourage the community in road cleaning operation.
18. Review & Draw the traffic plan and assess and identify road for the following conditions/facilities.
    a. One Way
    b. Blocked
    c. Alternate route
    d. Overall Traffic Management
    e. Other access roads
19. Under appropriate security, Law and Order, the evacuation of community and livestock should be undertaken with assistance from community leaders.
20. All evacuation must be reported to Deputy Commissioner and Superintendent of Police immediately.

7. DISASTER RECOVERY AND RECONSTRUCTION

The process of recovery for a small-scale disaster is usually simple. Recovery operations get completed almost simultaneously with the response, relief and rehabilitation. However, in medium and large disasters involving widespread damages to lives, livelihoods, houses and infrastructure, the process of recovery may take considerable time as the relief camps continue till houses are reconstructed. Often intermediary shelters have to be arranged before the permanent settlements are developed. Therefore, some of the Emergency Support Functions of recovery of the sector may continue for months. Departmental DM Plans should anticipate eventualities of longer duration recovery operations. Following are the roles and responsibility of the Police Department in the recovery and reconstruction phase:

1. Assist local administration in removing the dead bodies and debris in affected areas.
2. Assist in Setting up field hospital if required.
3. Participate in reconstruction and rehabilitation operation if requested.
4. Arrange security of government property and installations damaged in a disaster.
5. Coordinate with other offices for traffic management in and around damaged areas.
6. Assist the local administration in putting a stop to theft and misuse in the relief operation.
7. Provide security in transit and relief camps, affected villages, hospitals and medical centres and identify areas to be cordoned off.
8. Provide security arrangements for visiting VVIPs and VIPs.
9. Assist district authorities to take necessary action against Hoarders, Black Marketers and those found manipulating relief material.
10. In conjunction with other government officers, activate a public helpline to:
    a. Respond to personal inquiries about the safety of relatives in the affected areas.
    b. Respond to any specific needs that will be given.
    c. Serve as a rumour control centre.
    d. Confidence building among the public.
11. Make officers available to inquire into and record deaths.
12. Monitor the needs and welfare of people sheltered in relief camps.
13. To provide adequate security to International Agencies/Countries personnel and for their relief material and equipment etc.
14. Manage Traffic/Crowd. Recall important functionaries from leave, communicate to the staff to man their places of duties like the ward and divisional offices and respective department.

8. FINANCIAL ARRANGEMENTS

Section 40(2) of the Disaster Management Act stipulates that every department of the State Department while preparing the DM Plan, shall make provisions for financing the activities proposed therein. Normally the funds required for risk assessment and disaster preparedness must be provided in the budgets of every concerned department. Such funds are not very sizeable and departments should be able to allocate such funds within their normal budgetary allocations. **Here the idea is to come up with a separate disaster management budget head within the budget allocation of the department**. This budget can be used to work on the already suggested mitigation and preparedness measures, as response and relief are already being taken care of by the SDRF and NDRF. This budget will help in institutionalising the entire process. And once the department starts having a separate budget for prevention and mitigation, at least some measures will start automatically

Funds for disaster response, relief and rehabilitation are provided in State Disaster Response Fund (SDRF) which the departments can access without any problem. In case such funds are not adequate the additional demands can be projected by the State Government which can be met from the National Disaster Response Fund (NDRF).

ANNEXURE

I. Emergency Mock Drill Reporting Format

Drills shall be conducted every 3 months

1. **Earthquake drill:**
    a. Practice drop, cover and hold.
    b. Once evacuation starts, evacuate room in less than 1 minute without pushing and falling.
    c. Evacuate office in less than 4 minutes (or as per NBC, 2005) using different exits.
    d. Stay away from weak areas / structures.
    e. Perform head counts when reaching the assembly area.
    f. Help those who need assistance
    g. HeadCount at assembly point
2. **Fire Drill:**
    a. Evacuate from the room.
    b. Practice Stop, Drop and Roll in case your clothes catch fire.
    c. Cut off electricity from the main switch and remove or close down gas connections.
    d. Evacuate room in less than 1 minute without pushing and falling.
    e. In case of heavy smoke, crawl out safely from the room.
    f. Evacuate office building in less than 4 minutes (or as per NBC, 2005) using different exits / fire exits.
    g. Perform head counts when reaching the assembly area.
    h. Help those who need assistance.
    i. Headcount at the assembly point.
3. **Reporting:**
    a. Every incident shall be documented and reported to Deputy Director Safety.
    b. Incident Report shall include:
        i. Date of Incident:
        ii. Time of Incident:
        iii. Type of Incident:
        iv. Location of incident:
        v. Activities disrupted:
        vi. Was early warning generated?
        vii. Evacuation Time (if needed):
        viii. Response time (if needed):
        ix. Recovery time (if needed):
        x. Damage if any to life and property:

II. Mock Drill Reporting Format

Emergency Mock Drill Reporting Format		
Person Completing the Format/ Designation		**Date**
Time Alarm Sounded:	**Time Drill Concluded:**	**Time to Evacuate**
Type of Drill	**Notification / Alert Method**	**Weather Conditions**
☐ Fire / Evacuation ☐ Bomb Blast ☐ Shelter-in-Place ☐ Earthquake ☐ Medical Emergency ☐ Other:	☐ Bell or Buzzer ☐ Enhanced Alert System ☐ Phone ☐ Voice Notification ☐ Siren	☐ Clear ☐ Cloudy ☐ Rain and wind ☐ Hot/Cold
Participants		**The situation at Start of Drill:**
☐ Authorities ☐ Safety Personnel ☐ Employees/Staff ☐ HOD ☐ Fire Department ☐ Emergency Medical Services ☐ Police ☐ Red Cross ☐ Other		☐ Before Lunch Hours ☐ During Lunch Hours ☐ After Lunch Hours ☐ Peak working Hours
Participants have previously trained on emergency procedures.		**Employees previously trained on emergency procedures this year?**
☐ Yes ☐ No		☐ Yes ☐ No

Incident Command System as per IRS used?	Incident Commander / Designation
☐ Yes ☐ No	
Problems Encountered	
☐ Congestion in hallways ☐ Alarm not heard ☐ Employees unsure of what to does/don't ☐ Staff unsure of responsibilities/response ☐ Unable to lock doors ☐ Windows left open ☐ Doors left open ☐ Lights left on ☐ Personnel not accounted ☐ Personnel run towards lifts ☐ Lifts are shut down. ☐ Difficulties with the evacuation of disabled personnel.	☐ Communication problems ☐ Phone problems ☐ Chaos ☐ Long time to evacuate building ☐ Personnel not serious about drill ☐ Improper or unavailable supplies ☐ Confusion ☐ Doors or Exits blocked ☐ Delay in Medical response ☐ Delay in Fire service response ☐ Delay in Security response ☐ Interagency miscommunications ☐ Command, Control & Coordination problems ☐ Other:
Mitigation / Plans for Improvement	
☐ Additional training for emergency response teams members. ☐ Additional staff training ☐ Address need for additional equipment/resources ☐ Improved emergency supplies	☐ Cooperative planning with responders ☐ Revised emergency response procedures ☐ Other:

NOTES