



DISTRICT DISASTER MANAGEMENT PLAN SHIMLA

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Himachal Pradesh

DDMP-2017

District Disaster Management Plan Shimla (2017)

Submitted to
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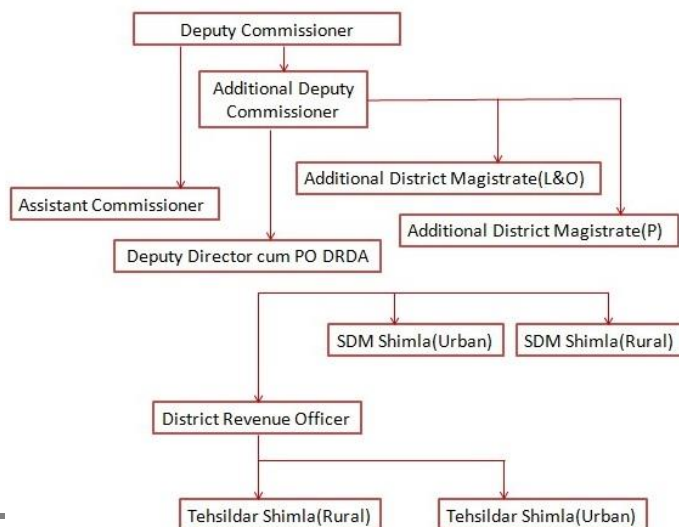
CHAPTER-1 INTRODUCTION

1.1. Rationale

The geographical location of Himachal Pradesh is such that it lies in Himalayan region between latitude Latitude: 30°22'40" N to 33°12'40" N Longitude: 75°45' 55" E to 79°04' 20" E Himalaya being a nascent mountain range and due to the continuous ongoing movement of tectonic plates, it is still rising and making this region vulnerable to various disasters .The whole area of Himachal Pradesh falls into two earthquake zones viz. Zone IV and Zone V as per the BIS Zoning map of the Himachal Pradesh. Consequently Shimla District is also located in Zone IV and Zone V (about 99.62% area falls in Zone IV and 0.38% falls in Zone V) making the region liable to experience the earthquake of intensity MSK VIII or more. Consequently rendering the human lives and property situated in this district more vulnerable to disaster. In addition to it, river Satluj ,Giri, Pabar and their tributaries flow through this district and hence the population living on the banks of these rivers are susceptible to floods which can occur naturally or due to human activities. Nowadays due to the increasing developmental activities like construction of roads, houses and other developmental infrastructural activities like hydropower projects, industrial hubs, big industrial institutions, the unscientific construction methods and ways used for the disposal of debris, the landslides are on the rise causing huge loss to human lives and properties.

District Shimla lies between the longitude 77°0" and 78°19" East and latitude 30°45" and 31°44" North. It is bounded by Mandi and Kullu in the North, Kinnaur in the East, the state of Uttarakhand in the South, Sirmaur District in the West. The elevation of the district ranges from 300 to 6000 meters. The topology of the district is rugged and tough. Shimla district derives its name from Shimla town which was once a small village. Shimla district in its present form came into existence from 1st Sept, 1972 on the reorganization of the districts of the state. Further the Shimla District being enriched with the green cover, during summers the incidents of forest fire have increased manifold and hence irreparable loss is being caused to the natural resources of the state every year. Hence there is a need to prevent, mitigate the danger or threat of such disasters and to prepare the community by way of capacity building to respond in a better way to such disastrous situation if arises at any time. Shimla district derives its name from Shimla town, the district headquarters and now state capital of Himachal Pradesh. District Shimla comprises 7 Sub-Divisions, 12 Tehsils and 6 Sub Tehsils. Administrative setup of the District Shimla is mentioned below (Figure 1.1)

Figure 1.1: Administrative Setup of Shimla District



1.2. Legal Mandate

Disaster Management (DM) Act 2005 in Section 31 mandates that there shall be a District Disaster Management Plan (DDMP) for each district. The proposed DDMP complies with the National Disaster Management Plan (NDMP) of 2016, State Disaster Management Plan (SDMP) 2012 and conforms to the provisions of the DM Act 2005 making it mandatory for the Government of India and various central ministries to have adequate DM plans. While the district plan will pertain to the disaster management for the whole of the district, the hazard specific nodal ministries and departments notified by the Government of India and State Government will prepare detailed DM plans specific to the disaster assigned. As per Section 32 of the DM Act, every office of the Government of India and of the State Government at the district level and the local authorities shall prepare comprehensive DM plans detailing how each of them will contribute to the national efforts in the domains of disaster prevention, mitigation of risks, preparedness, response, and recovery.

1.3. Scope

As per the DM Act 2005, the District Disaster Management Plan shall include:-

- a) 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 local authorities in the district;
- c) The capacity-building and preparedness measures required 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) The response plans and procedures, in the event of a disaster providing for- (i) Allocation of responsibilities to the Departments of the Government at the district level and the local authorities in the district; (ii) Prompt response to disaster and relief thereof; (iii) Procurement of essential resources; (iv) Establishment of communication link; and (v) The dissemination of information to the public; e) Such other matters as may be required by the State Authority.

1.4. Aims and Objectives of the DDMP

- **Aim**

The overall aim of this plan is to facilitate actions by different stakeholders to prevent / mitigate disaster, climate risk, to enhance preparedness and to develop capacities for effective disaster management in the district. It further seeks to identify and clarify the roles and responsibilities of the internal and external stakeholders throughout the entire cycle of disaster management i.e. pre-disaster, during disaster and post disaster management phases.

- **Objectives of the DDMP :**

The specific objectives of the DDMP are:

- To identify and map disaster risk,
- To strengthen institutional arrangements in the district by identifying roles and responsibilities of different stakeholders,
- To facilitate enhanced level of preparedness of different stakeholders and develop their capacities, preparation and implementation of action plan for disaster risk mitigation, strengthen mechanism for early warning, response & relief, guide rehabilitation & recovery and facilitate mechanism for monitoring, evaluation, revision and updation.
- To clarify Authority, Responsibility and Relationships as to who is responsible for ensuring that the work gets done, distributing and decision making authority among the team members and the existing organizational units, and establishing formal lines of communication.
- To facilitate mobilization of resources, funds, personnel, supplies and equipment necessary for doing the required activities.
- To establish communication and information management system
- To facilitate Monitoring, Evaluation and updation of the plan from time to time

The District Disaster Management Plan (DDMP) is the guide for achieving the objective related to disaster mitigation, preparedness, response and recovery. This Plan will help in disaster response in a planned way to minimize human, property and environmental losses.

1.5. Authority for DDMP: Disaster Management Act 2005 (DM Act)

As per provisions in Chapter-IV of the DM Act, each State Government shall establish a District Disaster Management Authority for every district in the State with such name as may be specified in that notification. The DDMA will be headed by the District Collector, Deputy Commissioner or District Magistrate as the case may be, with the elected representative of the local authority as the Co-Chairperson. The State Government shall appoint an officer not below the rank of Additional Collector or Additional District Magistrate or Additional Deputy Commissioner as the case may be of the district to be the Chief Executive Officer of the District Authority. The DDMA will act as the planning, coordinating and implementing body for DM at the District level and take all necessary measures for the purposes of DM in accordance with the guidelines laid down by the NDMA and SDMA. It will prepare the DM plan for the District and monitor the implementation of the all relevant national, state, and district policies and plans.

The DDMA will also ensure that the guidelines for prevention, mitigation, preparedness and response measures laid down by the NDMA and the SDMA are followed by all the district-level officers of the various departments of the State Government. Moreover, the "District Plan" means the plan for disaster management for the district prepared under section 31. There shall be a plan for disaster management for every district of the State. It shall be prepared by the District Authority after consultation with the local authorities and having regard to the National Plan and the State Plan to be approved by the State Authority. Authoritatively DDMP has following characteristics, 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:-
 - i. Provisions for prevention and mitigation measures as provided for in the District Plan and as is assigned to the department or agency concerned;
 - ii. Provisions for taking measures relating to capacity-building and preparedness as laid down in the District Plan;
 - iii. The response plans and procedures, in the event of any threatening disaster situation or disaster;
- b) Coordinate the preparation and the implementation of its plan with those of the other organizations at the district level including local authority, communities and other stakeholders;
- c) Regularly review and update the plan.
- d) The copies of the District Plan referred to in sub-sections (2) and (4) shall be made available to the Departments of the Government in the district. Submit a copy of its disaster management plan and of any amendment thereof to the District Authority.
- e) 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.

1.6. Evolution of DDMP in brief

Preparation of the District Disaster Management Plan is the responsibility of the District Disaster Management Authority (DDMA). The first draft plan is to be discussed in the DDMA. The main steps involved in the development of this plan are:

- Training to develop the DDMP as per NDMA template by State and United Nations Development Programme (UNDP) official.
- Data collection from all the line departments.
- Data analysis.
- Discussion with experts.
- Reference of national and international literature.
- Preparation of action plans for all line departments.
- Preparation of draft plan document.
- Mock drill to check the viability and feasibility of the implementation methodology.
- Wide circulation for public and departmental comments.
- Preparation of the final plan document.

1.7. Stakeholders and their responsibilities

District Shimla being the hub of the state administrative heads in the Capital city of Shimla the DDMP need to be more specific to how these departments and their departmental plans are incorporated for enhancing the preparedness, mitigation, response & rehabilitation. DDMA may consult following stakeholders (Table 1.1) for development of the District Disaster Management Plan and their responsibilities in detail are given in the following chapters.

Table – 1.1 Stakeholders of District Shimla and their responsibilities

Sr.	Stakeholders	Responsibilities
1	DDMA – Shimla	<ul style="list-style-type: none"> • Updation and implementation of DDMP. • To conduct meetings on disaster management. • Building capacity by trainings and awareness through IEC material development and distribution • Managing all the resources at district level in consultation with their respective State level directorates/offices • Coordinating with stakeholders and liaisoning with the district as well as state offices • Enable local authorities to establish contact with the state authorities and other departments • Coordinate planning procedures between district, state and the center; • Provide ready formats for all formal reporting procedures as a standby
2	DEOC Shimla	<ul style="list-style-type: none"> • Receive and process disaster alerts and warnings from nodal agencies and Early Warning System (EWS) providers • Corresponding with the State Emergency Operation Center (SEOC) Shimla for information sharing so that the decision makers at the state level are well aware of the situation and help in further resource mobilization . • Other sources and communicates the same to all designated authorities. • Monitor emergency operations. • Facilitate coordination among primary and secondary Emergency Support Functionaries (ESF)/ Departments/ Agencies. • Requisitioning additional resources during the disaster phase. • Issuing disaster/incident specific information and instructions specific to all concerned. • Consolidation, analysis and dissemination of damage, loss and needs assessment data. • Forwarding of consolidated reports to all designated authorities.
3	HPSDMA, Shimla	<ul style="list-style-type: none"> • Coordination with the National Disaster Management Authority (NDMA) • Coordinating Disaster Risk Reduction (DRR) activities and implementation thereof. • Facilitating resources on demand rise by administration. • Enhancement of capacity building and trainings at state and district level
4	NDRF 7 th Battalion, Bhatinda & the NDRF unit at Nurpur, Kangra	<ul style="list-style-type: none"> • Carrying out search and rescue on requisition by District as well as state administration. • Strengthening the response mechanism through trainings and awareness in L0 state.
5	Armed Forces	<ul style="list-style-type: none"> • Coordinate with administration in response as well as capacity building. • Facilitate administration with the key resources in disaster.
6	Himachal Police Shimla for Law & Order	<ul style="list-style-type: none"> • Creation of Disaster Management dedicated wireless channel • Training to DEOC staff to use and record the information over VHS • Having sound communication and security plan in place to coordinate law &

		order issues;
7.	Department of Irrigation & Public Health (Drinking & potable water)	<ul style="list-style-type: none"> • Training to security personnel in handling issues of disaster situations • Procurement of clean drinking water; • Transportation of water with minimum wastage; • Special care for women with infants and pregnant women; • Ensure that sewer pipes & drainage are kept separate from drinking water facilities.
8.	HPSEB Ltd. "Electricity"	<ul style="list-style-type: none"> • Provide and coordinate with State and support until the local authorities are prepared to handle all power related problems; • Identify requirements of external equipment required such as DG sets, generators etc. • Damage Assessment
9	HP PWD- Shimla	<ul style="list-style-type: none"> • Emergency clearing of debris to enable reconnaissance and clearing of roads; • Identifications of the hotspots of different seasonal disasters • Get the GIS & Landslide zone mapping of roads and bridges in vulnerable areas • Assemble casual labour and provide a work team carrying emergency tool kits depending on the nature of disaster, essential equipment's such as towing vehicles, earth moving equipment and cranes etc. • Construct temporary roads, keep national and other main highways clear from disaster effects such as debris etc. • Coordination with private services providers for supply of earth moving equipment etc.
10	Fire Services Shimla	<ul style="list-style-type: none"> • To strengthen community response through trainings and awareness camps. • To train first responders at village / Panchayat level in firefighting. • To mitigate the fire risk by auditing, inspection and fighting fire disaster. • To take the responsibility as the first responder for Search and Rescue (SAR) and further support other Search and rescue teams.
11	Public Health (CMO, MS IGM, Shimla, MS District Hospital, Red Cross Society)	<ul style="list-style-type: none"> • To coordinate, direct and integrate State level response and activation of medical personnel, supplies and equipment's; • To provide human services under the Department of health; • To prepare, keep and check ready Mobile Hospitals, stocks of equipment and drugs; • To network with private health service providers; • To provide ready ambulances and transform other vehicles into ambulance to meet the transportation requirement at mass level. • To provide improvised as well as ready medical resources. • To provide resources for mass level water decontamination
12	Municipal Corp. Shimla	<ul style="list-style-type: none"> • Land usage & promotion of Disaster Resilient housing • Solid/ liquid waste treatment and management • Make arrangement for proper disposal of waste in their respective areas; • Arrange adequate material and manpower to maintain cleanliness and hygiene
13	PRI's	<ul style="list-style-type: none"> • Strengthening the community based response by awareness and

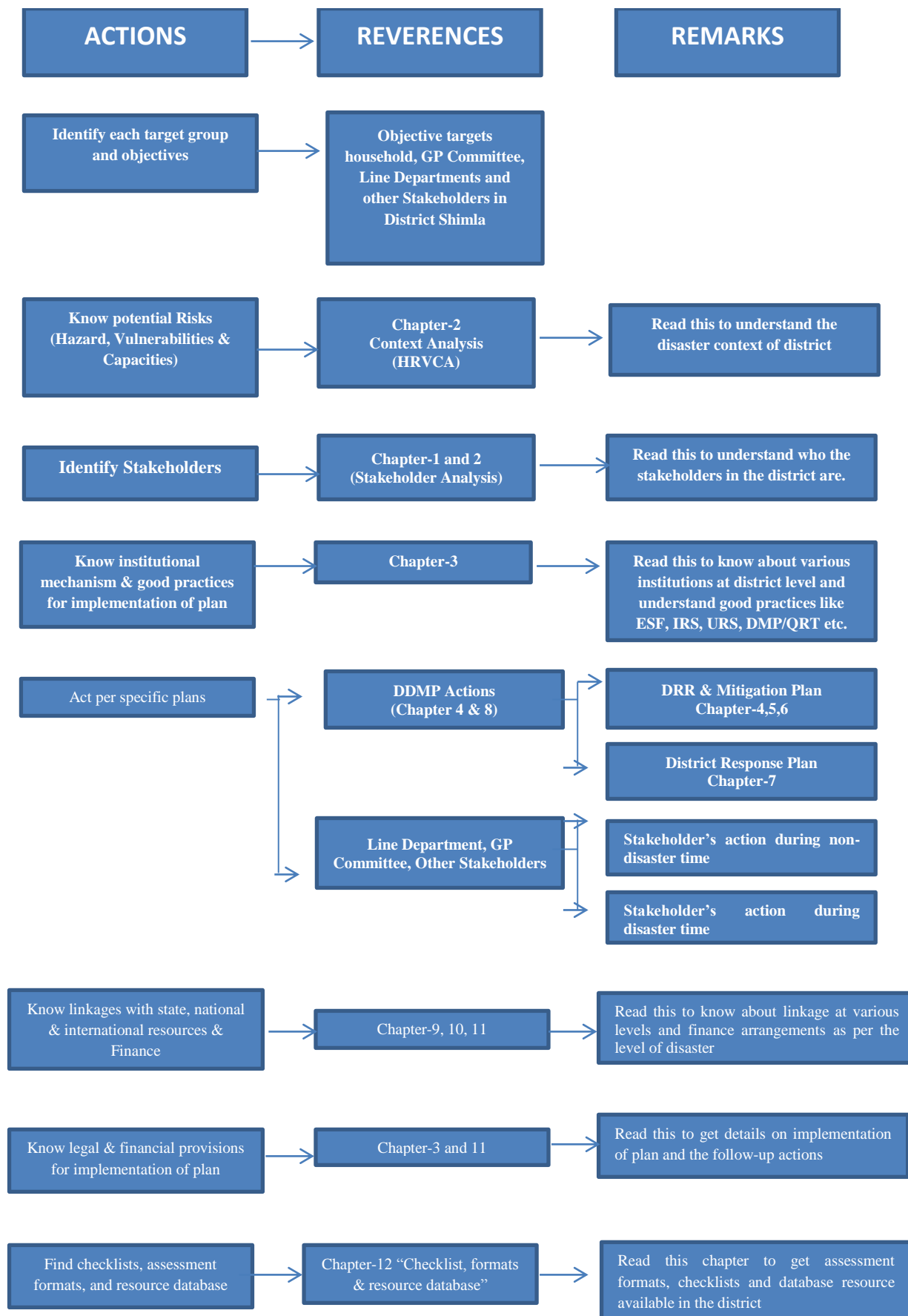
		implementation of DM policy and guidelines
14	(HRTC & RTO for Transportation)	<ul style="list-style-type: none"> • Preparing the Community as first responder and local authorities as per Village Disaster Management Plan (VDMP). • Overall coordination of the requirement of transport in implement emergency related response and recovery functions, search and rescue and damage assessment; • Make an inventory of vehicles available for various purposes; • In response to disasters catering the need of transportation through buses and other vehicles; • Providing drivers and other skilled manpower for repair and maintenance.
15	Civil Defence, Home Guards, and Emergency Services (Search and Rescue)	<ul style="list-style-type: none"> • Establish, maintain and manage search and rescue response system; • Coordinate search and rescue logistics during field operations; • Provide status reports of S&R updates throughout the affected areas.
16	DFSC for Food & Civil Supplies	<ul style="list-style-type: none"> • Identify requirement of food and clothing for affected population; • Control the quality and quantity of food, clothing & basic medicines • Ensure the timely distribution of food and clothing to the people; • Ensure that all food that is distributed is fit for human consumption as per minimum standards of relief.
17	Media, information and communication (Department of Public Relations office)	<ul style="list-style-type: none"> • To provide and collect reliable information on the status of the disaster and disaster victims for effective coordination. • Coordinate with all TV and radio networks to send news flashes for specific do's, don'ts & needs. • To disseminate the updates and directions to public through radio broadcasting. • Respect the socio-cultural and emotional state of the disaster victims while collecting information for dissemination.
18.	Forest (DFO for Removal of trees & fuel wood & forestation)	<ul style="list-style-type: none"> • Removal of fallen trees and afforestation or shifting of trees. • Ensuring the mainstreaming of DRR ensured by the development of the roads • To provide fuel wood for the relief camps and public; • Have adequate storage of fuel wood and make arrangement for distribution thereof; • To provide fuel wood for cremation.
19	Education	<ul style="list-style-type: none"> • Building capacity at school/college level through various competitions and awareness campaign. • Safe keeping of infrastructure of schools converted into shelters • To train the volunteers through NCC/ NYKS/ NSS etc. in Firefighting, First aid and other disciplinary & volunteering.
20	DRDA, Revenue, Agriculture & Horticulture	<ul style="list-style-type: none"> • Gathering damage reports from the ground through PRI's and Patwaris. • Providing details for the relief and other resources • Implementation of VDMP's

1.8. Approval Mechanism of DDMP: Authority for implementation (State Level / District level orders)

The DM Act 2005 enjoins central and state governments to make provisions for the implementation of the disaster management plans. In this respect the sections of the DM Act 2005 applicable for national, state and district DM plans are 11, 23, and 31. The Chapters V and VI of the DM Act spell out the responsibilities of the central, state and local governments with respect to disaster management. The DM Act states that every Ministry or Department of the Government of India shall make provisions in its annual budget for funds for the purposes of carrying out the activities and programmes set out in its disaster management plan.

The Act mandates that every Ministry and Department of the Government of India and every state must prepare a DDMP in accordance with the NDMP. Annually, respective DM authorities must review and update their DM plans. Central ministries and state governments will integrate DRR into their development policy, planning and programming at all levels. They must adopt a holistic approach and build multi-stakeholder partnerships at all levels as appropriate for the implementation of the DM plans. Depending on its nature different components of the NDMP will be implemented within a span of five, ten or fifteen years. The plan is highly ambitious and the complete implementation of all elements across the country may take a very long time. Nevertheless, both central and state governments have already made considerable progress and they are expected to make sincere efforts for the implementation of the DM plans. The NDMA has prepared and published hazard-specific guidelines covering various aspects of disaster management and including a separate one for response.

1.10 How to use District Disaster Management Plan Shimla: Brief Framework



1.11. DDMP review and updation :

- **Plan review and updating:** Periodicity Plan is reviewed every six months and updated every year before onset of monsoon i.e. in the month of May. Following activities have been involved during DDMP review and updation.
 - **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 of specific procedures necessary to support those planned tasks.
 - **Exercise the Plan** - Evaluating the effectiveness of plan which 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 lead to a successful response. The purpose of an exercise is to promote preparedness by testing policies, plans and training personnel.
 - **Revise and Maintain** - Planning teams should establish a process for reviewing and revising the plan. Reviews should be a recurring activity. Review on an annual basis is considered minimum. It should be mandatory to consider reviewing and updating the plan after the following events:
 - a. A major incident.
 - b. A change in operational resources (e.g., policy, personnel, organizational structures, management processes, facilities and equipment).
 - c. A formal update of planning guidance or standards.
 - d. Each activation and major exercises.
 - e. A change in the district's demographics/hazard or threat profile.
 - f. The enactment of new or amended laws or ordinances.

Chapter-2

Hazard Vulnerability Capacity and Risk Assessment

2.1 Hazard Profile of District Shimla

District Shimla of Himachal Pradesh lies between the longitude 77.00" and 78.19" East and latitude 30.45" and 31.44" North, having its headquarters situated at Shimla. It is surrounded by Mandi and Kullu in the North, Kinnaur in the East, Uttarakhand in the South-East, Solan to the South-West and Sirmaur in the South. The elevation of the district ranges from 300mt. (984ft) to 6000mt. (19,685ft). The climate of District Shimla is predominantly cool during winters and moderately warm during summer. Temperature ranges from 4 degree to 31 degree centigrade over the course of year. The average temperature during summer ranges between 19 to 28 degree centigrade and in winter 1 degree to 10 degree centigrade. Monthly precipitation varies from 15 ml in November to 434 ml in August. It is typically around 45 ml per month during winter and spring and 175 ml in June. The average total precipitation is 1575 ml which is less than other hill stations. Snowfall in this region takes place in the month of December and January but gradually it has been shifted to the month of January or early February from the last few years. The unique Geo Climatic conditions of Shimla make it vulnerable to various kinds of natural hazards/disasters which have been compounded by increasing human interventions with the nature. There is need to identify and delineate the Hazard Risk zones of the District (areas vulnerable to various hazards) which will provide the necessary information to work on micro-level and to map the active and dormant processes of the hazards. The disasters, which generally occur in this district along with the vulnerable areas, are as under:

2.1(1) Natural Hazards

- **Earthquake:**

The District Shimla as a whole lies between mid-Himalaya and greater Himalaya and due to the tectonic movements of the Indo Australian Plate and Eurasian plate the Himalaya is Still rising and giving rise to tremors in the Himalayan region. Further the Jutog and Kaurik thrust etc. made this region more prone to the earthquakes. As per vulnerability atlas 99.62% of the district lies in Zone IV and 0.38% in Zone V, however the amount of urbanisation and unplanned construction makes the district highly vulnerable to the earthquakes and its likely to impact to the large extent.

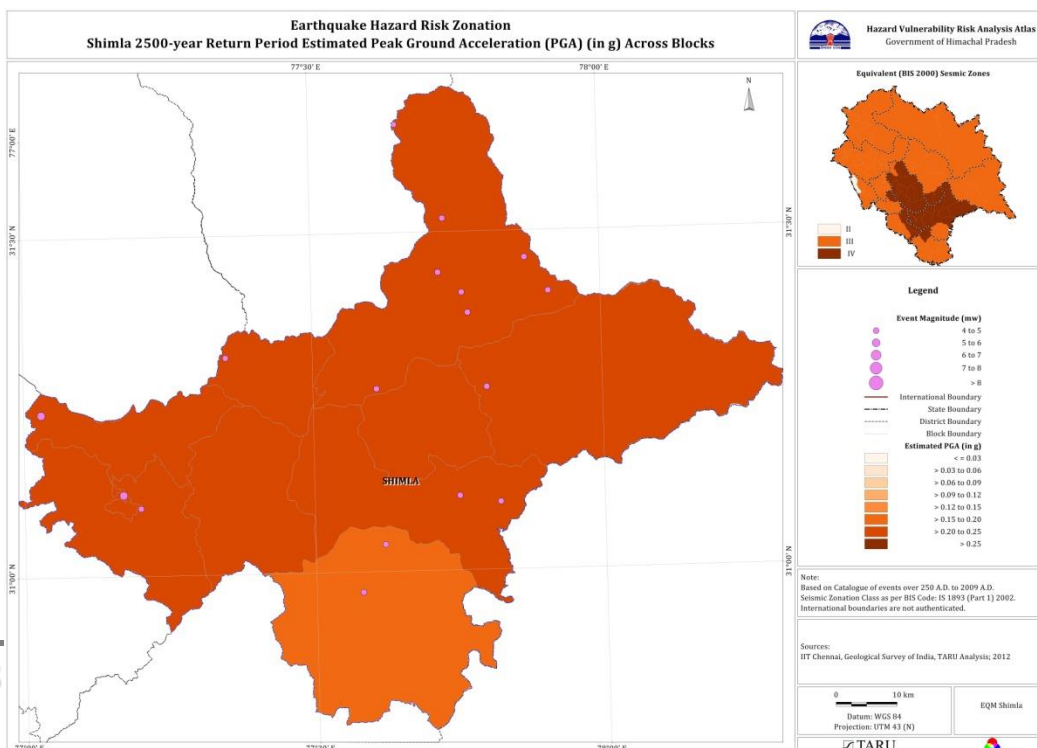


Figure 2.1: Earthquake Hazard Risk Zonation Map of District Shimla

Table 2.1 Major Earthquakes in District Shimla

DATE	MAGNITUDE /INTENSITY	DAMAGES
05/03/1842	VI/VII	Houses were damaged
07/04/1856	VII/VIII	Loss to life and property but not exactly reported
09/07/1860	V	Loss not reported
05/10/1869	V	Loss not reported
28/02/1906	6.5	Approximately 26 People Died And 45 Injured And 73 Dwelling Houses Destroyed

- **Landslide:**

Landslide is a frequent phenomenon in District Shimla. It is most risk oriented hazard found in the district affecting human lives and property in many ways like damages to the houses, roads, communication network agriculture etc.

Table 2.2 Landslide Vulnerable Area in District Shimla (in Sq Km)

District	Severe To Very High	High	Moderate To Low	Unlikely	Total Area
Shimla	893	3345	767	14	5019

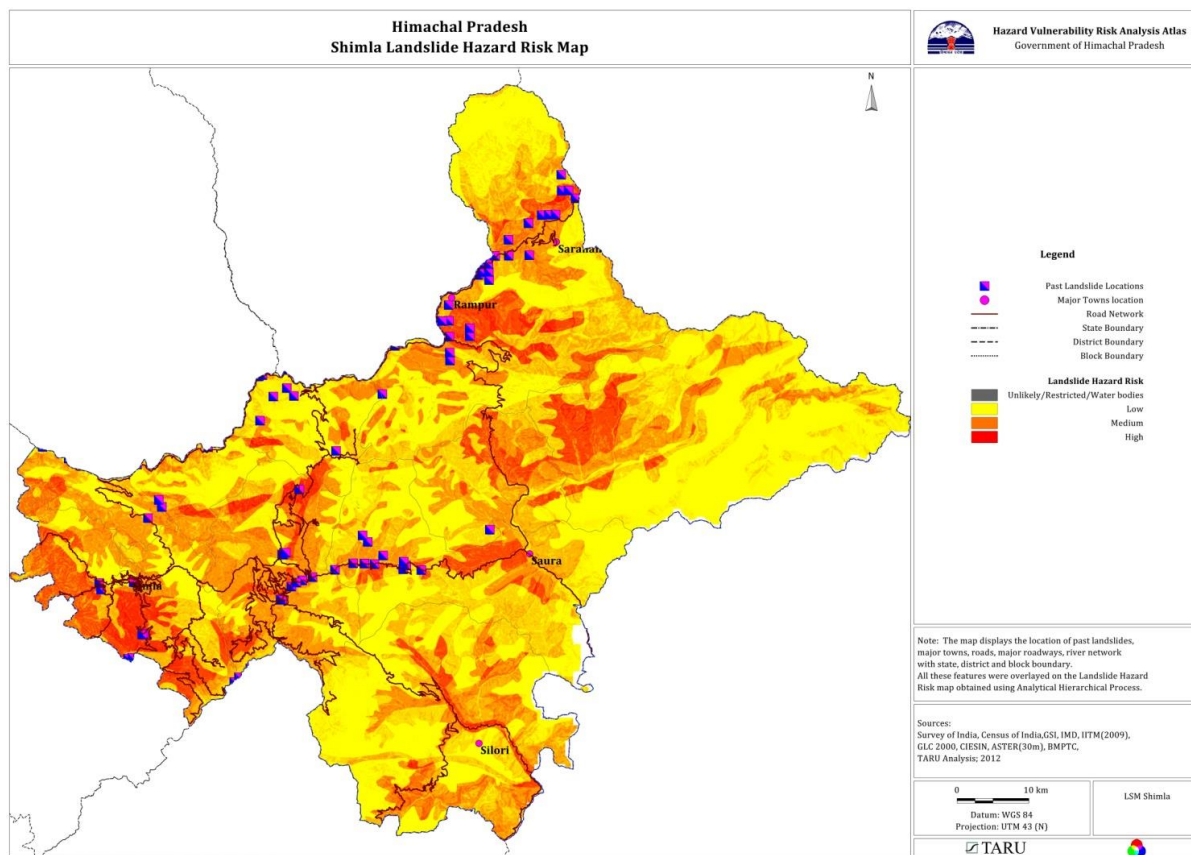


Figure 2.2: Landslide Hazard Risk Zonation Map of District Shimla

- **Cloud Burst:**

It has been noticed that sudden heavy rains are occurring in some part of the district during the last two decades causing the situation of flash floods and landslides resulting in devastation in terms of huge loss to the human life and property. It is being attributed to the climate change caused due to the large human interference with the nature. Activities like deforestation, unchecked development like construction of roads, bridges, hydel projects, buildings etc. is largely responsible for such catastrophe.

Table 2.3: Occurrences of Cloud Bursts in District Shimla

Sr. No	Date and Place of Occurrence of the Event	Extent of Damages caused
--------	---	--------------------------

1	11 th August 1997 at Chirgaon and Rampur.	<p>1. Due to cloud burst at the top of the hill near Rohal village in Chirgaon Tehsil the Andhra river which is originated from the same mountain was inundated in the ordinary way due to the heavy rains i.e. cloud burst occurred in the night and the people and property situated along the Andhra River and thereafter Pabbar were washed away till Rohru. About 124 people died along with 456 cattle washed away. Roads and bridges, houses, fishery tanks and school buildings situated at Chirgaon were completely washed away.</p> <p>2. The above cloud burst also caused damages towards Rampur side and killed 19 people, 464 cattle's, 105 houses and agriculture damaged along with land measuring 40 hectare were also damaged.</p>
2	On 10 th August 2001 at Murali Danda, Devidhar Chirgaon.	The sudden heavy rains i.e. cloud burst occurred in Devidhar area of tehsil Chirgaon causing the complete washing away of the Harizan Basti, village paths, roads, about 8 village bridges, cattle sheds etc. caused devastating damages to the human property.
3	August 2003 and 2007 at Ghanvi Rampur.	The flash floods caused due to the cloud bursts in Ghanvi Area caused the death of 7 human beings and washed away houses, cattle sheds and other human property along with the damaged public property.

- **Lightening:**

In this district there are intermittent incidents of the lightening and many lives have been lost in such incidents. Many times it has caused the damages to the livestock's as people generally rear animals and for grazing them they have to climb the higher reaches where the lightening is a common event. However the documentation of such events is negligible.

- **Drought:**

Due to the climatic changes, the drought is causing threat to the agro/ horticulture sectors of district Shimla.

- **Forest Fires:**

Shimla district is under thick forest cover and the flora varies from the pine trees to oaks to cedar. However during the hot dry spell sometimes the human negligence and the unattended small spark in the forest triggers forest fire which gradually spreads if unchecked and becomes difficult to control resulting in huge loss to the natural resources of the district i.e. flora and fauna and to the extent that some time the fire enters the nearby villages causing huge loss to human life and property.

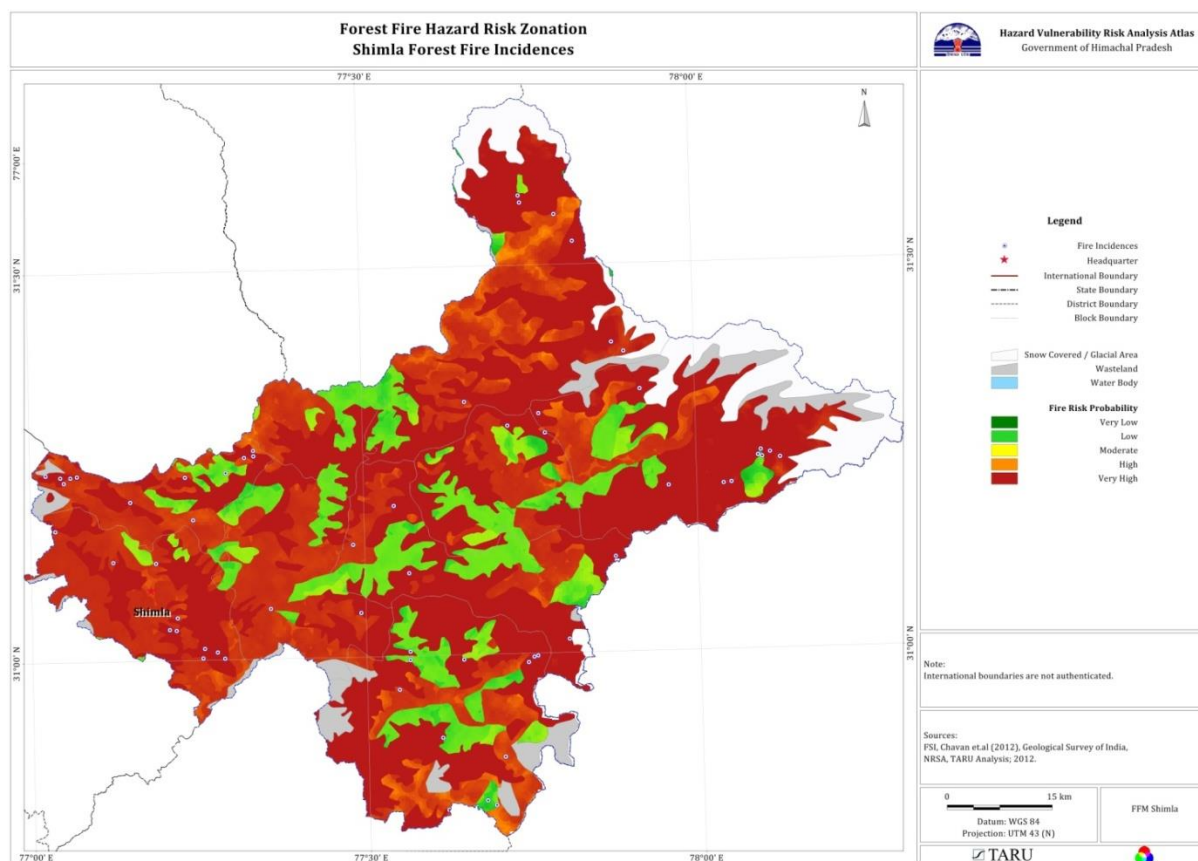


Figure 2.3: Forest Fire Hazard Risk Zonation Map of District Shimla

- **Epidemics:**

A disease outbreak happens when it occurs in greater numbers than expected in a community or a region during a particular season. An outbreak may occur in one community or even extended to several countries. It can also last from days to years. Sometimes a single case of a contagious disease is considered an outbreak. In the year 2002 plague broke out in the Rohroo sub-division viz. Sarswati Nagar Kuddu area claiming 11 lives which was triggered due to eating of the infected wild meat. In a recent incident there was a major outbreak of jaundice epidemic in the parts of Shimla town and some rural areas of district Shimla adjoining Ashwani Khud due to contamination in the drinking water source in the area. There were over 1000 jaundice cases reported since December 2015.

- **Flash Floods:**

Shimla district's geographical location is such that it spreads from mid Himalaya to greater Himalaya and the river Satluj, Andhra, Pabbar, Nogali, Ganavi and other many smaller khuds/rivulets flowing through it makes the area and the people living around these more vulnerable to the floods /flash floods as is evident from the history.

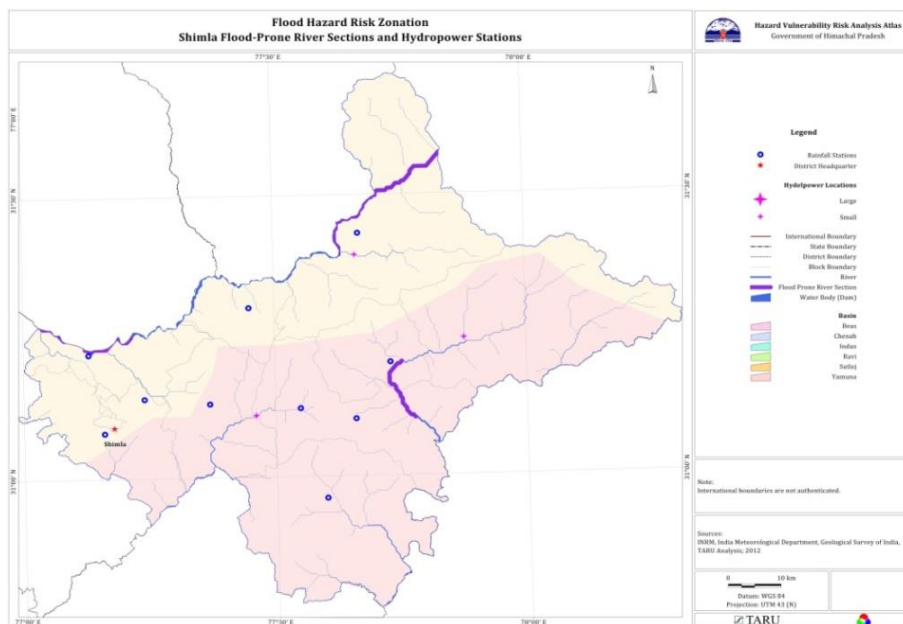


Figure 2.4: Flood Hazard Risk Zonation Map of District Shimla

- **Sinking Zone in Shimla City:**

Recent geological studies indicate that roughly 25% of the old town is in the sinking zone and unless improvements are made in the drainage and sewerage systems of the upper reaches more could undergo sinking. Geologists say that when the famous Ridge of Shimla was constructed the hilltop was sliced and all the debris was dumped on its northern slopes. Though it has compacted over the years but gradually with time many parts of Lakkar Bazar and Rivoli bus stand do show a downward creeping movement. Slopes have become overloaded, and buildings in several heavily crowded localities in the central part of the town have become unsafe as they fall in the sinking zone. The Ridge is not only a portion of land in Shimla but it contains its life line. The water reservoir beneath it has storage of ten lac gallons of water. The reservoir was constructed without using an ounce of cement and only lime mortar has been used. A major portion of the flat land consist debris and has resulted into so called sinking zone. Geologically weak areas identified as highly sinking zone which include the northern slope of the Ridge extending upto Grand Hotel in the west covering Lakkar Bazaar, Central School upto Auckland School, Dhobi Ghat below Idgah electric sub-station and sliding areas including Ladakhi Mohalla, the spur below the office of the Directorate of Education and surrounding areas of Clark's Hotel are also integral parts of green vertical buildings which have led manifold increase in pressure on land resources and urban infrastructure development. Further addition of load is likely to be hazardous in these areas.

2.1 (2) Human Induced Hazards

- **Accidents:**

The mountainous relief, rugged topography and adverse climatic conditions make the District quite prone towards road accidents. Besides the natural factors some human-induced factors viz. distracted driving like over speeding, drink and drive, reckless driving, teenage driving and answering mobile phones etc. are some of the common causes of road accidents. The state of Himachal Pradesh has faced around 30,000 road accidents since 2010. District Shimla has also experienced some of the major road accidents including falling of buses in gorges, car collision etc. The district wise data mentioned below shows that in the recent year total number of people killed were 430 and injured were 801 in total accidental cases numbering 211. Some of the road accidents occurred in the year 2016 are mentioned below:-

- Eleven people killed in the year 2016 when a HRTC bus fell into a deep gorge near Bajroli in Theog Sub-Division of Shimla district.
- In another accident in Shimla district again eleven people including the driver and conductor were killed while 25 others sustained injuries. Four others died on the spot and seven succumbed to their injuries at a hospital.
- **Industrial Hazards:-**

This district has come up as Hydro Project district with the one mega project Nathpa Jhakari hydro project 1500mw along with Rampur hydro power project 431mw, Luri Power Project, Kuddu Sawra Power Project and around 30 mini and micro projects thus making the district prone to bursting of the water reservoir and other accidents. These projects not only display people living in close vicinity but also pose threat to vegetation and environment. One of the major projects on the Sutlej River is Nathpa Jhakri Dam which generates nearly 1500 MW of electricity. The Nathpa Jhakri Hydroelectric Station is the country's largest hydropower Plant. The project is funded by the World Bank. It is located on River Sutlej a major tributary on the Indus basin in Shimla district of Himachal Pradesh in North India.

This plant is designed to generate 6950.88 (6612) million units of electricity each year but quality management at the plant has enabled generation to exceed yearly targets. The impact of hydroelectricity project is slow but clearly becoming visible in the shape of vanishing aquatic life, depleting vegetation, water pollution, reducing irrigation water and livelihoods of locals. The problem would deepen in near future. Besides various advantages such plants has many disadvantages viz. emission of Methane and Carbon Dioxide, disturbance of habitat, expensive installation costs, limited use, diverted natural waterway, adverse effects on agriculture, breaking of dams and deposition of silt etc.

- **Stampede:**

Due to congestion especially in central Shimla the chances of stampede is very high. There are single paths in Lower Bazaar, Ram Bazaar and Sabzi Mandi area. If any mishappening occur it will result into stampede which due to congestion and slope terrain will cause huge loss. Also at temples in peak festival days huge crowd assembled and there is always a chance of facing stampede in crowded places. Incident of fire, earthquake or terrorist attack can also lead to such incidents.

- **Rapid Unplanned Growth in Shimla:**

Planned for a maximum population of 16,000 the town now supports 2, 36,000, as per provisional census figures for 2011. Shimla has seen a very rapid population growth during the last three decades due to huge housing and tourism demands. Lack of planning and haphazard growth has resulted in the construction of buildings on steep and unstable slopes with improper construction practices. High priority lifeline structures like hospitals, power stations, telecommunication installations and water supply stations are located in high vulnerability area with poor connectivity. Weak enforcement of byelaws and poor emergency management capacity has added to the risk.

- **Distorted Land Use and Building Utilisation:**

The major land use is residential area in the Capital town of Shimla which is estimated at 75% of the total built up area. Seven percent of the residential buildings accommodate street level commercial activities. Areas such as Mall Road, Lower Bazar, Krishna Nagar, Summer Hill and Totu are highly commercialised where upto 50% of the total buildings are used for commercial purposes. There is only 4% of total building stock that is used by institutions and facilities such as schools, offices, hospitals, post offices, power stations, water works, and places for worship which could be utilised as community shelters. The built up areas have very few and small open spaces in most of the municipal wards. The development plan of Shimla City reflects that in the city only 0.41 % area is

meant as parks and open spaces. It would be really a wrong caution for the Shimla City to come out in the open ground when there is an earthquake because Shimla hardly have any open area. It is again increasing the vulnerability of the District.

- **Poor Accessibility:**

Accessibility within the Shimla city is extremely poor and about 72% of all buildings are not accessible by trafficable roads. Out of that, 38% are accessible through pedestrian paths and stair ways with less than one meter in width. Certain areas are built on such steep slopes and with such poor accessibility that in case of a building collapse there will be no escape routes. Many of the trafficable roads too are in such locations that in case of earthquake induced landslides or building collapse on the slopes above the roads, they will get blocked. This can lead to the cutting off of critical rescue and relief routes.

2.2 Socio Economic Profile of the District

Figure 2.5: Population of District Shimla (As per 2001 & 2011 Census)

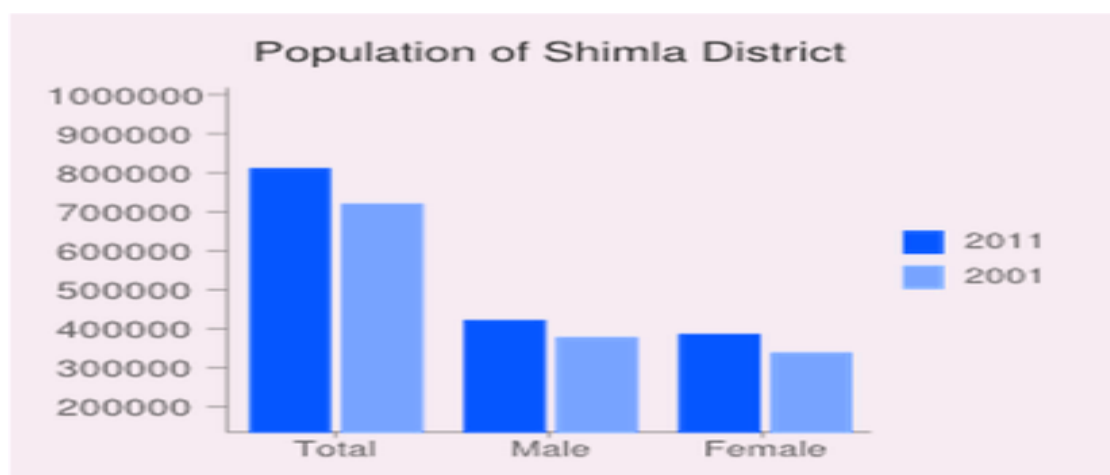


Table 2.4: Population of District Shimla (As per 2011 Census)

Male	4,25,0,39
Female	3,88,9,71
Rural	6,12,6,59
Urban	2,01,3,51
BPL Household	31681
Sex ratio per 1000	915
Density of population (per KM ²)	159

Table 2.5: Literacy Rate Aggregate (As per 2011 Census)

Male Literacy	89.59 %
Female Literacy	77.13 %

- **Social Vulnerability:**

The awareness level of the society regarding earthquake and other disasters in the district is very low. Being highly exposed to the earthquake disaster and living in a vulnerable location with poor awareness level magnify the vulnerability of the community. Neither the government nor the citizens are ready to face the earthquake. Although the whole Shimla is equally vulnerable but the poor population is living in the most vulnerable locations i.e. on slopes and sinking zones. Their exposure makes them more vulnerable to face the vagaries of an earthquake. Below the table reflects the age composition of the population. It reflects that around 60% population belongs to the productive age and if they face some accident or life loss it will cause adverse impact on the community.

The Shimla economy is mainly dependent upon the revenue from travel and tourism industry and also agriculture and horticulture. The majority portion of the Shimla people is either placed into the tourism industry or into the administrative department of Shimla. A vast number of people of Shimla have taken the occupation of either travel agent, guide or photographer or something related to the tourism industry like hotels and the restaurants. Shimla's economy is being run to a large extent by the tourism industry that has developed gradually over the years. Shimla is the administrative capital of the state of Himachal Pradesh. As such there are many important departments and offices of the governing body in Shimla. The people working in these offices are the cogs and screws of the economy of Shimla. Besides, Shimla has a number of health care centres like the Indira Gandhi Hospital, Snowdown Hospital and so on, that also helps in the economy of Shimla.

Table 2.6: Geographical Area (in KM²): 5131 sq. km

Forest Area (by Village Paper 1999-2000)	119331 Hect.
Cultivated Area (by Village Paper 1999-2000)	101160 Hect.
Unusable Area (by Village Paper 1999-2000)	49051 Hect.
Longitude	East(76°59'22"-78°18'40")
Latitude	North (30°45'48"-30°43'0")
Major Rivers	Sutlej , Pabbar , Giri

Table 2.7: Cattle Population (As per cattle census)

Cows	307187
Buffaloes	16292
Yak	9
Mithun	3
Sheep	98376
Goats	98223
Horses & ponies	2050
Mules	3963
Camels	0
Donkeys	904
Pigs	544
Total Livestock	527551

Table 2.8: Climate of District Shimla

Humidity (at Hqr.)	89%(Max.) 51%(Min.)
Annual Rainfall	1211.4 mm (Average)
Temperature	33.3°C(Max.) -3.1°C (Min.)

Table 2.9 – Distances within District Shimla

Nearest Railway Station	Shimla (Narrow gauge line just 1 Km from Mall Road Shimla Town), Kalka Railway Station (Broad Gauge line 90Km from the main Shimla Town)
Nearest Airport	Jubbarhatti Airport (14 Kms from Shimla town, but not operational these days – Under renovation) Chandigarh International Airport (125 Km from Shimla Town)

- Animal Husbandry:-**

Table 2.10 – List of Veterinary Hospitals and Dispensaries

State Level veterinary Hospital	01
Sub- Division veterinary Hospitals	05
Veterinary Hospital	40
Veterinary Dispensaries	253
Veterinary Disp.(Mukhiya Mantri Arogya Pashudhan Yozna)	99
Poultry Farm	0

Table 2.11: Schedule Caste and Schedule Tribe Population:-

Sr. No.	District/Block	Population	Scheduled Castes	Scheduled Tribes
1	2	3	4	5
	SHIMLA			
1.	Rampur	67,232	23,389	2,238
2.	Narkanda	42,161	12,846	187
3.	Theog	80,331	22,013	53
4.	Mashobra	86,782	25,305	359
5.	Basantpur	41,724	12,224	37
6.	Chopal	85,244	25,230	1,789
7.	Jubbal Kotkhai	74,012	18,110	218
8.	Rohru	56,421	18,060	262
9.	Chauharra	52,514	14,948	192
10.	Nankhari	26,238	7,110	64

Table 2.12 : Health facilities in District Shimla

Zonal Hospital	1
Civil Hospital	8
Community Health Centre	8
Primary Health Centre	88

Health Centres	250
Ayurvedic Hospital	3
Homeopathic	1
Available Beds	2026

Table 2.13: Employees According to the type of Institutions, 2014-15

Name of District/Town / Urban Local	Employees in Govt. Sectors				Govt. Undertakings			Local bodies		
	Regular	Part Time/ Contract/ Other	Daily Paid	Total	Regular	Temporary Non regular	Total	Regular	Temporary /Non regular	Total
1	2	3	4	5	6	7	8	9	10	11
SHIMLA										
1. Shimla	8042	538	277	8857	2378	528	2906	1073	55	1128
2. Theog	1137	116	76	1329	43	0	43	12	2	14
3. Rampur	1425	40	155	1620	750	160	910	30	1	31
4. Rohru	1530	247	279	2056	240	130	370	11	14	25
5. Narkanda	80	20	0	100	12	1	13	8	0	8
6. Jubbal	105	15	35	155	15	10	25	8	0	8
7. Chopal	210	90	90	390	40	2	42	3	3	6
8. Kotkhai	276	0	31	307	7	0	7	4	1	5
9.Sunni	234	20	5	259	60	0	60	7	1	8
10. Jutogh (CB)	0	0	0		0	0	0	38	1	39
11.Jhakhri(CT)	..	..	..	..	..	..	..	..	..	..
Total	13039	1086	948	15073	3545	831	4376	1194	78	1272

2.3 Important Gaps in Existing Capacity to Deal with Disasters

- Connectivity and terrain of the district.
- Lack of specialised Search & Rescue (SAR) equipment and capabilities with the state authorities.
- Communication (land and mobile based communication only).
- Lack of trained workforce.
- Lack of awareness at all levels i.e. government functionaries, elected representatives and the general public.
- Lack of clarity of roles of various departments and stakeholders.
- Disaster Risk Reduction (DRR) not integrated into development planning and programmes.
- Hospitals and schools not prepared to deal with disasters.
- Only fire Post for the entire district.
- The existing construction of the district is not hazard resistant.
- Huge infrastructure has come along the major river courses of the district making them vulnerable to flash floods.
- No efforts have been taken to transfer the risk by way of insurance etc.
- The Early Warning System (EWS) in the district is not adequate and there is hardly any mechanism to communicate the Early Warning to the vulnerable community.
- The district control room is equipped, first phase is completed and has trained manpower to handle it.
- The institutional set-up i.e. SAR, MFA, etc. to deal with disasters is not adequate.

❖ Risk Assessment:-

Risk has been defined as the total loss as expected from the hazard on the elements at risk as per the prevailing vulnerability at that point of time. It is therefore the function of the probability of occurrence of the hazard of the particular magnitude and the vulnerability prevailing at that point of time regarding the elements at risk.

Therefore risk = probability of hazard magnitude * vulnerability

Hence as per the analysis of hazard done above and the vulnerability assessment the risk assessment as calculated for district Shimla is as follow:-

**Table
2.14 –**

ASSESSMENT OF RISK FOR MULTI HAZARDS IN DISTRICT SHIMLA													
RISK ASSESSMENT BASED UPON PROBABILITY MODEL													
NATURAL AND HUMAN INDUCED HAZARDS													
EVENT	PROBABILITY				RISK					PREPAREDNESS			TOTAL
	HIGH	MED	LOW	NONE	LIFE THRE AT	HEALTH/ SAFETY	HIGH DISRUP- TION	MOD DISRUP- TION	LOW DISRUP- TION	POOR	FAIR	GOOD	RISK
SCORE	3	2	1	0	5	4	3	2	1	3	2	1	
NATURAL AND HUMAN INDUCED HAZARDS													
Flash Floods	3	0	0	0	5	0	0	0	0	3	0	0	45
Cloud bursts	3	0	0	0	5	0	0	0	0	3	0	0	45
Drought	0	2	0	0	0	0	0	0	1	0	2	0	4
Hailstorm	0	2	0	0	0	0	0	0	1	0	2	0	4
Lightening	3	0	0	0	0	4	0	0	0	3	0	0	36
Forest Fires	3	0	0	0	5	0	0	0	1	3	0	0	45
Earthquake	3	0	0	0	5	0	0	0	0	3	0	0	45
Landslide	0	2	0	0	0	0	3	0	0	3	0	0	18
epidemic	0	2	0	0	0	4	0	0	0	0	2	0	16
Accidents	3	0	0	0	5	0	0	0	0	3	0	0	45
village fires	3	0	0	0	5	0	0	0	0	3	0	0	45

Assessment of Risk for Multi-Hazards in District

• Risk Assessment of Shimla in Context of Various Hazards and Associated Vulnerabilities

Risk is a measure of expected losses due to a hazardous event of particular magnitude occurring in given area over a specific time period. It is a function of probability of particular occurrence of activation of any hazard and losses each would cause. Risk is the potential that a chosen action or activity (including the choice of inaction)

will lead to a loss (an undesirable outcome). The notion implies that a choice having an influence on the outcome exists (or existed). Potential losses themselves may also be called "risks". Almost any human endeavour carries some risk but some are much more risky than others. Risk in itself exists only theoretically unless the hazard got activated and it gets an exposure with the vulnerability. Considering the situations of Shimla as there are different types of hazards with multi facet vulnerabilities, the risks are also multi-dimensional. Risk associated with each of the hazard taken into account are mentioned below:

- **Risk Related To Earthquake**

(i) Probability of Earthquake:

Being situated in seismic active zone and having the multi fold vulnerabilities the Shimla is at risk to face an earthquake in near future. Shimla can expect maximum peak ground acceleration (PGA) of 4.0 meters per Second Square. This suggests that Shimla can expect an earthquake of seismic intensity of VIII on the Modified Mercalli (MM) Intensity Scale.

(ii) Consequences of Earthquake:

a) Building Collapse:

MM VIII indicates that there will be slight damage in specially designed structures considerable in ordinary substantial buildings and great damage in poorly built structures. Panel walls can be thrown out of frame structures. Chimneys, factory stacks, columns, walls and monuments can collapse. Heavy furniture can get overturned. Sand and mud can be ejected in small amount. Changes can be caused in water levels. The worst part is that 90% of the buildings in Shimla are categorised as poorly built.

b) Landslides:

Apart from building collapse the most prominent after effect of earthquake is triggering of landslides and which will cause blockage of roads, damage of built property & assets etc. The roads i.e. the lifelines for search and rescue are also likely to block with the collapse of structures along the road.

c) Failure of Water Supply System:

The water supply and sewerage system in Shimla is already more than 100 years old and is in very poor and weak condition. Even a mild tremor could hit the water and sewerage supply system of Shimla. The supply of water within the city mainly depends upon the big water storage tanks- 02 number which are located at Ridge and Sanjauli. There is no scientific study available to say that these tanks could face the tremor upto what extent. Otherwise it could cause floods as an after affect and may wash out the Lower Bazar and Lakkar Bazar area of central Shimla. The water is lifted to Shimla from great distances and the supply line is likely to damage at many locations. Same is the situation of the sewerage system as well. At present only 40% of the area in Shimla is served with proper sewerage system which too is weak. The old sewer lines are likely to damage. The same may cause sanitation and related problems. Also restoration of these services is again a big challenge for M.C. Shimla. At present no studies have been done which could state as how much time it will take to restoration of W&S system in Shimla and how it will be done.

d) Failure of Electricity Supply:

Failure to electricity supply and damage to supply wires is another consequence. Dependency on 24 hrs supply of electricity makes people more vulnerable and they find it hard to manage without electricity as they don't have alternate options. Disrupted electricity supply will affect the search and rescue operations, health care facilities prominently and also the water supply.

e) Shelter Management:

Another major risk is to rehabilitate communities after an earthquake as at present no exercise has been done to identify shelters at ward or at micro level. Having mountain terrain and cold weather with shortage of open spaces it will not be possible to put tents in open and make temporary shelters.

f) Dead Body Disposal:

In case of mass causality it is important to identify the places where dead bodies could be buried. Open spaces are very few in the town and nearby areas and lack of additional space may cause the cremation process very difficult.

g) Communication:

At present there is no centralised communication system available which will address different aspect of emergency management. It could create chaos after an earthquake. There is a big risk of conflict generation with multiple commands and actions. Also in absence of clarity of roles few agencies will not respond or others will get over burdened with low capacities.

- **Risk Related To Landslides/ Landslips**

(i) Probability of Landslides/ Landslips:

The probability of Landslides could be high in Shimla. Either the heavy rainfall can trigger the landslides during monsoon or it could be the after effect of an earthquake which will be more threatening than the normal landslide.

(ii) Consequences of Landslide:

a) Collapse of Built Structure:

Structures constructed on extreme slopes are liable to damage from landslide. Weak and unstable strata also contribute to the slipping of structures which could cause damage or collapse of building, infrastructure and utilities.

b) Debris:

The buildings, infrastructure or the utilities may also be threatened by mudslide or debris.

c) Blockage of Roads and Paths:

After landslide it is possible that important highways or internal roads/paths get blocked. It is important to develop a mechanism to open these important paths at the earliest to ensure the smooth transportation for search and rescue, medical response and relief operations.

d) Evacuation and Early Warnings:

Due to unavailability of proper information of city regarding landslides or micro-zonation maps containing information regarding landslides it is impossible to provide early warnings to communities for evacuation.

- **Risk Related To Sinking Zone**

(i) Probability of Sinking of Shimla:

The core area of central Shimla Ridge is gradually sinking over the period and this sinking is on. Administration interventions have proved futile.

(ii) Consequences of Sinking:

a) Threat to Ridge and Heritage Buildings: Continuous sinking in core area is causing threat to the historical Ridge. It is also possible that one day this area will get collapsed and people will lose the historical buildings situated at Ridge including the Ridge itself.

b) Pressure over Water Supply System: The underground water supply system is also getting pressure due to the sinking. Getting cracks in water supply pipes is now a common feature in this area as sinking area causing pressure over old supply lines which are situated towards sinking side.

c) Threat to Water Tank: A water supply tank is also located at Ridge, due to seepage the tank could be a reason for sinking of this area. Also if this tank got collapsed any way it will cause big threat in its vicinity.

- **Mounting Pressure on land resources:**

The original structure of city was designed for 25,000 persons at pedestrian scale. Population of the city and migration to it has increased manifolds. The housing stock, water supply, transportation, sewerage, electricity supply and tourist infrastructure are under stress and strain. Every conceivable space has been utilised for constructions and to cater for infrastructural requirements. Thus Shimla has exhausted all physical thresholds and any more development shall be at the cost of health of the city at exorbitant costs. The immense pressure on land resources has led to environmental degradation.

Shimla has reduced to a hazardous city. It has congested built-up areas. Common problems of the city are the disturbance to natural profile of land by cutting of terrain for constructions, haphazard development, traffic hazards, over concentration in the Central area, unauthorized constructions, encroachments on roads and public land, mixed land use, lack of integration between place of work and place of living discrimination between population growth and urban infrastructure development, garbage nuisance and scanty care of natural and built heritage. Land, Water, Air and noise pollution and vegetation loss have grossly affected its eco-system. High rate of construction activity is damaging the natural setting as well as its scenic beauty. Increasing depth of water table has also become a prime concern. The greed and selfishness and thereby materialistic and consumerism attitude have taken over almost all spheres of life.

- **Geo-hazards:**

There is a constant environmental and aesthetic degradation. Once quaint and tranquil, now melancholy shadows of its glorious past. Increased commercial activity, unplanned physical growth and influx of rural population, along with tourists have ruptured the fragile relationship between the built form and nature. All this has resulted in denuding the mountain slopes of majestic tree-cover-making way for more asphalt roads and concrete buildings. Metamorphosed Himalayan system has Shali series, permo- carboniferous, Pre- Cambrian arch and group of rocks and hard sedimentary rocks. It has mountainous and sandy soil. Shimla city and its surrounding areas have a complicated physiography due to tectonic events, folding, faulting and thrusting processes, and resulting inversion of topography and formation of irregular landforms. On account of predominance of dolomite and lime stone rocks, landslides are common. As rocks are unstable, dislocation of buildings can occur. Being located in seismic zone, it is susceptible to earthquakes.

The recent two decades of organic growth, on account of overwhelming urbanization forces, resulted into eyesores on the townscape of Shimla, which may emerge death traps in the event of natural calamities like earthquakes, cloudbursts and landslides, for which the area is highly susceptible. As the city is now growing beyond its leaps and bounds, it has posed colossal environmental threats. Constructions carried on slopes are more dangerous. Even 45° slope is more than tolerable limits in order to cope up with the gravity of geo-hazards like earthquakes, landslides and dislocation of buildings.

Chapter: 3

Institutional Arrangement for Disaster Management

India has integrated administrative machinery for management of disasters at the National, State, District and Sub-Division levels. The basic responsibility of undertaking rescue, relief and rehabilitation measures in the event of natural disasters at present is that of the concerned State Governments. The Central Government supplements the efforts of the States by providing financial and logistic support. The district administration is the focal point for implementation of all governmental plans and activities. The actual day-to-day function of administering relief is the responsibility of the District Magistrate who exercises, coordinating and supervising powers over all departments at the district level. The 73rd and 74th constitutional amendments recognise Panchayati Raj Institutions as 'Institutions of Self- Government'. The amendment has also laid down necessary guidelines for the structure of their composition, powers, functions, devolution of finances, regular holding of elections and reservation of seats for weaker sections including women. These local bodies can be effective instruments in tackling disasters through early warning system, relief distribution, providing shelter to the victims, medical assistance etc. Other than the national, state, district and local levels there are various institutional stakeholders who are involved in disaster management at various levels in the country. These include the police and para-military forces, civil defence and home-guards, fire services, ex-servicemen, non-government organisations (NGOs), public and private sector enterprises, media and HAM operators etc. The institutional and policy mechanisms for carrying out response, relief and rehabilitation are well-established in the district. These mechanisms have proved to be robust and effective so far as response, relief and rehabilitation are concerned. This section gives a brief overview of the institutional mechanism for disaster management in National level, State level and in details at the district and sub-district Level.

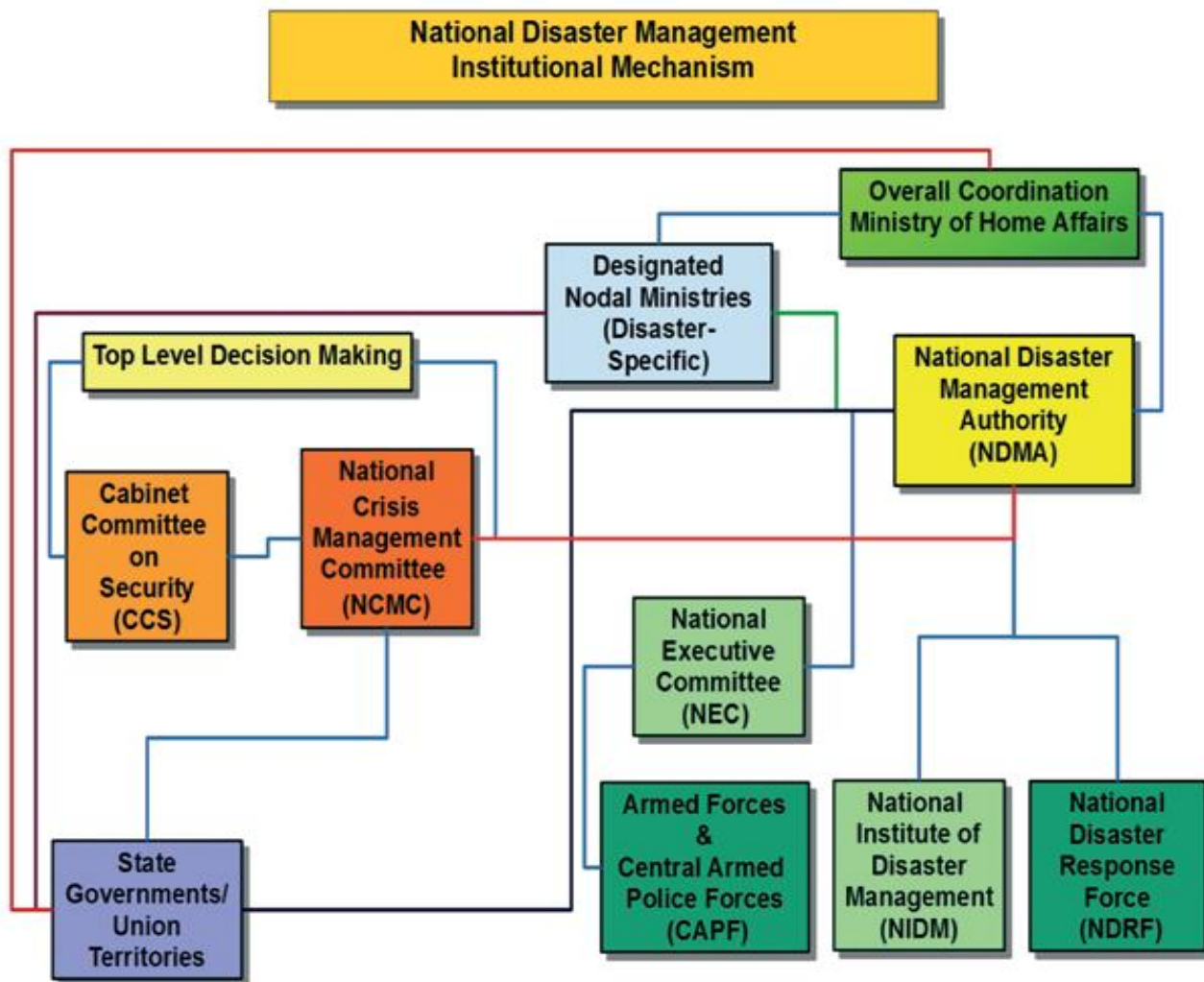
3.1. Institutional Framework

3.3.1. Disaster Management Organisational Structure at National Level

The overall coordination of disaster management vests with the Ministry of Home Affairs (MHA). The Cabinet Committee on Security (CCS) and the National Crisis Management Committee (NCMC) are the key committees involved in the top-level decision-making with regard to disaster management. The National Disaster Management Authority (NDMA) is the lead agency responsible for the preparation of Disaster Management plans and the execution of DM functions at the national level. In most cases, state governments will be carrying out disaster management with the central government playing a supporting role. The central agencies will participate only on the request from the state government. Within each state, there is a separate institutional framework for disaster management at the state-level. The DM Act of 2005 provides for the setting up of National Disaster Management Authority (NDMA) at national level and State Disaster Management Authority (SDMA) at the state level. The extent of involvement of central agencies will depend on the type, scale, and administrative spread of the disaster. If the situation requires the direct assistance from central government or the deployment of central agencies, the central government will provide all necessary support irrespective of the classification of the disaster. The central Institutional Mechanism/National Disaster Management Institutional Framework (Figure 3.1) is as following (Source: NDMP 2016).

Figure 3.1: National Disaster Management Institutional Framework

3.3.2. Disaster Management Organisational Structure at State Level



As per the Disaster Management Act 2005, each state in India shall have its own institutional framework for disaster management. Among other things, the DM Act mandates that each State Government shall take necessary steps for the preparation of state DM plans, integration of measures for prevention of disasters or mitigation into state development plans, allocation of funds, and establish Emergency Warning System. Depending on specific situations and needs, the State Government shall also assist the Central Government and central agencies in various aspects of Disaster Management. Each state shall prepare its own State Disaster Management Plan. The Disaster Management Act 2005 mandates the setting up a State Disaster Management Authority (SDMA) with the Chief Minister as the ex- officio Chairperson. At the State level, the State Disaster Management Authority (SDMA) under the chairmanship of the Chief Minister has the responsibilities of policies, plans and guidelines for Disaster Management and Coordinating their implementation for ensuring timely, effective and coordinated response to disasters. The Chief Secretary is the Chief Executive Officer of the SDMA. Besides, the SDMA has seven other members.

The SDMA will, inter alia and approve the State Plan in Disaster Management organisational structure at the district level in accordance with the guidelines laid down by the NDMA, it will also approve Disaster Management Plans prepared by the departments of the State Government, lay down guidelines to be

followed by the departments of the Government of the State for the purpose of integration of measures for prevention of disasters and mitigation in their development plans and projects, coordinate the implementation of the State Plan, recommend provision of funds for mitigation and preparedness measures, review the developmental plans of the different departments of the State to ensure the integration of prevention, preparedness and mitigation measures and review the measures being taken for mitigation, capacity building and preparedness by the departments. The State Authority shall lay down detailed guidelines for providing standards of relief to persons affected by disasters in the State. The State Government shall constitute a State Executive Committee (SEC) to assist the SDMA in the performance of its functions. The SEC is headed by the Chief Secretary to the State Government and it coordinate and monitors the implementation of the National Policy, the National Plan and the State Plan. The SEC also provides information to the NDMA relating to different aspects of Disaster Management.

- **State Disaster Management Authority:**

As per clause b of sub-section (2) of Section 14 of the Disaster Management Act 2005, the Himachal Pradesh Disaster Management Authority (HPSDMA) under the chairperson of the Honorable Chief Minister was constituted on 1st June 2007 with the following persons as member of the HPDMA:

1. Honorable Chief Minister - Chairperson
2. Hon'ble Revenue Minister - Member
3. Chief Secretary - Chief Executive Officer
4. Principal Secy.(Revenue) - Member
5. Principal Secy. (Home) - Member
6. Principal Secy. (PWD) - Member
7. Principal Secy. (Health) - Member
8. Director General Police - Member
9. Secretary/Add. Secy. (Rev.) - Member Secy.

The State Disaster Management Authority (SDMA) has the mandate to lay down the state policies and approval of State Disaster Management Plan, with the assistance of SEC.

The State Executive Committee (SEC): As per sub-section (1) of section 20 of the Disaster Management Act 2005, the State Executive Committee under the chairperson of Chief Secretary was constituted by the Government of Himachal Pradesh on 1st June 2007 comprising the following members (Table 3.1):

Table 3.1 – Members of State Executive Committee

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

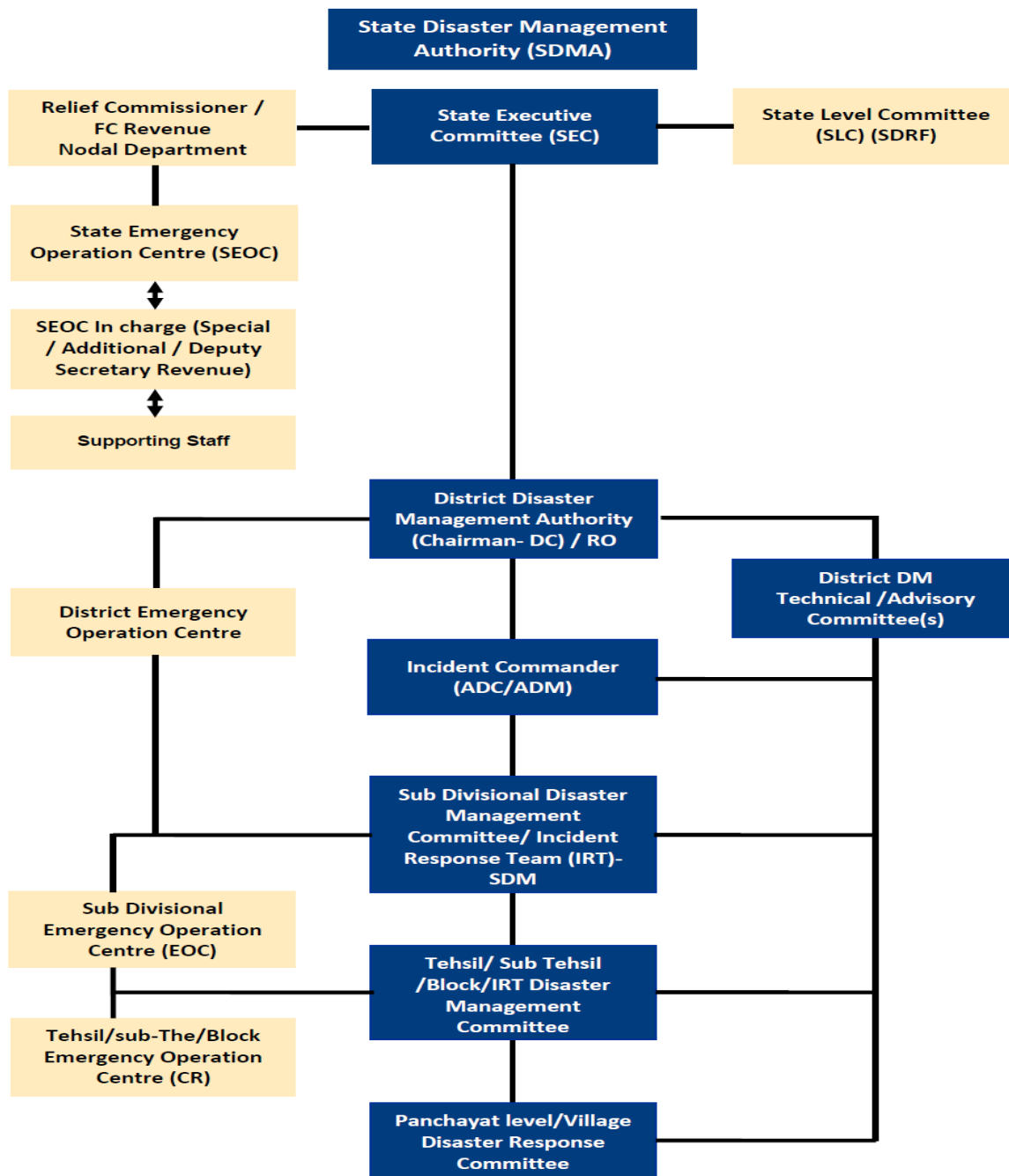


Figure 3.2 -Organisation of State Disaster Management Authority

3.3.3 Disaster Management Organisational Structure at District Level

The district administration is the focal point for implementation of all governmental plans and activities. The actual day-to-day function of administering relief is the responsibility of the District Magistrate who exercises coordinating and supervising powers over all the departments at the district level. As per provisions in Chapter-IV of the DM Act, each State Government shall establish a District Disaster Management Authority for every district in the State with such name as may be specified in that notification. *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 Disaster Management Act 2005, DDMA for every district in the State of Himachal Pradesh has also been constituted, consisting of the following members (Table 3.2):

Table 3.2 Administrative Setup at District Level

S.No.	Officials	Designation
1.	Deputy Commissioner	Chairperson
2.	Superintendent of Police	Member
3.	Chief Medical Officer	Member
4.	Superintending engineer (PWD)	Member
5.	Superintending Engineer (I & PH)	Member
6.	Superintending Engineer (MPP & P)	Member
7.	Chairperson of the Zila Parishad	Member

3.3.3.1 District Crisis Management Group

The District Disaster Management Committee will work as District Crisis Management Group established at the district level comprising of such officers from all the nodal departments who are head of the offices /departments and are capable of taking decision on behalf of the departments at the district level. District Shimla Crisis Management Plan will address situations of large-scale human induced problems such as major extremist attacks, suicide attacks, sabotages, bomb explosions, taking of hostages, major breakdown of law & order, mutiny, large scale desertion in Central Para Military Forces and State Police Forces, terrorist attacks using chemical weapons, radioactive material, biological agents and major natural calamities like floods, landslides and earthquakes.

3.3.3.2 District Disaster Management Committee and Task Forces

District level Disaster Management Advisory Committee(s) will be appointed by the District Disaster Management Authority to take advice on various subject specific fields within the overall context of disaster management. The committee will comprise disaster management experts, which may be from government departments, research institutes and NGO's.

In order to implement the District Disaster management Plan in the district the following members have been constituted under the chairmanship of Deputy Commissioner Shimla as below:-

1. Superintendent Of Police Shimla
2. Additional Deputy Commissioner Shimla
3. Additional District Magistrate (L& O) Shimla
4. Conservator Of Forest Shimla
5. General Manager (Telecommunication) Shimla
6. Chief Medical Officer Shimla
7. Superintending Engineer (PWD) Shimla
8. Superintending Engineer (IPH) Shimla
9. Superintending Engineer (MPP & Power) Shimla

10. Chairperson Of Zila Parishad Shimla
11. District Food and Civil Supplies Controller Shimla
12. Commandant Home Guards Shimla
13. Commandant ITBP(Hqrs) Shimla
14. District/Divisional Fire Officer Shimla
15. Divisional Manager HRTC Shimla
16. District Public Relation Officer Shimla
17. District Town Planner Shimla
18. District Revenue Officer Shimla
19. Commissioner Municipal Corporation Shimla
20. Deputy Director (Higher Education)
21. Deputy Director (Elementary Education)
22. Medical Superintendent IGMCH Shimla
23. Medical Superintendent KNH
24. District Coordinator NYKS
25. Additional District Magistrate (Protocol) Shimla ----- Member Secretary

Non Official Members

- 1) Mayor /Deputy Mayor MC Shimla
- 2) All Zila Parishad Members
- 3) All Councilors MC Shimla
- 4) All NGOs/CBO Shimla

Any other member can be included as desired by the chairman. This committee will ensure that the functions assigned to the different departments are being implemented properly while dealing with the disastrous situation.

Table 3.3 Nodal Ministry for Management / Mitigation of Different Disasters

	Disaster	Nodal Ministry/ Department
1	Biological	Min. of Health and Family Welfare (MoHFW)
2	Chemical and Industrial	Min. of Environment, Forest and Climate Change (MoEFCC)
3	Civil Aviation Accidents	Min. of Civil Aviation (MoCA)
4	Cyclone/Tornado	Min. of Earth Sciences (MoES)
5	Tsunami	Min. of Earth Sciences (MoES)
6	Drought/Hailstorm/Cold Wave and Frost/Pest Attack	Min. of Agriculture and Farmers Welfare (MoAFW)
7	Earthquake	Min. of Earth Sciences (MoES)
8	Flood	Min. of Water Resources (MoWR)
9	Forest Fire	Min. of Environment, Forests and Climate Change (MoEFCC)
10	Landslides	Min. of Mines (MoM)
11	Avalanche	Min. of Defence (MoD)
12	Nuclear and Radiological	Dept. of Atomic Energy (DAE)
13	Rail Accidents	Min. of Railways (MoR)
14	Road Accidents	Min. of Road Transport and Highways (MoRTH)
15	Urban Floods	Min. of Urban Development (MoUD)

Ref: NDMP 2016

Table 3.4 - Roles and Responsibilities of Nodal Departments/ Agencies (State Level)

H.P. State Disaster Management Authority (HPSDMA)	Lay down policies and plans for disaster management in the State. Declare emergency situation in case of State level disaster and the end of it. Provide policy directions and integration of Disaster Management programmes in the state development framework.
State Executive Committee for Disaster Management (SEC)	Implementation of the State Plan and monitoring body for management of disasters in the State.
Himachal Institute of Public Administration (HIPA)	Primary agency responsible for conducting and coordinating training to all government officials involved in the planning and implementation of preparedness, mitigation response and relief work.
State Technical Committee(s)	Responsible for ensuring community participation in the disaster management activities. They will also advise the SEC on implementation of activities at State level.
Department of Revenue and Relief	Member Secretary of SDMA. Member of SEC, Overall coordination, implementation of the EOC activities and documentation and reporting to the SEC.
Department of Public Works (PWD)	Primary agency for maintenance of public infrastructure identifies safer places, assess physical damage, identify safer routes, and provide necessary reconstruction and rehabilitation support. Ensure hazard resistant features as per all building by laws and maintain all National & State roads.
Department of Town and country planning	Primary agency responsible for evolving policy and ensuring land use, hazard wise zonation and implementation building by laws.
Department of Urban development	Main agency to ensure repair and maintenance in the urban areas.
Himachal Pradesh Housing and Urban Development Authority	One of the executing agency for constructions under implementation of recovery and rehabilitation plans. Responsible for ensuring the mitigation measures while construction or reconstruction of its projects in the state.
Department of Education	The department will prepare curriculum related to disaster management and conduct training programme for teachers and children. The department will coordinate with the local authority and arrange for mock drills and search and rescue drills, Awareness campaigns, to make volunteer teams etc. Ensuring maintenance and retrofitting of school buildings/school safety.
Department of Home	Primary agency responsible for Urban Fire, rural fire, nuclear disasters, serial bomb blasts and festival related disasters etc. and also responsible for security, evacuation, emergency assistance, search and rescue, first aid, law and order, communication, shifting of people to relief camps, traffic management, disposal of dead bodies etc.
Department of Forest	Primary agency responsible for "Forest Fire". Identification of disaster prone areas, mitigation activities, research and assessment.

Department of Environment, Science and Technology	The primary agency responsible for Avalanches, Snow Storms & Environmental & Climate Change Hazards. GIS mapping for effective disaster management. Primary agency of research and development on climate change impact and adaptation activities for the State. Provide inputs to the State Disaster Mitigation Committee for new technologies and also for awareness programs.
Department of MPP and Power	Primary agency responsible for dam failures / bursts, electrical disasters and fires. It will ensure power supply for public facilities such as hospital, police stations, telecommunication building and meteorological stations. Coordination with Hydro Power Projects.
Department of Information Technology	Overall responsible for the fail proof communication. Maintenance of IT infrastructures and HIMSWAN, maintain communication and satellite links.
Department of Irrigation and Public health	Primary agency responsible for floods, water supply and drought, issue flood warnings, identification of safer places, construct embankments, arrangement of boats and pump sets, swimmers, divers and communication.
Department of Health	Be the primary agency responsible for “Biological Disasters and Epidemics”, first aid, health, medical care, ambulance arrangements, preventive steps for other diseases, establishment of health camps and also to establish “Trauma Centres” and all other health related support.
Department of Information and Public Relations	Communicate warnings to the public, relay announcements issued by SEC, telecast special programmes for information and actions, education and awareness messages for preparedness actions and to coordinate response. Promote disaster related polices, provide emergency communication systems, enable critical communication links with disaster sites and coordinate with media.
Department of Rural Development	Primary agency to implement vulnerability reduction projects to alleviate poverty and improve people’s livelihoods. Ensure Rural development schemes implemented in the State incorporating disaster management measures. Assists in rehabilitation of the victims.
Department of Agriculture	Primary agency for hailstorms, droughts and pest attacks. To provide seeds and necessary planting material and other inputs to assist in early recovery. Early warning and avert disasters such as hailstorms and droughts.
Department of Finance	Arrange necessary funds, ensure equitable distribution and manage accounts.
Department of Planning	Allocation of funds on priority basis for disaster mitigation and rehabilitation projects
Department of Transport	Primary agency for Road accidents. Arrange for sending personnel and relief material to the disaster affected area, relocate the affected people, keep access routes operational and inform about alternate routes. Keep an inventory of resources available with Govt. & private operators.

Department of Town and Country Planning	Ensure hazard resistant features in all building by laws. Zoning for safe construction sites and development of policies.
Department of Technical Education and vocational training	Be the primary agency responsible to conduct certificate training programmes for construction workers. To create a pool of qualified masons to ensure safe construction practices in construction work.
Department of Food, Civil Supplies and Consumers Affairs	Plan for food storage locations keeping in view the necessity. Primary agency responsible for identifying the basic needs of food in the aftermath of a disaster or emergency, to obtain appropriate supplies and transporting such supplies to the disaster area.
Department of Social Justice and Empowerment	Primary agency for building capacities and increasing awareness of disabled persons and women. Organizing special camps for the disabled, widows, children and other vulnerable groups. It will also provide necessary help and assistance for socio-economic rehabilitation.
Department of Industries	Primary agency for landslides, mudflows and mining collapses.
Department of Horticulture	Primary agency for hailstorm and pest attack for horticulture sector. Support in crop damage assessment due to disasters.
Department of Animal Husbandry	Primary agency for Animal epidemics. Responsible for fodder assessments, supply and management during disasters and also the disposal of dead animals.
Department of Panchayati Raj	Ensure training of Panchayati Raj Institutions on disaster management and also ensure that all the development schemes of the department have the component of disaster mitigation as an integral part.
District Administration	The District Disaster Management Authority (DDMA) will 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 State Authority.
International Agencies / NGOs	Provide relief, coordinate with Government, conduct awareness campaigns, capacity building programmes, preparedness activities at community level and assist in reconstruction and rehabilitation.
Department of Tourism	Coordinate in providing temporary shelters and food packages for air dropping.

Ref: SDMP 2012

3.4.2.1. Essential Service Functions (ESF):

The Essential Service Functions (ESFs) aim is to ensure continuity of services important for human life and dignity, enabling smooth governance and other socio-economic-political systems of the district during disaster and pre-disaster times. The broad guidelines are:

- a. Each ESF shall have a nodal agency, primarily a government agency responsible for providing that service.
- b. All other agencies, government and non-government that are directly/indirectly involved in provision of these services will coordinate with nodal agency as support agencies.

c. The nodal agency in consultation with the support agency shall develop its own terms of reference, rules and regulations.

d. The nodal agency in consultation with the support agency shall develop a plan for the particular service to include contingency planning for worst case scenarios.

3.4.2.1.1. Essential Service Functions (ESF) Management Committee:

ESF management committee comprises of the heads of nodal agencies for all ESF and is chaired by Zila-Pramukh and co-chaired by ADM disaster management or Chief Executive Officer of DDMA. After constitution of District Disaster Management Authority (DDMA), this committee takes over the role of district disaster management committee.

✓ **Key Functions of ESF management committee are:**

- Collate annual Disaster Risk Reduction (DRR) action plans for each ESF and monitor its implementation.
- Recommend projects and activities for DRR to be included in the development activities of nodal and support agencies for each ESF.
- Collaborate assessments from each ESF during emergencies and suggest strategies for intervention to DDMA.
- Finalise strategies for response and recovery interventions.
- Coordinate overall response.
- Document lessons learnt and good practice.
- Ensure grievance redressal mechanisms.

3.3.3.3 Forecasting and Warning Agencies

Table 3.5 - List of Forecasting and Warning Agencies

SN	Hazards	Warning Agency	Contact Details
1	Earthquake	Center: (IMD) Indian Meteorological Department / NEOC State: SDMA/SEOC District: DDMA/ DEOC	011-24619943 / 24624588 www.imd.gov.in 1071 (National Helpline) 1070 (State Helpline) 1077 (District Helpline)
2	Landslide	(GSI) Geological Survey of India SDMA/SEOC DDMA/ DEOC	0172-2622529 Fax0172-2621945. Mob: 094173-71954. Joginder.singh@gsi.gov.in
3	Heavy Rain / Snowfall/avalanche	(IMD) Indian Meteorological Department / SEOC and DEOC	0177-2626211 www.weathershimla.gov.in 1070 1077
4	Flood/ Flash Flood	(CWC) Central Water Commission Irrigation and Public Health Dept. SEOC DEOC	0183-236105 1070 1077
5	Domestic / Forest Fire	Department of Fire Services/ Department of Forest	101
6	Epidemics	Health and Family Welfare Department	102/108

7	Human Hazards	Induced	Himachal Pradesh Police	100
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Forecasting refers to the prediction of future weather events and trends, tested against historic data. Along with Early Warning Systems, forecasting has the ability to deliver immense benefits in the form of improved planning and preparedness, especially when combined with indigenous knowledge of past trends. Unfortunately very few people in the developing world are receiving these benefits and their wellbeing is therefore compromised. Whereas an early warning system (EWS) is technology and associated policies and procedures designed to predict and mitigate the harm of natural and human-initiated disasters and other undesirable events. Both are major element of disaster risk reduction. It prevents loss of life and reduces the economic and material impact of disasters. To be effective, early warning systems need to actively involve the communities at risk, facilitate public education and awareness of risks, disseminate alerts, warnings and ensure there is constant state of preparedness. A complete and effective early warning system supports four main functions i.e. risk analysis, monitoring and warning; dissemination and communication and response capability.

3.3.3.4 Emergency Operation Centre (EOC) Setup and Facilities Available in the District

It has been observed that at the time of a calamity/disaster communication services are the first to go out of order. Emergency Operation Centre plays a vital role in emergency operation activation and place multi-mode and multi-channel communication system for pre, during and post emergency situation. It coordinates the flow of information with respect to activities associated with relief operations. District Emergency Operation Centre (DEOC), Shimla established according to essence mentioned above. The design, layout, equipment and operation of the DEOC, Shimla is as per the EOC Manual prepared at the State level by Himachal Pradesh State Disaster Management Authority (HPSDMA), Shimla or National Disaster Management Authority (NDMA), Delhi (India). It also fortify with all the basic as well as advance communication and IT infrastructure is constraint of limited space and resources. The main office of DEOC, Shimla is sited adjoining to the main building of DC Office, Shimla.

❖ Role and Objectives of DEOC, Shimla

District Emergency Operation Centre plays a vital role in emergency operation activation in the district and have following roles and objectives during occurrence of any disaster and normal time :-

- It acts as a control room that would be the nerve centre for the fatal incident and disaster management in the district.
- To monitor, coordinate and implement the actions for disaster risk management within the district.
- Activate the Emergency Support Function (ESF) in the event of a disaster and coordinate the actions of various line departments/ agencies.
- Encourage each line and stakeholder department within the districts to prepare their area specific plans in terms of their vulnerability and proneness to specific disasters and receive reports on preparedness from their side. Based on these, the DEOC will submit a summary report to SDMA and higher authority.
- Serve as a data bank to all line departments and the planning department with respect to risks and vulnerabilities and ensure that due consideration is given to mitigation strategies in the planning process.
- Maintain a web-based inventory of all resources available with all concerned departments in the district and update it through the India Disaster Resource Network (IDRN).

- Receive appropriate proposals on preparedness, risk reduction and mitigation measures from various departments/agencies and place the same for consideration of the Chief Secretary through Deputy Commissioner's approval.
- Monitor preparedness measures undertaken at the district levels including simulation exercises undertaken by various departments.
- Ensure from each line departments that all warning, communication systems and instruments are in working conditions. Upgrade the Disaster Management Action according to the changing scenario.
- Monitor preparedness measures and build the capacity on the disaster risk management through training, workshops and awareness generation programme.
- Providing information at district level, local level and to disaster prone areas through appropriate media. Brief the media of the situations and prepare day to day reports during the disasters and report the actual scenario and the action taken by the District Administration.
- Maintain a data base of trained personnel and volunteers who could be contacted at any time.

3.3.3.5 Alternate EOC: -

State Emergency Operations Centre (SEOC) is located in District Shimla.

3.3.4. Public –Private Partnership:

Himachal Pradesh may not have many large corporate entities in private sector but it does have significant presence of public sector giants like NHPC, Power Grid, BSNL etc. that have always provided support to district administration during disasters. Moreover, CSR does not have any geographical limitation and large corporate houses of the country have always extended their support whenever major disasters have struck the country.

3.3.5. Incident Response System (IRS)

Incident Response System is a combination of facilities, logistic, personnel, finance, operation and communication operating within a common organisational structure with responsibility for the management of assigned resources to accomplish the objectives effectively pertaining to an incident. The IRS organisation functions through Incident Response Team (IRTs) in the field. The District Magistrate (DM) as the chairman of the DDMA is a Responsible Person (RO) as overall in charge of the incident response management. If needed, he can delegate his functions to any other responsible officer or appoint another senior officer as an incident commander. On activation of the incident response system all line departments/ organizations/ individuals shall follow the directions of the Incident Commander as condition demands. He can divert all mechanisms and resources in the district to fight against a scenario leading to disaster/calamity in the district. On activation of IRS, an operation section with a chief and associates, planning section with a leader and associates, logistic section with a leader and section chief and finance section with a leader and associates shall assume their roles. This is the sole discretion of the Incident Commander to appoint the Section Chief. These section chiefs are vested with commanding authority and logistic assistance to deliver the concerned responsibility. The chief and associates for the different sections are as nominated below:

1. All team leaders will be in the rank of ADM/Line Department Heads in the district who are senior level officer.
2. The SDMs shall not be given any responsibility in the incident command chain since

they have to look after the onsite EOC in their territory or as assigned to the affected areas as well as they are the Team Leaders of Incident Management Teams (IMTs) in each Onsite Emergency Operation Centre

The IRS team has not been yet notified officially by the District Administration, it is planned to be notified shortly.

Chapter: 4

Prevention and Mitigation Measures

As discussed in the previous chapters that district Shimla lies in Zone IV & Zone V. Risk gets compounded when hazard meets with vulnerabilities due to increase in population number, high dense population, weak physical structures and conventional construction technologies etc. Similarly, District is also vulnerable to high degree of fire (Forest/Domestic). Although, it has not faced any high intensity earthquake in recent past but the recent repeated tremors felt in Rampur makes it crucial to take necessary prevention and mitigation measures. Studies envisage that the district can receive an earthquake of 6 to 7.5 on Richter scale band. Earthquakes can destroy buildings and infrastructure with secondary effects i.e. fires, embankment failures, landslides and liquefaction etc. Therefore it is important to consider both primary and secondary effects into earthquake disaster mitigation planning. So, an effective mitigation planning is necessary to reduce the risk involved in the district. For efficient disaster mitigation, the pre-disaster management phase needs to be utilised for planning and implementing preventive measures on the one hand and working on preparedness activities on the other. Disaster is caused due to failure of manmade structures, lack of preparedness and awareness.

4.1 Prevention Measures:-

Prevention can be defined as an action taken to avoid an incident or stopping an incident from occurring. It basically includes deterrence operations and surveillance. Whereas, Mitigation refers to measures that prevent an emergency, reduce the chance of an emergency happening or reduce the damaging effects of unavoidable emergencies. Moreover, Disaster Mitigation contributes to lasting improvement in safety and is essential to integrate disaster management in mainstream planning.

Risk mitigation measures are typically designed to reduce or limit the adverse impacts of already existing risks of disasters through various structural or non-structural measures or a combination of both. For example, risks of drought can be reduced through measures of water conservation and drought proofing. Risks of earthquake can be reduced by retrofitting life line structures in seismic zones. Risks of every type of disasters can be reduced with proper strategic action plans for risk reduction as well as development of capacities at all levels.

Broadly mitigation ways can be divided into two parts i.e. structural measures and non-structural measures. Structural measures undertake to strengthen buildings, lifelines and infrastructure to withstand any hazard. Non-structural measures emphasis on land-use planning programmes for sustaining awareness, dissemination of information materials on do's and don'ts at the time of disaster. Once the area has been identified as hazard prone, it becomes important that the government and the community should practice these above-said measures. Based on this ideology, mitigation plan may vary according to major hazards identified. Shimla district is being considered prone to flood, drought and fire related hazards apart from earthquakes & landslides. Mitigation measures practiced in the district is mentioned below in Table 4.1

Table 4.1 Mitigation Measures in District Shimla			
Hazard	Structural Mitigation Measures	Non- Structural Mitigation Measures	Implementing Agency/ Department
Earthquake	<ul style="list-style-type: none"> • Safety Audit of Lifeline buildings • Seismic Retrofitting of Lifeline Buildings • Seismic Micro-Zonation • Implementation of the solutions to the identified Non-Structural hazards in a building • Making all public utilities like water supply systems, communication networks, electricity lines etc. earthquake-proof. • Ensuring that all new structures conform to earthquake resistant standards and specifications. • Ensuring that all existing structures are retrofitted to withstand the shocks of disasters. 	<ul style="list-style-type: none"> • The building codes have to be suitably formulated/ amended and appropriately detailed along with legal implications properly stated. • Wide dissemination of earthquake-resistant building codes, the National Building Code 2005, and other safety codes. • Provisions of insurance according to building bye laws, codes and hazard proneness. • Training and Capacity Building Activities. • Policy Measures. • Capacity Building of engineers, masons and general public. • Identification of critical lifeline buildings. • Mock drills. • Land Use Planning. • IEC material for earthquake resilient building. • Awareness generation • Non Structural hazard identification in the building. • Determine Local Soil and Groundwater Conditions. 	Dept. of Environmental Science and Technology (HP), Ministry of Earth sciences/Geological Survey of India, Wadia Institute of Himalayan Geology (Dehradun), Town & Country Planning Department, Urban Development Department, Municipal Corporation, Public Works Department, IPH, HPSEBL
Landslide	<ul style="list-style-type: none"> • Landslide Hazard Zonation Mapping. • Land use regulation. • Slope stabilisation. • Drainage development & improvement. • Tunnels and elevated structures that allow passage of debris. • Synthetic materials are used for slope 	<ul style="list-style-type: none"> • Legislation. • Land use planning. • Monitoring & Early warning system. • Awareness generation of the Hotspots of Landslides. • Routine observation and assessment of slope conditions. 	PWD, IMD, Ministry of Earth sciences, Wadia institute of Geology, RS Environment Science & Technology, PWD, BRO, Urban Development, ARI Shimla (for Plantation)

	stabilization.	<ul style="list-style-type: none"> • Implement vegetation management plans in specific areas based on recommendations from geotechnical and vegetation specialists • Training of trainers in professional and technical institutions. • Training of professionals like engineers and geologists for landslide mapping, investigation techniques, analysis and observational practices. • Launching public awareness campaigns on landslide hazard and risk reduction and sensitising all stakeholders on landslide hazard mitigation. 	
Flash flood, Flood and Cloud Burst	<ul style="list-style-type: none"> • Flood plain zoning regulations. • Construction and maintenance of river embankments and levees. • Pre and post monsoon inspections of dams and reservoirs. • Desilting or dredging of rivers to improve flows. • Improvement of drainage systems in towns. • Floodwater diversion through existing or new channels. • Removal of encroachment into the waterways and natural drainage systems. 	<ul style="list-style-type: none"> • Flood Hazard zoning. • Monitoring & Forecasting. • Early Warning. • Insurance. • Capacity Development (Training, education, research and awareness) • Updating and implementation of flood management plans of vulnerable areas of the District. • Catchment area treatment and afforestation programmes. 	IPH, IMD,CWC, Department of Environment Science & Technology, Revenue Department.
Fires	<ul style="list-style-type: none"> • Fire hazard zoning and risk assessment. • Use of fire extinguishers. • Procurement of latest Fire equipment's required accordingly. 	<ul style="list-style-type: none"> • Monitoring. • Awareness Generation. 	Fire Department, IPH, Health, Home
Forest Fire	<ul style="list-style-type: none"> • Adequate fire fighting equipment's and vehicles • Deployment of helicopters and air-tankers for fighting fire in remote strategic locations. 	<ul style="list-style-type: none"> • Forest areas prone to fires can be mapped • Communities living close to fire prone areas can be targeted for special awareness • Programmes regarding do's and don'ts for 	Forest Department, Fire Department

		fire prevention.	
Road Accidents	<ul style="list-style-type: none"> • Median barriers to prevent overtaking and to eliminate head-on crashes. • Advisory speed limits at sharp bends. • Better highlighting of hazards through road lighting at junctions. • The systematic removal of roadside hazards such as trees, utility poles and other solid objects. 	<ul style="list-style-type: none"> • Constant performance monitoring of existing roads ('Blackspot' or Hazardous location treatment programme) for all categories of roads. • Introduction of Road Safety Audit (RSA). • Risk assessment of all categories of existing roads. • Enhanced improvement by deployment of Intelligent transport System (ITS). • Reducing exposure to risk through transport and land-use policies. • Shaping the road network for road injury prevention. • Improving visibility of road users. • Setting and securing compliance with road safety rules. 	Transport Department, Urban Development, NHAI, PWD & HRTC

4.2 Mainstreaming DRR in development plans and programmes

The DM Act mandated DDMA to “lay down guidelines to be followed by the departments of the Government of the State for the purposes of integration of measures for prevention of disasters and mitigation in their development plans and projects and provide necessary technical assistance therefore” and to “review the development plans of the different departments of the State and to ensure that prevention and mitigation measures are integrated therein”. Under Section 38 (2) (e) of the Act the State Government is to ensure that the integration of measures for prevention of disaster or mitigation have been incorporated by the departments of the Government of the State in their development plans and projects. The State Government is further to ensure integration of measures to reduce or mitigate the vulnerability of different parts of the State to different disasters in the state development plan {38 (2) (f)}. The Act also prescribes for preparation of District Disaster Management Plan (DDMP) and for incorporation of measures suggesting as to how mitigation shall be integrated into development plans and projects. The Act states that the DDMPs shall prescribe “the manner in which the mitigation measures shall be integrated with the development plans and projects”. The DDMPs of departments at State and District level shall also have provisions for prevention of disaster and mitigation of its effects or both in the development plans and programmes as provided for in the State Disaster Management Plan and as is assigned to the department or agency concerned.

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 minimising 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 of ‘do no harm’ approach. The measures such as urban planning and zoning, upgradation of building codes their enforcement, adoption of disaster resilient housing designs and flood proofing, response preparedness planning, insurance, establishment of early warning systems, generating community awareness, creating technical competence and promoting research among engineers, architects, health experts etc will be taken on priority. The current level of urbanisation is likely to increase and It is inevitable and growing at a fast pace. Urban settlements are bound to be confronted with problems of greater magnitude in terms of shelter options, cramped living space, problems of transportation, access to facilities and services etc. Above all the climate change, mainstreaming Disaster Risk Reduction (DRR), issues in Development Plans etc. are to be interlinked vertically and horizontally for fail safe infrastructures in Himachal Pradesh. The Major challenges which will be addressed are as follows:

Table 4.2 Disaster Risk Reduction and Major Challenges

Sr. No.	Major Challenges			
	Technical	Regulatory	Organisational	DRR Initiatives
1	Micro-zonation	Development of Law	Sensitisation	Mapping
2	Risk Identification & Assessment	Up-gradation of Building Bylaws	Capacity Building	Proper land use practices
	Vulnerability Assessment	Building Inspection and compliance of BIS	Implementing regulatory measures	Zoning regulations
3	Identification and optimum utilisation of local resources.	Retrofitting methodologies	Setting up of Disaster Management cells	Building bye laws
4	Monitoring the DMP plans of all Projects	Soil Improvement measures	Knowledge sharing	Vulnerability Assessment
5	Community disaster risk reduction of all NREGA & MNREGA based programmes	Compulsory Disaster Risk assessment as part of project planning	To improve emergency response planning	Categorisation of building having high/very high risk
6	Integration of development plans with Disaster Management Plan	Geotechnical investigations of all road projects	Enhance capacity of ULBs	Retrofitting
7	-	Mandatory geological & geotechnical examination of all engineering programme	Facilitate Structural and Non-Structural interventions	Framework for redevelopment

Table 4.3 - Aim/Purpose of Disaster Risk Reduction

Sr. No.	Aim/Purpose
1.	To make certain that all the development programmes and projects that originate from or funded by Government are designated with evident consideration for potential disaster risks to resist hazard impact.
2.	To make certain that all the development programmes and projects that originate from or are funded by Government do not inadvertently increase vulnerability to disaster in all sectors viz. social, physical, economic and environment.
3.	To make certain that all the disaster relief and rehabilitation programmes and projects that originate or are funded by Government are designed to contribute to development aims to reduce future disaster risk.

➤ **Mainstreaming Disaster Risk Reduction into Development Sectors:**

Disaster Risk Reduction (DRR) refers to the measures used to reduce direct, indirect and intangible disaster losses. The measures may be technical, economic or social. DRR encompasses the two aspects of a disaster reduction strategy i.e. 'mitigation' and 'preparedness'. Mitigation refers to measures aimed at reducing the risk, impact or effects of

a disaster or threatening disaster situation. Whereas, preparedness refers to the measures undertaken to ensure the readiness and ability of a society to forecast and take precautionary measures in advance of imminent threat and respond/cope with the effects of a disaster by organising and delivering timely and effective rescue, relief and other post-disaster assistance. 'Mainstreaming DRR' describes a process to fully incorporate the concerns of disaster preparedness, prevention and mitigation into development and post disaster recovery policy and practice. It means completely institutionalising DRR within the development and recovery agenda. Accordingly, the following broad objectives of mainstreaming DRR into Development will be encouraged:

- Ongoing schemes and projects of the Ministries and Departments of GoI and State Governments as well as of all Government agencies and Institutions including Public Sector Undertakings, will be selectively audited by designated government agencies for ensuring that they have addressed the disaster risk and vulnerability profiles of the local areas where such schemes and activities are being undertaken.
- At conceptualisation or funding stage itself the development schemes will be designed with consideration of any potential hazardous impact associated with it and incorporate measures for mitigation of the same.
- All the development schemes will be pragmatic, incorporating the awareness of local disaster risk, its vulnerability and ensuring that the schemes have addressed these concerns and included specific provisions for mitigating such disasters.
- DDMA's will ensure that all the disaster relief and recovery programmes and projects that originate from or are funded by any agency satisfy developmental aims and reduce future disaster risks.

➤ **Illustrations of Mainstreaming DRR into ongoing Flagship Programmes**

Some of the following flagship programmes for Government of India could be used as an entry point for mainstreaming the DRR in development plans and the following steps may be undertaken:

Table 4.4 - Mainstreaming Disaster Risk Reduction into ongoing Flagship Programmes

Sr. No.	Name of the Programme	Department/ Sector	Proposed Strategies for DRR Integration into the Flagship Programmes
1	Indira Awas Yojna (IAY)	Rural Development	<ul style="list-style-type: none"> • Inclusion of such measures like application of hazard resistant design in construction of IAY houses and appropriate setting of IAY housing in guidelines of Indira Awas Yojna (IAY). • Development of model design for IAY houses which could be easily referred to by DRDAs at district level and used for community awareness depending on the geographical location. • Capacity building of rural masons on safe construction. • Capacity building of Panchayti Raj Institutions. • Community awareness. • Capacity building programmes for DRDA officials on Disaster Risk Reduction issues.
2	Mahatma Gandhi National Employment Guarantee Scheme (MGNREGS)	Rural Development	<ul style="list-style-type: none"> • Utilisation of MGNREGS funds to reduce the vulnerability of Panchayat vis a vis natural hazards such as landslide, drought, forest fire, cloud burst, flash floods and earthquake etc. • Giving priority to those works which reduce the vulnerability of area over the works which enhances the vulnerability due to natural hazards. • Identify workers which take into account the hazard profile of the area and offer continuous employment opportunities in the event of disasters to ensure livelihood security. • Works which reduce disaster risk are given priority in plans such as local mitigation works etc. • Any other suggestion within the ambit of the scheme.
3	Pradhan Mantri	PWD	<ul style="list-style-type: none"> • The Master Plan rural roads, the district rural road plan and identification of core network under the planning process of this scheme should, which the overall

	Gram Sadak Yojana		<p>guidelines of its preparation, explicitly address the disaster risk reduction concerns and accord priority to connect the vulnerable habitations.</p> <ul style="list-style-type: none"> • The technical guidelines should explicitly provide for suitable protection and inclusion of disaster risk concerns. While provision of cross drainage, slope stabilisation and protection works are already included in multi-hazard and especially flood and landslide prone areas and roads also needs to be upgraded on a priority basis. • The maintenance guidelines are modified to ensure that in case of disasters these roads get provision for restoration and also to ensure all weather connectivity.
4	Sarva Siksha Abhiyaa (SSA)	Education	<ul style="list-style-type: none"> • Development of a Policy for school safety. Introducing school safety as a part of the guidelines of SSA which is currently focusing on inclusive development. • Developing model structurally safe designs for schools. • Introducing School Safety in the Teacher's Training Curriculum. • Training of Rural Engineers appointed under SSA Scheme as well as the SSA State Coordinators. • Training of masons in rural areas. • Construction of technology demonstration units. • Community awareness
5	Jawahar Lal Nehru Urban Renewal Mission (JNNURM)	Urban Development	<ul style="list-style-type: none"> • Strengthening of the compliance mechanism at the detail project report submission and appraisal stage in case of infrastructure projects as well as housing scheme to ensure structural safety. • Emphasis on disaster risk audit at the stage of preparation of detail project reports. • Inclusion of amending of building byelaws to ensure structural safety as a mandatory reform in the Mission cities to ensure safe habitat development (Both structural safety and fire safety norms). • Inclusion of disaster management as a function of Urban Local Bodies and allocate resources.

			<ul style="list-style-type: none"> • Inclusion of Disaster Resistant features in the houses being constructed under the BSUP component as well as promote development of safe habitat. • Inclusion of strategies for disaster management in the City Development Plans. • Training and Capacity Building Programmes for municipal officers on disaster risk reduction.
6	Rajiv Awas Yojana (RAY)	Urban Development	<ul style="list-style-type: none"> • Since Rajiv Awas Yojana is focusing on developing slum free cities and Capacity Building. Community Mobilisation is also an important component of RAY. Through this programme attempts can be made towards community level disaster preparedness as slum dwellers often become the most vulnerable community during such disasters as floods, fire and high wind speed etc. The 30 cities selected on a plot basis can be targeted to initiate community based disaster preparedness activities. • Also the Housing Programmes to be implemented in these selected cities can ensure incorporation of hazard resistant features.
7	National Rural Health Mission (NRHM)	Health and family welfare	<ul style="list-style-type: none"> • Ensure that the village health plan and the District health plan explicitly address the disaster risk reduction concerns in the vulnerable habitations. The vulnerable districts and the disaster management plan as per DM Act 2005 takes links itself to the District and village health plans. • Provide training to the ASHA workers on disaster health preparedness and response. • Strengthening of Disease Health Surveillance System in rural areas. • Ensuring structural safety of the CHC/PHC and other health care service delivery centres in rural areas. • Training of doctors and hospital staffs on mass casualty management and emergency medicine. • Community awareness on disaster management

The list given in the above table is an indicative one and many more line departments can be added to it. DRR planning needs to be done at Municipal and Panchayat levels with the involvement of local community representatives and simultaneously the resource and responsibility to manage would be in the domain of the local authorities. Decentralised planning can enhance local participation along with improved efficiency and equitable benefits.

➤ **Conclusion:**

- District consists of weak and illegal constructions which compounds its vulnerability to earthquake and fires.
- Buildings constructed through good design are not necessarily built with earthquake safe design.
- There is a need of an urgent mitigation planning under which new constructions should come up as per building-by-laws and standard codes.
- Retrofitting techniques are very much important to re-strengthen old and weak constructions which needs to be taken up by SDMC and district administration
- Fire safety assessments and fire-fighting arrangements shall be promoted in multi-storeyed buildings and residential communities
- Insurance of buildings according to their hazard proneness is important to promote in the district under the supervision of local administration
- Life-line buildings like Major hospitals, Deputy Commissioner's office, residences of key officials, schools, community spaces, police and fire stations etc. shall be organised on priority basis.

CHAPTER-5

PREPAREDNESS MEASURES

Disaster preparedness is a broad concept that describes a set of measures that minimises the adverse effects of a hazard including loss of life and property and disruption of livelihoods. Disaster preparedness is achieved partially through readiness measures that expedite emergency response, rehabilitation and recovery and help in providing timely assistance and also community-based approaches and activities that build the capacities of people and communities to cope with and minimise the effects of a disaster on their lives. Disaster causes sudden disruption to the normal life of society and causes damage to the properties and lives to such an extent that normal social and economic mechanism available to the society get disturbed. If community is not aware and unprepared then the people are affected more due to disaster or calamity. Hitherto, the approach towards coping the effects of disasters have been post-disaster management, involving many problems related to law and order, evacuation, communications, search and rescue, firefighting, medical and psychiatric assistance, provisions of relief and shelters etc. After initial trauma next phase starts with long-term reconstruction planning which takes about 5 to 6 years to normalize the life-style in a particular area. In view of these problems the district administration Shimla (H.P) has prepared a comprehensive plan. The plan basically detailed preparedness strategy under which communities and district authorities would be prepared so that level of destruction and unnecessary delay in relief and response can be reduced. The preparedness measures that is mentioned in this chapter include setting up of disaster relief machinery, formulation of community preparedness plans, training to the specific groups and earmarking funds for relief operations.

5.1. Preparedness by different departments / agencies of the district

Disaster preparedness is a multidisciplinary function and hence different departments of the district have to play a role. The following table captures the details of the roles of different departments of the district.

Table 5.1: Department Wise Preparedness Checklist and their Tasks and Responsibilities

Sr. No.	Department	Preparedness Task and Responsibilities
1.	District Administration/ DDMA	<ul style="list-style-type: none">• Prepare, Coordinate and monitor overall district response.• Review, readiness to respond to any disaster or threatening disastrous situation.• Advise, assist and coordinate the activities of the other Departments.• Establish stockpiles of relief and rescue materials.• Ensure communication systems are in order.• Mock drills are carried out periodically.• Ensure preparedness and response plans are in place for all Departments of the Government.• Ensure enforcement of the codes, bylaws and act such as National Building Code, Bureau of Indian Standards, etc. in the upcoming development projects, construction work, and commercial complexes.
2	DEOC	<ul style="list-style-type: none">• Ensure proper functioning of the DEOC including hunting line 1077.• Prepare and maintain inventory of maps, information and contact

		<p>details.</p> <ul style="list-style-type: none"> • Prepare and maintain contract agreements for procuring different goods and services. • Identify, list and maintain vendors of critical goods and services. • Ensure functioning of Satellite phones. • Track stock piling of multi -hazard emergency equipment and maintenance.
3	HPSDMA	<ul style="list-style-type: none"> • Facilitating resources on demands raised by administration. • Maintain state level inventory of critical resources. • Constitute and train disaster management teams which could be deployed in the event of a disaster. • To check the readiness, conduct mock drills. • Track and mobilize resources during disasters. • Update IDRN. • Ensure functioning of Satellite phones.
4	Police Department	<ul style="list-style-type: none"> • Ensure proper functioning of all equipments. • Ensure proper mechanism in place for early warning of different hazards through police stations and police posts. • Arrange for public address system and siren. • Prepare for temporary installation of wireless systems between district and sub-divisions in case of any damage to existing wireless system with the department. • Train the communication wing of police in setting up control room at short notice at a required site. • Prepare Contingency Plan for response to bomb blast, riots, terrorist attack and other law and order emergencies. • Prepare deployment plan of home guards and other volunteers for protection of property of affected community. • Prepare for proper arrangement for custody of recovered belongings and property from dead bodies and affected sites. • Police personal and staff of PCR vans should keep basic first aid box and ensure proper functioning of equipments. • Train police personnel and staff of PCR vans in first aid and basic life saving techniques. • Prepare for proper protection to women, girls and children to avoid cases of human trafficking. • Prepare for protection of dead bodies to avoid their theft and false claims. • Prepare for safety and security of food and other commodities. • Prepare for protection against hoarding, black marketing of relief material. • Prepare for safety and security arrangements for evacuated area, affected area, transit camps, relief camps, hospital, medical centre, cattle camps and feeding entrees.

		<ul style="list-style-type: none"> • Ensure traffic plan of Police at disposal. • Keep updated telephone Nos. and databases of reserved battalions of police, BDS and Dog Squad in police control Room
5	Home Guards	<ul style="list-style-type: none"> • Ensure proper functioning of all equipments. • Prepare teams trained in search and rescue, first aid, firefighting, etc. • Prepare a database of volunteers and equipments and update the same in DDMRI.emergency arrangements in industries and direct for corrective measures, If necessary, with respect to statutory provisions for safety. • Direct the management of industries and units to prepare on-site emergency plan of their units.
6	Fire Services	<ul style="list-style-type: none"> • Ensure proper functioning of all firefighting equipment's, appliances and respiratory equipment's. • Ensure important buildings should have sketched maps and marked evacuation routes with growing sign. • Ensure regular evacuation drills as per evacuation plans in all important buildings, malls, hospitals, etc. • Make a database of existing firefighting services and facilities provided with private agencies. • Be aware of MAH units and other potential hazardous installations and level of possible emergency required. • Prepare to deal with leakage of flammable toxic substances. • Ensure, at disposal, the list of adverse effects of chemicals and antidotes/ methods to deal with emergency involving each chemical. This is prepared by Department of Industrial Safety and Health. (See annexure VII) • Review the adequacy of existing fire prevention arrangements in each MAH and other hazardous units before and after the installations. Share the report with Department of Industrial Safety and Health. • Identify roads and routes of access and escape to and from MAH and other potential hazardous units.
7	Health Department	<ul style="list-style-type: none"> • Prepare trained team of paramedics. • Develop dos and don'ts and IEC materials regarding health and hygiene. • Organise awareness camps with help of CHC/PHCs and Development and Panchayat Department for hygiene promotion and public health issues. • Ensure availability of trained mobile medical teams at disposal. • Prepare psychological and psychosocial care teams. • Ensure availability of generator sets and buffer stock of fuel at disposal. • Ensure availability of adequate supply of life saving equipment's and stock of medicines, portable supplies including portable oxygen cylinders, portable X -ray machine, portable ultrasound machines,

		<p>triage tags, etc.</p> <ul style="list-style-type: none"> • Ensure availability of adequate space with suitable facilities for storage of medicines. • Prepare a database of private hospitals and nursing homes with services and facilities available. • Prepare a database of doctors registered with Indian Medical Association (IMA). 11. Prepare a database of available ambulance services from government, private agencies and District Red Cross Society, if any. • Ensure, at disposal, list of MAH units and hazardous chemicals stored in them. • Ensure, at disposal, the list of antidotes for various hazardous chemicals. This list is prepared by Department of Industrial safety and Health. • Ensure availability of adequate supply of blood units. • Prepare database of blood donors in the district and update the same in DDMRI. • Prepare a database of providers of refrigerated vehicles for transportation of vaccines, blood, blood products, etc. • Train drivers and attendants of ambulance and mobile medical units in first aid and basic life saving techniques. • Prepare a decontamination ward in view of any possible chemical or industrial hazard. • Prepare for prompt establishment of temporary hospital, mobile surgical unit, etc. at short notice, near the affected area. • Ensure proper and safe mechanism for medical waste disposal. • Prepare for proper disease surveillance system. • Make proper arrangement and mechanism for mass casualty management.
8	District Red Cross Society	<ul style="list-style-type: none"> • Ensure availability of fund for relief materials/ work. • Train and prepare ward and village wise first aid teams. • Prepare database of blood donors in the district and update the same in DDMRI. • Prepare database of trainers & volunteers and update the same in DDMRI. • Prepare a database of voluntary organizations and service they offer, ensure their authenticity, and update the same in DDMRI. • Ensure availability of adequate stock of food items, blankets, clothing including woollens, utensils, first aid kits, stretchers, medicines etc in view of any emergency situation. • Ensure availability of adequate stock of aids (hearing, visual, crutches, artificial limbs, etc.) for physically challenged persons. • Ensure availability of old blankets/ gunny bags for animal during cold wave period.

9	Agriculture Department	<ul style="list-style-type: none"> • Prepare Agriculture Contingency Plan. • Constitute a Crop Weather Watch Group at district level (as per 'A Model Manual for Drought Management', GOI) with representatives from Meteorological Department and concerned officers dealing with agricultural inputs, credit extension, etc to keep a close watch on the monsoon situation, extreme temperature, hail and wind storm. • Identify vulnerable areas prone to pest infestation, drought, flood and other hazards. • Ensure awareness generation in farmers regarding various plant diseases, alternate cropping practices in disaster-prone areas, crop insurance, provision of credit facilities, proper storage of seeds, etc. • Provide training to farmers in alternate cropping techniques, mixed cropping and other agricultural practices which minimise crop losses during future disasters. • Ensure surveillance for pest infestation and crop diseases. • Ensure availability of stock for immediate replacement of broken/non-functioning gadgets/equipments. • Ensure availability of adequate stock of seeds and other agro inputs particularly for areas vulnerable to hazards. • Prepare trained and equipped team for assessment of damage to soil, crop, plantation, drainage, embankment, other water bodies and storage facilities that might impact agricultural activities. • Prepare for establishment of public information booths, with appropriate and modern means of communication, to assist farmers in providing information regarding insurance, compensation, repair of agro equipment's and restoring of agricultural activities at the earliest. • Identify sources of feed and fodder.
10	Animal Husbandry	<ul style="list-style-type: none"> • Ensure solation/ separation of sick and healthy animals and prepare for arrangements for keeping, feeding and watering of animals suffering from contagious diseases. • Sensitize farmers/ owners for above problems. • Ensure separate transportation of animals suffering from contagious diseases. • Ensure proper disinfection of space, vehicle and manpower involved in transportation of sick/ infected and dead animal from contagious diseases. • Ensure fully functional mobile veterinary unit at disposal. • Prepare a database of veterinary hospitals/ clinics and agencies working for animal care. • Ensure availability of stocks of mineral and feed supplements, lifesaving drugs, electrolytes, vaccines, etc. • Ensure sensitization of farmers about protection of their feed and

		<p>fodder prior to the onset of monsoon.</p> <ul style="list-style-type: none"> • Ensure filling feed banks before the scarcity period. • Prepare for the feed of the poultry birds for drought situation. • Locate feed and fodder banks in view of submergence situation during the monsoon. • Identify source for procurement of fodder. • Identify safe locations for fodder depot and cattle camps within the district. • Ensure assured source of water or canals for drinking and growing fodder along with the above locations. • Prepare for necessary arrangements of tatties, gunny bags and tarpaulin sheets to cover the sheds during heat and cold waves. • Ensure availability of sprinklers/ foggers in shed/camp during heat waves period. • Prepare for special care for productive, lactating and pregnant animals; also supplement them with additional concentrates and fodder. • Ensure proper administration of deworming and vaccinations for cattle, sheep and goats, pigs and other relevant measures for disease management. • Prepare for arrangements for transportation of critically injured livestock. • Identify space for burial of animals and ensure proper disposal of dead animals.
11	Bharat Sanchar Nigam Limited	<ul style="list-style-type: none"> • Procure recovery plans from private communication service providers for their recovery time objectives. • Prepare for alternate communication System
12	Development Panchayat and	<ul style="list-style-type: none"> • Prepare mechanism for proper solid waste management, disposal of waste and removal of debris in shelter and relief camps, feeding centres and affected rural areas. • Prepare for sanitation operations in view of post flood situations. • Ensure availability of tractor trolleys and other required equipments for the same. • Plan to provide building/guest house/dharamshalas at different locations to establish control room, first aid and medical post or shelters during emergency. • Prepare a database of catering services providers. • Prepare mechanism for proper solid waste management and disposal of waste in shelter and relief camps, feeding centres and affected villages. • Prepare for prompt provision of temporary toilets/ trench latrines in the affected area and relief camps in rural area.
13.	Education Department	<ul style="list-style-type: none"> • Organise awareness generation programs in schools and colleges for students, teachers, administrative staff and other helpers. These programs should focus on dos and don'ts for various hazards and

		<p>safe evacuation in case of any emergency.</p> <ul style="list-style-type: none"> • Conduct hygiene promotion activities as per direction issued by the Health Department on a regular basis. • Ensure preparation of first aid and disaster management kit in each school and college. • Ensure preparation of school and colleges disaster management plan. • Identify safe schools and colleges to serve as relief shelter in case of any emergency within that area, only for short period of time.
14.	Electricity Department	<ul style="list-style-type: none"> • Ensure transmission map at disposal. • Prepare a database of critical and lifesaving infrastructure in the district and prepare for providing uninterrupted power supply to them. • Prepare for providing continuous power supply to the affected area. • Prepare to provide electrical connections and system at short notice in affected areas for purpose of pumping flood water and illumination of the area. • Prepare for prompt replacement/ recommissioning of affected power supply system. • Ensure availability of adequate stock of important equipments like transformers, poles, conductors, cables, insulators, etc for prompt action whenever required. • Ensure trained construction and maintenance staff at disposal.
15.	Food & Supplies Department	<ul style="list-style-type: none"> • Prepare a database of godowns and cold storage facilities in the district. • Prepare a database of catering services providers. • Prepare for safety of stored food grains in godowns against inundation and water logging, fire and other possible hazards. • Prepare for out-movement of food grains to a pre-decided safer location, if required. • Ensure availability of adequate food grains storage in godowns in view of the scarcity or emergency period. • Prepare a database of kerosene depots, petrol pumps, gas agencies, etc and update the same in DDMRI. • Ensure availability of adequate stock of gas cylinders, kerosene, etc. • Prepare database of private retailers and wholesalers of edible food items. • Prepare a database of providers of refrigerated vehicles for transportation of perishable food items. • Prepare for large scale movement of food grains, their transportation, expeditious unloading, proper storage and prompt distribution through fair price shops, if required. • Prepare a database of private providers of tents, tarpaulin sheets, poles, kanats, cooking utensils, polythene bags, shrouds and other essential items that could be used for community kitchen and cremation and burial.

16.	Forest Department	<ul style="list-style-type: none"> • Ensure proper functioning of all equipments and vehicles. • Prepare a database of Ara machine holders, carpenters. • Prepare team for catching wild animals to prevent infiltration in habituated areas, relief camps, etc. • Prepare for supply of wood for cremation.
17.	Transport/Himachal Roadways	<ul style="list-style-type: none"> • Ensure proper functioning of filling station, vehicles and equipments including fire extinguishers, first aid kits, etc. • Prepare for prompt deployment of vehicles at short notice for various purposes like mass evacuation, transportation of response teams, relief items, victims, etc. • Prepare mechanical team for prompt repair of equipment and vehicles. • Train drivers and conductors in first aid and basic life saving techniques. • Identify the vehicle for rescue operations. • Be well familiar with routes of potential hazardous installations and follow incident traffic plan.
18.	Irrigation Department	<ul style="list-style-type: none"> • Ensure proper early warning mechanism in place for flood by monitoring water level of surface water bodies. • Ensure proper and timely inspection of conditions of bunds, siphons, regulators, embankments, inlet and outlets of lakes and reservoirs, etc. • Ensure timely de-silting and dredging of rivers and canals, if required. • Ensure prompt repair of channels, if required. • Ensure proper functioning of all equipments including dewatering pumps. • Prepare for the arrangements of clean drinking water for affected livestock and poultry. • Ensure availability and well-functioning of all equipments and vehicles. • Prepare for distribution of water purifying tablets, bleaching powder and chlorination of public water resources, if required. • Prepare for arrangement of safe drinking water supply for surviving community in the affected areas and also in relief camps and shelters. Also prepare for provisioning of water for other purposes. • Prepare a database of suppliers and distributors of packaged drinking water. • Prepare for prompt repair of pipelines supplying potable water. • Prepare for prompt repair of sewerage systems and water works. • Make standby arrangements of generators for running the water pumps. • Ensure availability of adequate number of water tankers, drums, jerry cans or identify their private suppliers to prepare for supply of water, in scarcity period and in emergency. • Ensure availability of water supply/ filling points for fire tenders,

		<p>water cannons, hospitals and other necessary lifesaving infrastructure.</p> <ul style="list-style-type: none"> Ensuring filling of water ponds/ lakes in the district with canal water/tube wells prior to summer or whenever required in coordination of Irrigation Department.
19.	Municipal Council/ Committee	<ul style="list-style-type: none"> Prepare for sanitation operations in view of post flood situations within jurisdiction of the area. Ensure cleaning of drains before the monsoon season. Prepare mechanism for proper solid waste management and disposal of waste in shelter and relief camps, feeding centres and affected area. Ensure availability of tractor trolleys and other required equipments for the same. Prepare mechanism for proper solid waste management, disposal of waste and removal of debris in shelter and relief camps, feeding centres and affected areas in their jurisdiction. Plan to provide building/ guest house at different locations to establish control room, first aid and medical post or shelters during emergency in coordination with HUDA.
20.	Pollution Control Board	<ul style="list-style-type: none"> Prepare a database of hazardous chemicals and pollutants in the districts and their probable adverse effects on environment. Prepare for methods and techniques of decontamination of the same.
21.	Public Relations Department	<ul style="list-style-type: none"> Prepare for proper public address system ensuring rumour control. Prepare for media management. Ensure database of dos and don'ts of all possible hazards in the district. Ensure distribution of IEC material to community for awareness generation about the same. Publicise the information in the interest of public awareness through booklets, pamphlets, radio, television, film shows, newspapers, documentary films, door to door campaign, meetings, etc.
21.	Public Works Department (B&R)	<ul style="list-style-type: none"> Ensure availability and functioning of all equipments like cranes, JCB, etc. Prepare a data base of availability of heavy equipments like cranes, JCB with private agencies also. Ensure, at disposal, the list of MAH units and other vulnerable buildings. Prepare for prompt clearance of debris. Prepare the demolishing squad for prompt demolition of unsafe buildings. Prepare for prompt clearing and repairing of damaged roads, culverts, bridges and flyovers. Prepare for construction of new temporary roads at short notice for diverting traffic from the affected area. Prepare for construction of temporary facilities like that of medical

		post,temporary shelters, etc at short notice. <ul style="list-style-type: none"> • Prepare for prompt establishment of helipad near the affected site for VVIP visits. • Prepare for restoration of government buildings damaged during disaster.
22.	Regional Transport Authority	<ul style="list-style-type: none"> • Make a database of private vehicles available with schools, colleges and other private agencies.
23.	Revenue and Disaster Management Department	<ul style="list-style-type: none"> • Ensure regular monitoring of rain gauge and regular updation of database for distribution and variation in rainfall. • Ensure proper mechanism in place for early warning of different hazards to village level through tehsildars, patwaris, DDPO. • Prepare Flood Control Order by 31st May of each year. • Ensure proper functioning of district Flood Control Room during monsoon period and otherwise, if required. • Identify villages vulnerable to flood and drought. • Prepare a database of critical and lifesaving infrastructure in the district • Prepare a database of safe locations for evacuation. • Identify possible safe sites for temporary shelters, relief camps and staging area. • Ensure availability of fully functional boats, life jackets and oars in view of flood condition of the district. • Prepare a database of voluntary organizations and service they offer. Ensure the authenticity of the same. • Identify competent persons/experts from various required fields for carrying out damage and need assessment post disaster. • Prepare proper mechanism for disbursement of compensation to victims or families of deceased. • Prepare a database of safe locations for relief distribution site for mass care and housing. • Identify site(s) for temporary burial.

5.2. Measuring Community Preparedness

Generally community preparedness depends upon following four major components:

- Population characteristics (number of children, women, settlement etc.)
- Building and critical infrastructure such as road, drinking water, communication network, health and sanitation
- Physical environment
- Social environment (social groups)

In view of these components, risk assessment study has been conducted and identified by Shimla District. District is densely built and consists of a high number of urban population. Any major earthquake or fire/chemical explosion can affect district very badly. Although many steps have been taken by

the district but still a high degree of awareness and training is required to lay down an organization system within communities.

5.3 Components of Preparedness Plan for district Shimla (H.P)

Looking at the complexity of repose mechanism during disasters two sets of components have been included into the revised and updated plan of district Shimla.

5.3.1 Components of Community Preparedness Plan:

Several previous attempts have been made by researchers to measure community preparedness within various indicators. Some of the important components of measuring preparedness are given below:

- **Physical Safety:** It is concerned with the safety of the community members in view of the physical danger from these hazards. The parameters essentially tries to measure how effective structural mitigation measures are e.g. resistance of building structures for earthquakes, availability of safe shelters and its capacity etc.

Name of the Stakeholders	Tasks and responsibilities
BSNL – Communications	<ul style="list-style-type: none"> • Responsible for coordination of district level actions to assure the provision of telecommunication support; • Coordinate the requirement of temporary telecommunication in the affected areas; • Coordinate for the other network providers available to ensure timely restoration of the communication facilities; • BSNL has to coordinate and support Police Wireless systems to be setup at the time of emergency
Department of Health and Family Welfare – Public Health	<ul style="list-style-type: none"> • To coordinate, direct and integrate response; • Direct activation of medical personnel, supplies and equipment; • Provide systematic approach to patient care, Perform medical evaluation and treatment as needed; • Maintain patient tracking system to keep record of all patients treated; • Mass casualty Management • Mobilization of the private health services providers for emergency response. • In the event of CBRN disaster to provide for mass decontamination of the affected population; • Maintain record of dead and arrange for their post mortem. • Check stocks of equipment and drugs. • Arrangement of mobile hospitals for remote areas, also in case of damage to hospital building in the disaster provision to setup medical facilities in open area
Irrigation and Public Health in Coordination with Urban & Rural Development Department- Sanitation/ Sewerage Disposal	<ul style="list-style-type: none"> • Make arrangement for proposal disposal of waste in their respective areas; • Arrange adequate material and manpower to maintain cleanliness and hygiene. • To arrange for the disposal of unclaimed bodies and

	<ul style="list-style-type: none"> keeping record thereof; • Hygiene promotion with the availability of mobile toilets; • To dispose of the carcass.
HPSEB Ltd. – Power	<ul style="list-style-type: none"> • Support to Local Administration; • Review the total extent of damage to the power supply installations by a reconnaissance survey; • To provide alternative means of power supply for emergency purposes; • Dispatch emergency repair teams equipped with tools, tents and food; • Hire casual labour for the clearing of damaged poles etc. • Make arrangement for and to provide the alternative sources of lighting and heating to the affected populations and for the relief camps.
Department of Transport in coordination with HRTC, Civil Aviation, GAD-Transportation	<ul style="list-style-type: none"> • Overall coordination of the requirement of transport; • Make an inventory of vehicles available for various purposes; • Coordinate and implement emergency related response and recovery functions, search and rescue and damage assessment. • Coordinate arrangement of vehicles for transportation of relief supplies from helipads/airports to the designated places; • Coordinate arrangement of vehicles for transportation of SAR related activities. • Act as stocking place for fuel for emergency operations;
Civil Defence, Home Guards, Fire and Emergency Services - Search & Rescue	<ul style="list-style-type: none"> • Establish, maintain and manage state search and rescue response system; • Coordinate search and rescue logistics during field operations; • Provide status reports of SAR updates throughout the affected areas.
HP PWD - Public Works and Engineering In close coordination with CPWD, National Highways Authority of India, MES, BRO	<ul style="list-style-type: none"> • Emergency clearing of debris to enable reconnaissance; • Clearing of roads; • Assemble casual labour; • Provide a work team carrying emergency tool kits, depending on the nature of disaster, essential equipment such as Towing vehicles, Earth moving equipments, Cranes etc. • Construct temporary roads; • Making machinery and manpower available to the PWD and to keep national highways and other facilities in functional state. • Adequate road signs should be installed to guide and assist the relief work; • Clearing the roads connecting helipads and airports; • Restoring the helipads and making them functional;
DEOC – Information & Communication With support from DIO/NIC	<ul style="list-style-type: none"> • Operate a Disaster Welfare Information (DWI) System to collect, receive, and report and status of victims and

	<ul style="list-style-type: none"> assist family reunification; • Apply GIS to speed other facilities of relief and search and rescue; • Enable local authorities to establish contact with the state authorities; • Coordinate planning procedures between district, the state and the centre; • Provide ready formats for all reporting procedures as a standby. • Documentation of response/ relief and recovery measures; • Situation reports to be prepared and completed every 3-4 hours.
Drinking water – IPH In Association with Urban & Rural Development	<ul style="list-style-type: none"> • Procurement of clean drinking water; • Transportation of water with minimum wastage; • Special care for women with infants and pregnant women; • Ensure that sewer pipes and drainage are kept separate from drinking water facilities. • Support to local Administration; • Water purification installation with halogen tablets etc.
Shelter - Department of Revenue In association with HIMUDA, HP PWD, UD and Panchayati Raj	<ul style="list-style-type: none"> • Provide adequate and appropriate shelter to all population; • Quick assessment and identifying the area for the establishment of the relief camps; • Identification of public buildings as possible shelters; • Identifying the population which can be provided with support in their own place and need not be shifted reallocated; • Locate relief camps close to open traffic and transport links. • Locate adequate relief camps based on survey of damaged houses; • Develop alternative arrangements for population living in structures that might be affected even after the disaster.
Media - Department of Public Relations In Association with Local DD and AIR	<ul style="list-style-type: none"> • To Provide and collect reliable information on the status of the disaster and disaster victims for effective coordination of relief work at state level; • Not to intrude on the privacy of individuals and families while collecting information; • Coordinate with DOCs at the airport and railways for required information for international and national relief workers; • Coordinate with all TV and radio networks to send news flashes for specific needs of Donation; • Respect the socio-cultural and emotional state of the disaster victims while collecting information for dissemination. • Use and place geographical Information to guide people towards relief operation;

	<ul style="list-style-type: none"> • Use appropriate means of disseminating information to victims of affected area; • Curb the spread of rumours; • Disseminate instructions to all stakeholders.
Law & Order –Police In association with Home Guards	<ul style="list-style-type: none"> • Having sound communication and security plan in place to coordinate law and order issues; • Training to security personnel in handling disaster situations and issues related to them. • To maintain law and order; • To take measure against looting and rioting; • To ensure the safety and security of relief workers and material; • To take specific measure for the protection of weaker and vulnerable sections of the society; • To provide safety and security at relief camps and temporary shelters.
Animal Care - Department of Animal Husbandry	<ul style="list-style-type: none"> • Treatment of animals; • Provision of vaccination; • Disposal of dead animals. • To arrange for timely care and treatment of animals in distress; • Removal of dead animals to avoid outbreak of Epidemics

- **Hazard awareness** i.e. awareness level about hazards which have a reasonably higher probability of occurrence.
- **Organisation preparedness** i.e. how far the community is prepared to face disaster i.e. existence of committee at community level, task forces, volunteers of civil defence and other local volunteers , trained disaster management teams and community disaster management plan etc.
- **Infrastructure and services** which tries to measure current state of these services and how well restoring critical services are when disaster or any other calamity occur.
- **Recovery** ability i.e. ability of the community members to recover from the impact of the hazard.
- **Physical environment** i.e. State of environment to face hazards e.g. Condition of land surface, strata, soil and vegetation etc.
- **Social capital** i.e. degree to which social networking and cooperation exists among community members.
- **Psychological preparedness** i.e. how safe and prepared do community members feel in view of these hazards.
- **Cultural capital** i.e. cultural richness such as existence, recognition and use of traditional mechanism to cope with such disasters.
- **Household preparedness** i.e. preparedness of household members.

5.3.2 Components of Administrative Preparedness:

Administrative preparedness is another very important issue which helps in reducing relief and response time in a disastrous situation. Preparedness plan is based on below given components

- Operation readiness of facilities, equipment's and stores in advance.
- Maintaining response inventory of equipment's and materials required for response.
- Assignment of responsibilities to agencies and organizations.
- Management training of crisis group members, desk officers and officers of respective departments likely to be assigned management duties.

- Specialised trainings of district disaster committee members, officials, community organizations through seminars and workshop.
- Training of taskforces
- Raising community awareness
- Improving response mechanism through conducting practice drills etc.
- Annual updating of District and community level plans

Table 5.2: Responsibility of various Stakeholders

Establishment of Emergency Operation Centre (EOC) to ensure coordination at district headquarter among community organizations, district level organizations and State government during preparedness and response phase. EOC has to play an important role. Directing the operations at the affected site, the need for coordination at the district headquarter and the need for interaction with the state government to meet the conflicting demands at the time of disaster is the responsibility of the District Magistrate and his team. District EOC helps District Magistrate and his team to meet these conflicting demands. Keeping this in view, District Magistrate has established an EOC at district level. The EOC would be responsible to facilitate following activities.

5.4.3 Activities of EOC

- To ensure that warning and communication systems are in working conditions
- Collection and compilation of district level information related to hazards, resources, trained manpower etc.
- Conducting district, sub-division and community level mock drills
- Networking and coordination with community, district and state level departments
- Monitoring and evaluation of community and inter-intra organization level disaster management plans
- Develop a status report of preparedness and mitigation activities under the plan
- Allocation of tasks to the different resource organizations and decisions making related to resource management
- Reviewing and updating response strategy
- Supply of information to the state government

5.5.4 Facilities with EOC

Presently, the District Emergency Operation Centre is operating in 24/7 mode well-equipped with computer, wireless and telephone facilities. In future, EOC would include a well-designed control room with workstation, hotlines and intercoms by the year 2017. Following other facilities shall be made available within the EOC: 1. A databank of resources, action plans, district disaster management plan, community preparedness plan would be maintained at EOC. 2. Maps indicating vulnerable areas, identified shelters, communication link system with state government and inter and intra district departments. 3. Inventory of manpower resources with address, telephone numbers of key contact persons has been maintained. 4. EOC have to identify desk arrangements during disaster situations

5.4 Preparation of Disability Inclusive plan

Persons with Disabilities have difficulty in moving, hearing, seeing, communicating and/or learning. They have the same needs and perform the same activities as other members of the community (eating, dressing, working, etc.). However, persons with disabilities (PWDs) may need special support related to their disability and their living environment (assistive devices, caregiver, a modified physical environment or equipment) to enable them to participate fully in these daily activities. In an emergency situation, when all members of the community are placed in a vulnerable situation, a disabled person may face special

challenges if these special needs are not met. Moreover, early warning provides a very important link between preparedness measures and response action, which in turn reduces the risk of exposure and injury of community members. A comprehensive early warning system is very important in any community, however, even more so in a community having disabled persons as they are frequently overlooked in disaster situations.

Table 5.3: Type of Impairments and Warning Systems

Types of Impairments/Disabilities	Warning System
Visual Impairment	Auditory Signal System/Alarms <ul style="list-style-type: none"> • Announcements • Posters written with large characters and colour contrast
Hearing Impairment	Visual Signal Systems- Red Flag, Symbols <ul style="list-style-type: none"> • Pictures • Turn lights off-on frequently
Intellectual Impairment	Special Signals- Red flag, Symbols <ul style="list-style-type: none"> • Clear and brief announcements by rescue workers
Physical Impairment	Auditory Signal System/Alarms <ul style="list-style-type: none"> • Announcements

5.5 Search & rescue

Table 5.4: Search & Rescue Team

Designation of Trained Search & Rescue Team member
<p>The Search & Rescue team is formed as and when required and the members & equipment's are taken according to the nature of the disaster (and also on their availability)</p> <ul style="list-style-type: none"> • Police Officers (2 or more) • Home guards (2 or more) • Swimmers (In case of flood) • A construction engineer (From P.W.D.) • Driver (For Every vehicle) • Any person with the prior experience of the disaster (From Home Guard/Police Dept.) • A doctor or nurse or at least a person having first aid training • A Class IV Officer (Health Dept.)

5.6 Early Warning

Table 5.5: List of Warning Agencies

SN	Hazards	Warning Agency	Contact Details
1	Earthquake	Center: (IMD) Indian Meteorological Department / NEOC State: SDMA/SEOC District: DDMA/ DEOC	011-24619943 / 24624588 www.imd.gov.in 1071 (National Helpline) 1070 (State Helpline) 1077 (District Helpline)
2	Landslide	(GSI) Geological Survey of India	0172-2622529 Fax0172-

		SDMA/SEOC DDMA/ DEOC	2621945. Mob: 094173-71954. loginder.singh@gsi.gov.in
3	Heavy Rain / Snowfall/avalanche	(IMD) Indian Meteorological Department / SEOC DEOC	0177-2626211 www.weathershimla.gov.in 1070 1077
4	Flood/ Flash Flood	(CWC) Central Water Commission Irrigation and Public Health Dept. SEOC DEOC	0183-236105 1070 1077
5	Domestic / Forest Fire	Department of Fire Services/ Department of Forest	101
6	Epidemics	Health and Family Welfare Department	102/108
7	Human Induced Hazards	Himachal Pradesh Police	100

As soon as the warning of an impending calamity is received, the EOCs at the State, District and Block levels will be on a state of alert. The Incident Commander will take charge of the EOC and oversee the dissemination of warning to the community. The District Collector will inform the District Disaster Management Committees who will alert the local and Village level DMCs and DMTs to disseminate the warning to the community. On the basis of assessment of the severity of the disaster, the State Relief Commissioner (Incident Commander) shall issue appropriate instructions for the actions to be taken including evacuation. District Collector, will then supervise evacuation. In situations of emergency, the District Collector will use his own discretion on the preparedness measures for facing the impending disaster. At the village level members of the VDMCs and DMMS will coordinate the evacuation procedures to the pre-designated relief centres, taking special care of the vulnerable groups of women, children, old people etc. according to the plans laid down earlier.

Operational check-up of Warning System

Warning systems are checked periodically like, Satellite phone, Hot Line, Telephone connection, connectivity etc. In Pre-Monsoon meeting District Administration also give direction for checking warning system like, port signals.

5.7 Evacuation

The plan allocates responsibility for management of each of the elements of shelter. Considering the wide range of services, agencies and issues to be managed, it becomes essential for 'shelter' to be managed within a structure, which facilitate the coordination of agencies and services and support of emergency workers. The following factors will be taken under consideration:

- Identification of appropriate shelter areas based on safety, availability of facilities, capacity and number of victims
- Approaches to the shelter location in light of disruption due to hazard impact and traffic blockades
- Temporary accommodation
- Provision of essential facilities like drinking water, food, clothing, communication, medical, electrical and feeding arrangements, etc.
- Security
- Financial and immediate assistance
- First-aid and Trauma counselling

5.8 Damage & Loss Assessment

Immediately after the disaster, there is an urgent need of damage assessment in terms of loss of life, injury and damage to property. The objectives of damage assessment are to mobilize resources for better rescue and relief, to have detailed information extent of damage due to disaster and to develop strategies for reconstruction and restoration facilities. Damage is assessing with regard to building stock, standing crops, agricultural area, livestock lost, forest cover decimated, vital installations etc. In damage assessment of building stock, generally three types of flags are used; green, yellow and red. The green colour is given to the buildings that are safe and require 2-3 days to return to their original function. Yellow flags depict the considerable damage to the buildings and considered unsafe for living, as they require proper structural repairs and careful investigation. The red flag is assigned to buildings that are partially or completely collapsed. Immediately after a disaster event, damage assessment will be conducted in 2 phases viz. Rapid Damage Assessment and Detailed Damage Assessment

5.9 Checking and certification of logistics, equipments and stores:

Shimla District has various types of logistics and equipment. It will be checked and certified by concerned officer periodically. Disaster Management cell is regularly monitoring this activity and got certification of this equipment. (Detail information of Equipment is given in Annexure)

5.10 Operational check-up for Emergency Operation Centre

Operational check-up of Emergency Operation Centre are carried out month wise and check out all facility and equipment in DEOC and more about DEOC.

5.11 NGOs and other stakeholders coordination – identification of their strengths and allocation of responsibilities in area/sector/duty/activities – Activate NGO coordination cell

NGO and Voluntary group are doing very important activity and response during disaster. DDMA also organized capacity-building programmers, awareness programmers on Disaster Management for NGO and Voluntary group. For arrangement of water supply, temporary sanitation facilities, search and Rescue activity, Relief distribution can be sought with help of special agencies, NGOs and CBOs. (Information of NGO and Voluntary group refer Annexure)

5.12 Awareness Generation

As a part of Preparedness Awareness, generation among community will be continuous process. From District to Taluka, Village level awareness programme must be conducted with the help of Print Media, Electronic media, folk media authority can create awareness among community.

Table 5.6: Awareness Activity and Responsible Department

Task	Activity	Responsibility
Information, education And communication	Advertisement, hording, booklets, leaflets, banners, shake-table, demonstration, folk dancing and music, jokes, street play, exhibition, TV Spot, radio spot, audio-visual and documentary, school campaign, Rally, - Planning and Design -Execution and Dissemination	<ul style="list-style-type: none"> • Information Dept. • Education Dept. • All line dept. • Dist. Collectors • Chief officer • Other Distt. Authorities

5.13 Community Warning system-Early Warning System (EWS)

Shimla district had taken the preparedness measures from village level to District level. At the Village level, village Task forces were formed and trained about First aid and Health, Search and Rescue and Disaster

Management. Some volunteers were also trained in Disaster Management and plans like VDMP were prepared and updated. Officers reviewed the disaster preparedness of the villages and interacted with the Village level Disaster Management team members, in the pre-monsoon meeting all departments and stakeholders were asked to prepare departmental plan. SOP's were also discussed with them so that quick response can be assured and any kind of risk due to water logging, flood, heavy rainfall and dam overflow can be reduced.

5.14 Media Management

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. Media through educating the public about disasters; warning of hazards; gathering and transmitting information about affected areas; alerting government officials, helping relief organizations and the public towards specific needs; and even in facilitating discussions about disaster preparedness and response. During any emergency, people seek up-to-date, reliable and detailed information. The District Government has established an effective system of collaborating with the media during emergencies. At the District Emergency Operation Centre (DEOC), a special media cell has been created which is made operational during emergencies. Both print and electronic media are regularly briefed at predetermined time intervals about the events as they occur and the prevailing situation on ground.

5.15 Documentation

Documentation is very important activity in disaster management. DDMA also appoint duty for Documentation to the information department. Documentation should be in good manner. It should be reliable and authentic. It can be detailed or summarised form.

5.16 General Preparedness Checklist for the District Shimla (H.P.)

- Deputy Commissioner, Shimla (H.P.) shall ensure that preparedness checklist is duly followed by each line department and status of the same is discussed in monthly meetings.
- Head of department of each line department shall ensure that the departments are prepared to meet the challenges of any emergency/ disaster by duly following the preparedness checklists.
- Nodal officers of each of the frontline departments shall ensure quarterly updation of District Disaster Management Resource Inventory and submission of the same to District Revenue Officer, Shimla (H.P.) by:
 - a) Adding to it any changes in the human resources of their department along with their updated contact numbers, if any.
 - b) Adding to the equipment list, relevant resources for response activities from both the government and private sector.
- DRO shall ensure that the same has been updated and uploaded on website of District Administration on quarterly basis with the help of District Information Officer (DIO).
- Nodal officers of each of the line department shall also report to Head of Department and/or Deputy Commissioner, Shimla (H.P.) about requisition of any relevant resource/equipment, not available with the Government and/or private sector, for disaster management activity.
- District Disaster Management Authority (DDMA), Shimla (H.P.) shall ensure the establishment of Emergency Operation Centre, Shimla (H.P.) with the following:
 - a) Proper space for Planning and Logistics Section Chief and staff.
 - b) Proper space for control room with adequate communication equipment's including landline telephones, mobile phones, satellite phones, walkie-talkie, ham radio, computer/ laptop with printer facility, email facility, fax machine, television, etc.

c) Ensure power backup facilities along with availability of generator set.
d) Ensure proper space for meeting, conference, media briefing along with LCD, computer and video conferencing facilities.

- Availability of District Disaster Management Resource Inventory, Shimla (H.P.) and also of the neighbouring districts (Hamirpur, Kangra, Solan, Bilaspur, Hoshiarpur, Rupanagar), Disaster Management Resource Inventory of the state and also of critical national resources.
- Availability of Hazard Seasonality Map of Shimla (H.P.) district.
- Availability of District Disaster Management Plan, Shimla (H.P.)

5.17 National Disaster Management Guidelines –(School safety policy-2016)

National School Safety Guidelines

Emphasize on the need for active mainstreaming of Disaster risk reduction in all the school education in the country.

This would require collaboration between the state education department and SDMA.

1. It needs capacity development activities such as sensitization of officials, public awareness on disasters, training of teachers and students.
2. Pre-positioning equipment's for emergency response.
3. Creation of educational material on disaster.
4. Monitoring of risk.

Approach to implementation

School safety efforts need to consider all kinds of hazards that may affect the well-being of all children.

Hazards include structural and non-structural factors.

Structural factors include dilapidated buildings, poorly designed structures, faulty constructions, poorly maintained infrastructure, loose building elements etc.

While non-structural factor include loosely placed heavy objects:

1. Almirahs
2. Infestation of the campus by snakes and other pests.
3. Broken or no boundary walls
4. Uneven flooring, blocked evacuation routes, poorly designed and placed furniture that may cause accidents and injuries, inadequate sanitation facility etc.

Safety of children , their teachers and parents needs to be approached holistically to include visible as well as invisible risks that may be sudden or have built-up slowly over a period of time.

Policy provisions to make school safer

Unsafe structures can increase the vulnerability of children who are the primary target group of such efforts. Thus it is important to ensure that all development actions taken even in non-emergency times are designed with a view to ensuring their performance during emergencies. So, it is imperative that the existing institutions at the national and state level are strengthened

and capacitated to take responsibility of school safety planning and action school safety as an indicator of quality for planning, execution and monitoring.

1. Safety principles need to be incorporated in day to day functioning of the educational institutions in the country
2. Thus institutions involved in providing education need to evolve a mythology and an approach of their own that looks at safety as a continuously monitored indicator of quality.

Objectives of the policy guidelines

The primary objective of the national school safety policy guidelines is to ensure the creation of safe learning environment for children .

The policy guidelines also seeks to highlight the specific actions towards the school safety that can be undertaken by different stakeholders within the existing framework for delivery of education.

School Disaster Management Plan

Schools should also develop a Disaster Management Plan defining procedures to confine, contain, consolidate and control the emergency and crisis with inputs from DDMA. This plan should include among other aspects system of warnings, communication protocols within and outside the school (including usage of public addressal system), identification of evacuation routes, access by emergency vehicles and care of children with special needs. The Disaster Management Plan should also include stock piling of emergency equipment and materials, regular maintenance of emergency equipment, arrangements for orderly release of students to guardians and temporary shelter in case required. A site map should be included in the plan, designating planned evacuation routes and assembly areas. The same should be displayed on each floor of the school. A copy of the plot map and floor plan for each school with these details should be submitted to the DDMA for inclusion in the DDMP.

Implementation of safety actions

Appropriate Siting, Design and detailing for structural safety in new schools and repairing of existing schools

All existing as well as new schools need to conform to safety standards as per the National Building Code. In addition any other norms prescribed by the state government need to be adhered to.

Some of these actions are given below:

- New schools should be located on a site that has adequate mitigation measures already in place against any imminent natural hazards. Existing schools located in a vulnerable location should either be relocated at a safer site or they should be provided adequate support to mitigate the effect of any natural hazards that may affect the area.
- All new school constructions should include disaster resilient features. Existing vulnerable schools need to be repaired to the desired level of resilience with regard to local disaster risks.
- Prescribed designs may be adapted to accommodate safety and child friendly features.
- For design of structural standards of school building and its components such as corridors, staircases, side areas, quality of construction should be as per the National Building Code 2005. Only non-combustible, fire-proof, heat resistant materials shall be used in school construction.

- Vertical expansion of existing schools shall not be carried out without a fitness certificate for the building from a certified civil / structural engineer.
- Additional classrooms or any other structures requiring horizontal expansion shall be designed taking into account the space availability and while constructing as a continuous unit to the existing structures, these should be designed to have less impact of seismic forces.
- Each class room should have two doors for easy evacuation, adequate openings for ventilation and lighting are some of the essential elements that need to be accommodated in the design.
- Doors opening outside into open areas or corridors of adequate width are key details that need to be incorporated to make schools safer.

All of these and any other additional ones require the guidance and support of a panel of technical agencies to be identified at the state level and designated to work in specific districts. In this manner location specific designs can be worked out with adequate attention to safety features as well as child friendly elements.

Besides these details other design solutions in line with the Whole School Development Concept need to be incorporated to promote safety and child friendly features. Elements pertaining to school safety should be included in the whole school development approach

Non structural safety measures in schools

Besides structural safety measures, non-structural elements within the school campus need to be addressed to ensure safety. These are mostly low cost, regular maintenance items that the school should address on a regular basis from their own funds. Some of these items have been listed below:

- All items of furniture such as almirahs, shelves, black boards etc. as well as any other items that may fall and cause injury to students and teachers such as ceiling fans, coolers, water tanks etc. need to be secured to the walls or floor.
- Any electrical items such as loose wires that may cause an exigency should be addressed promptly by the school.
- Chemicals and any hazardous materials in the school laboratory should be handled and stored as per instructions to prevent any harm to students and school staff.
- Open areas including corridors and evacuation routes including staircases and ramps should be kept free from any hurdles and barriers so that evacuation is smooth and swift.
- Pots / planters in the playground or corridors should be kept in a manner that does not affect smooth evacuation.
- Any derelict or unused building, rubble, etc. should be removed to prevent any harmful animals or pests from accessing children.

- Traffic movement outside the school should be managed to minimize risk to students at the time of assembling and dispersal of school.
- During excursions, schools should carefully choose the location of excursion and the itinerary so that exposure to hazard is minimized. Extra precautions should be taken when students are being taken close to water bodies, narrow mountainous tracks etc.
- Buses or any other vehicles owned / hired by the school need to be maintained properly so that students are not at risk of accidents. Drivers need to be appropriately trained on speed limits, stoppage of vehicles as well as crisis management so that children remain safe during their travel to and from schools.
- Emergency equipment such as fire extinguishers, first aid kits, ropes etc. need to be procured and maintained regularly by the School Authorities.

These guidelines are also available at NDMA website i.e. www.ssa.nic.in/docs/NDMA_guide.pdf



Various Dimensions of School Safety – building on the Whole School Development Approach

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. DDMA Shimla has been doing CBT activities in past years and planned for further measures to minimize the response time and mitigate the disaster risk. Following training cum Orientation Programme are already organised by DDMA Shimla:

- One day sensitisation programme for 50 school teachers on 11th of April 2016 at DC Office Shimla to Commemorate the Kangra Earthquake anniversary of 4th April, 1905.
- Regional Training Programme under Hazard, Vulnerability and Risk Assessment (HVRA) Himachal Pradesh Project
- Comprehensive Capacity Building Programme on basic Disaster Management for Civil Defence/Home Guards/NYKS/Red Cross/ NCC/NSS volunteers
- Samarth 2016 with coordination with HPSDMA
- Formation and Training of Task Forces on following topics : i) Early Warning ii) Search & Rescue iii) First aid iv) water, sanitation and Hygiene v) Shelter Management (at Rohru & Theog Sub-Divisions of the District)
- District Level ToT on role of Panchayati Raj Institutions (PRIs) in Disaster Management from 21st-25th June, 2016
- Courses for the member of Panchayati Raj Institutions (PRIs) at Dodra Kwar and Rampur sub-division in July, 2016
- District level engineers and masons sensitisation programme on safe construction practices on 04th and 05th February, 2017 at District Shimla
- Shakeout drill/drop cover hold exercise/sensitisation programme for school teachers on 18th April, 2017 at DIET center Shamlaghat, Shimla.
- One day training on Community based emergency response on 2nd May, 2017 at DC Office, Shimla.
- Comprehensive Disaster Management Course for District Disaster Management Authority including Municipal Officials from 22nd to 25th May, 2017 at DC Office, Shimla.
- Community based disaster preparedness orientation programme for NGOs/CBOs/NYKS/NCC/Civil Defence & Home Guards/Red Cross/Navayuvak and Mahila Mandal from 14th – 16th June, 2017 at Sub-Division Rampur Bushahr
- District level basic and intermediate course on Incident Response System for District level officers from 03rd to 06th July, 2017 at DC Office, Shimla
- Disaster Management Course for members of Panchayati Raj Institutions from 19th – 21st July, 2017 at Sub-Division Chaupal.

6.1 Training & Capacity Building

To enhance organizational and capability skills to deal with emergency situations requires trainings and capacity building exercises of the various linked government and non-government officers. Since disaster

management is a multi-organizations effort, it emphasizes on trainings in execution and coordination as well. Therefore wide ranges of trainings related to management skills are highly required for potential officers in order to equip them for specialized disaster related tasks. They require orientation of various aspects of crisis management such as :-

- Skill training,
- Planning,
- Trainings on Emergency Response Functions such as first-aid, search and rescue, emergency operation center, emergency feeding and welfare, communication and damage assessment etc.
- Trainings for coordinated disaster management activities and response operations are highly required especially for the persons engaged in emergency services, government – line departments, non-government organizations and important private sector groups
- Training requirements are likely to comprise of core activities of emergency management such as Incident Response System, Emergency Response Functions and basic management skills. Persons to be trained shall be:
 - Government Officers at par with the rank requirement under Incident Response System
 - Team leaders and members under Emergency Support functions
 - Quick Response Teams at headquarter and field level
 - Community level taskforces including Volunteers, NGOs and home guard volunteers, school and college students, NCC and NSS scouts and NYKS etc

District Administration can organize seminars and workshops with the help of State disaster management authority, Civil Defence and Home Guard, Fire fighting department, Health departments etc. A record of trained manpower shall be maintained by each department and their representation shall be noticed during mock-drill.

6.2 Institutional Capacity-building

Institutional capacity-building will be structured upon a level-system that will be designed to bring officials and professionals from multiple fields and skill-sets at the district level. The District Disaster Management Authority, Shimla will utilize the abilities and expertise of representatives from following agencies, structured in the form of levels on the basis of priority.

6.2.1 Capacity-Building

a) CDM/Himachal Institute of Public Administration (HIPA)

The HIPA holds responsibility at the State level for conducting training programs on Disaster Management in all the districts of Himachal Pradesh as well as in District Shimla. The trainings take place over three to five days and involve district officials from various departments, as per the specificities of the training being conducted. Trainings are conducted in the Institute of Shimla as well as within the districts, for which officials are nominated by the District Administration. It is incumbent upon these officials to attend the trainings for which they have been nominated, and upon completion of the program, they shall receive certification from HIPA. Then officials in charge of updating the DDMP, Shimla are also responsible for keeping track of all trainings conducted and at the time of updating the plan, they are to include the names and contact details of all officials from Shimla district who have

attended any disaster management related training in the past six months. This will ensure the availability of trained human resources capable of dealing with disasters at the district level.

b) (DDMA) District Disaster Management Authority/ HODs:

The key role of capacity-building and training of district level officials in Shimla lies with the District Disaster Management Authority (DDMA, Shimla). The Authority will ensure that participants from various departments are nominated for the various disaster management related trainings conducted by CDM, HIPA and any other State/ National / International bodies or authorities that is competent to conduct/ organise trainings in the field of disaster management. The role of the DDMA will, thus, be predominantly that of coordination and monitoring. Furthermore, capacity building at the institutional level should be done by carrying out various activities under the District Supportive Staff (DSS) Programme of UNDP-India. The DDMA will also be responsible for ensuring that the Heads of Department (HODs) of the following departments discharge their responsibility of nominating officials from their departments for various disaster management trainings pertaining to their specific areas of work.

Table 6.1: Future Training Schedule with Target Departments

Nature of training	Target departments	Potential training institutes	Frequency	Timeline and approach
Training of doctors on emergency response	H&FW, CMOs, SMOs, MSs, Nurses, Medical Support staff from all district & Zonal Hospitals	EMRI, Red Cross, AIIMS Delhi	Quarterly	Long term / existing institutions
Training of doctors on Mass casualty management	Surgeons, Paramedics from all district & Zonal Hospitals	St. John Ambulance, IFRC (Red Cross), AIIMS Delhi	Half Yearly	Short term / outside institutions
Training of Departmental Heads in the District	All the Head of Departments in the District, SDMs, BDOs, Tehsildars	DDMA, UNDP	Half Yearly	Medium term using local as well as outside institutions
Training of Engineers, Architects	Town & Country Planning, Urban Development, HIMUDA, Rural Development	IIT Mandi, NIT Hamirpur IIT Roorkee	Half Yearly	Short term / outside institutions
Training of Teachers	Schools, Colleges, Department of Education	DDMA, UNDP	Annually	Medium term using local as well as outside institutions
Comprehensive training for DDMA district and sub division level officials	DDMA, Line departments, Officials from Municipality, Officials from and Sub division level officials	DDMA / HIPA	Annually	Regular
Relief Management	DDMA, Line departments, Officials from Municipality, Officials from and Sub division level officials	DDMA/HIPA	Annual	Regular
Search and Rescue Training	Police, Fire, Home Guards and Civil Defence	NDRF	Half yearly	Long term

1 Agriculture / Horticulture Department

The HOD must ensure:

- Formation and training of a Weather Watch Group for the purpose of monitoring crops in the district.
- Putting in place disaster management protocols for the hazards of drought, flood, hailstorm, etc.
- Provision of training to farmers in alternate cropping techniques and mixed cropping.
- Formation of Rapid Damage Assessment Teams who will be capable of assessing the condition of soil, fields, irrigation systems and any other damage to crops and produce in post-disaster situations.

2 Animal Husbandry

The HOD must ensure:

- Training of Staff for reducing attacks stray animals and control of their population.
- Formation of Rapid Damage Assessment teams capable of examining and assessing damage caused to livestock, feed and fodder, and other things within the domain of animal husbandry.

3 Civil Defence & Home Guards

The HOD must ensure:

- Provision of trainings for volunteers in Search and Rescue (SAR), First Aid, Traffic Management, Dead Body Management, Evacuation, Shelter and Camp Management, Mass Care and Crowd Management etc.
- The purchase of SAR equipment's through the appropriate channels of the District Administration.

4 District Red Cross Society

The HOD must ensure:

- Provision of training for the preparation of ward-level and village level First Aid teams.
- Ensure organisation of blood donation camps on a regular basis during normal times.
- Organise drives to recruit volunteers to help with blood donation camps and other activities.

5 Education Department

The HOD must ensure:

- Formation and training of damage and needs assessment teams within the department.
- Provision of trainings in First Aid and basic survival skills for teachers and students in the district.
- Education and awareness programs should be designed in such a way so that the disaster management education in the school/ college curriculum could be included.
- Capacity-building at the institutional level should be done by carrying out various activities under the School Safety Programme (SSP).

6 Electricity Department

The HOD must ensure:

- The timely purchase of electric equipment's necessary for maintaining state of adequate preparedness and for speedy and efficient disaster response, through the appropriate channels of the District Administration.

- To make the response task force for dealing power problems and provide trainings on electrical safety to departments and community.

7 Forest Department

The HOD must ensure:

- Formation and training of teams within the department for catching wild/ escaped animals who pose a threat to human safety.
- To generate awareness among community on Forest Fires.
- To generate awareness on afforestation among communities.

8 Himachal Pradesh Road Transport Corporation

The HOD must ensure:

- Provision of training to drivers, conductors and staff in First Aid and basic life saving techniques
- Adequate stocking/replenishing of First Aid kits and maintenance of fire extinguishers in all vehicles and depots in the district.

9 Health Department

The HOD must ensure:

- Formation and training of damage and needs assessment teams within the department.
- Provision of trainings for Quick Response Medical teams (QRMTs) of paramedics, mobile medical teams, psychological first aid teams and psycho-social care teams.
- Timely procurement/purchase of portable equipment for field and hospital diagnosis, triage, etc.
- Provision of trainings for health attendants and ambulance staff in First Aid and life-saving techniques.
- Provision of training to members of local communities in health and hygiene practices.
- Capacity-building at the institution all level should be done by carrying out various activities under the Hospital Emergency Preparedness Programme (HEPP).

10 Irrigation Department

The HOD must ensure:

- Provision of trainings to all human resources with regard to early-warning for flood.
- The timely purchase of early warning and communication equipment through appropriate channels of the District Administration.

11 Development and Panchayat Department

The HOD must ensure:

- Providing Awareness or Trainings among community on Disaster Preparedness.
- Provision of training for formation of teams to engage with the issues of hygiene and sanitation at the village level through the Gram Panchayats.

12 Police Department

The efforts of the police go a long way in and avoid or control chaos at affected sites. They also help prevent human trafficking which is increasingly common in the aftermath of disasters. The trained police personnel should be placed on record within a district-level database of persons trained in disaster management. Trainings for the police personnel are thus, an important aspect of capacity-building in the district. District police also receives training specific to the role of the department from the Himachal Police Academy (HPA) in Shimla district.

13 Fire Services Department

- For capacity-building, Fire Services in Shimla district should be made responsible for conducting fire-safety trainings for all district officials as well as for societies, shopkeeper associations, etc. from time to time.
- Himachal Fire Services should also be made responsible for conducting safety audit so of various government and civilian buildings in order to check whether they are compliant with fire-safety norms.
- Furthermore, the Fire Services should conduct mock-drills for firefighting and evacuation procedures regularly, following a schedule stipulated by the District Disaster Management Authority (DDMA –Shimla). Training programs on disaster management that are relevant to the role of the Fire Services are conducted by CDM, HIPA from time to time, and the District Administration, Shimla should ensure that fire personnel are deputed for such trainings. The trained Fire Services personnel should be placed on record with in a district level database of persons trained in disaster management. Such trainings are thus an important aspect of capacity-building in the district.

In addition to these Disaster Risk Reduction (DRR) specific Capacity Building & Training initiatives of the Line Departments, these departments would include Disaster Mitigation and Preparedness as one of the integral part in the regular trainings conducted by these departments in consultation with DDMA.

6.3.2 Level-2 Capacity Building

a) Civil Engineers (structural capacity-building)

There is strong evidence that appropriate engineering intervention can significantly reduce the risk of disasters. Civil engineers also play an important role in post-disaster conditions – in rescue operations, damage assessment and the retrofitting of structures. Civil engineers need to keep themselves updated about the latest research and developments in construction technology, advances in construction materials and analysis or design procedures. Civil engineers should also take support from other branches of engineering for the better planning, execution and functioning of their building and infrastructure projects. Trainings to Civil Engineers will be provided by CDM, HIPA. Furthermore, at the district level, civil engineers will conduct training of masons for construction of earthquake-resistant structures. Such trainings will be facilitated by the DDMA.

b) Corporate, Professionals

National Disaster Management Framework emphasizes on the ‘involvement of corporate sector in awareness generation and disaster preparedness and mitigation planning’. Keeping in mind the need to mainstream disaster management concerns at multiple levels of the corporate sector, the following steps should be taken into consideration:

- Through Corporate Social Responsibility (CSR), Corporate can assist in development projects, and thus help enhance the capacity at the district-level.

- Conducting mock-drills at regular intervals to determine the efficacy of the Disaster Management plans.
- Large-scale association with awareness generation initiatives aimed at building the knowledge, attitude and skills of the common people for a safer habitat.
- To move away from relief centric approach to a pro-active approach through risk management measures and capacity building of industrial personnel through Business Continuity Planning (BCP), trainings and other measures.
- Training of a core team of structural engineers for retrofitting of existing industrial infrastructure as per requirement

6.4 Strengthening of District (EOC)

As mentioned in previous Chapter, the Emergency Operations Centre (EOC) contains important equipment's and resources such as maps and communication equipment's including landline telephones, mobile phones, walkie-talkie, computer/laptop with printer facility, email facility, fax machine, television, etc. In addition, it will also contain printers, power sources and backups, copies of plans, etc. It is crucial to strengthen the district-level EOC.

This can be done by:

- Ensuring regular training of all staff meant to be present in the EOC.
- Video-conferencing equipment
- Satellite Phones with annual subscription
- Wireless Phone Setup in the EOC
- Training and provision of HAM Radios

6.5 Capacity-building at the Community Level

Community Disaster Management Planning is one of the vital components of community preparedness. It involves all important parameters related to hazard awareness, evacuation planning, resource inventory, community level taskforces and committees etc. which helps community members in organizing themselves to combat disaster in a pre-planned manner and also focus on vulnerable groups – women, children, aged persons and persons with various kinds of disabilities. Preparation of community plans encourages promoting preparedness planning at community level. District Administration is also imparting trainings on regular basis to the volunteers of Home Guards, Nehru Yuva Kendra Sangathan (NYKS), Non Governmental Organisations (NGOs), Self Help Groups etc. to involve them into community planning. The hazards of the district indicate that there is a vital need of awareness among community through public awareness programs on the following themes of disaster:

- Types of disasters and basic do's and don'ts related to those disasters.
- Post disaster starvation / Health (epidemic) problems
- Mitigation measures such as retrofitting techniques for hazard resistant building construction.
- Communication of information of all possible risks based on vulnerable areas, groups, structures / situations and related response such as evacuation in the district and to solve preparedness problems at community level.

Local residents are likely to be the first emergency responders to such incidents, particularly in remote areas and, therefore, critical to the successful outcome. The capacity building plan should cater to the ‘differential capacity building needs’ based on the functional responsibilities assigned to stakeholders. It should address –

It is important to consider the special/ specific needs of persons with disabilities in every phase of disaster management and risk reduction.

Table 6.2: Disaster Risk Reduction Addressing Special Needs of PWD

Disaster Management/Risk Reduction Phase:	Addressing Specific/Special needs of the PWD
<ul style="list-style-type: none"> • Preparedness • Immediate Response/Recovery • Mitigation/Rehabilitation • Development 	Medical treatment/therapy/medications. Assistive/Mobility aids Infrastructure/relief accessibility Community attitudes towards PWDs

Volunteers and social organizations also play a vital role in spreading mass scale community awareness. Media can also play an important role in raising awareness and educating people. Capacity-building at the community level includes awareness, sensitization, orientation and developing skills of communities and community leaders. At the district-level, assistance will be provided by consolidating the know-how and practical training provided by NDRF, Civil Defence and NGOs, District Red Cross and Self-Help Groups (SHGs) and disseminating it within the communities. Multiple responsibilities within the arena of capacity-building and training will be delegated to local authorities, PRIs and ULBs under the overall guidance of District authorities. It is also crucial to focus on imparting training, cultivating community awareness and ensuring skill development among members of the community .Furthermore, capacity-building at the community level should be done on the Public Private Partnership (PPP) model. This can be done by ensuring identification of local resources and developing local infrastructure through PPP. Community Based Disaster Risk Reduction (CBDRR) and Village Contingency Planning (VCP) are also critical for capacity building at the community-level and will be managed by the concerned departments in the district.

6.6 Development of IEC Material

Addressing the specific requirements of vulnerable regions and the risk mitigation and preparedness needs of identified communities ,various IEC material like list of do’s and don’ts, posters, leaflets, banners, training modules and audio visual material must be produced using capacity-building funds from the state. The aim is to develop a large body of advocacy and awareness materials, especially in vernacular languages, targeting vulnerable groups such as women, children, elderly, differently- abled, and marginalized and excluded groups.

6.7 Simulation Exercises

To encourage participation in a coordinated manner simulation exercises on various disasters are very important. These exercises help in institutional building at various levels. Mock exercises have been promoted at district and community level. These exercises help in improving response time and also test reliability. These mock-drill arranged by involving all required agencies. These drills also help in updating the response plans. District Disaster Management Authority is playing an important role in conducting mock-drills and to update plan.

CHAPTER-7

RESPONSE AND RELIEF MEASURES

The post disaster phase of Disaster Management looks into relief, rehabilitation, reconstruction and recovery. The effective disaster management strategy aims to lessen disaster impacts through strengthening and reorienting existing organisational and administrative structure from district and state to national level. Relief on the contrary is viewed as an overarching system of facilitation of assistance to the victims of disaster for their rehabilitation in States and ensuring social safety and security of the affected persons. Relief needs to be prompt, adequate and of approved standards. It is no longer perceived only as gratuitous assistance or provision of emergency relief supplies on time. Therefore, Emergency response plan is a first attempt to follow a multi-hazard approach to bring out all the disasters on a single platform incorporating disaster resilient features to 'build back better' as the guiding principle. It provides a framework to the primary and secondary agencies and departments which can outline their own activities for disaster response. Response process begins as soon as it becomes apparent that a disastrous event is imminent and lasts until the disaster is declared to be over. Disaster response is aimed at: Saving Life-Minimise the Loss- Stabilising the Situation.

7.1 Response Planning

The onset of an emergency creates the need for time sensitive actions to save life and property, reduce hardships and suffering to restore essential life support and community systems, to mitigate further damage or loss and to provide the foundation for subsequent recovery. Effective response planning requires realistic identification of likely response functions, assignment of specific tasks to individual response agencies, identification of equipment, supplies and personnel required by the response agencies for performing the assigned tasks. A response plan essentially outlines the strategy and resources needed for search and rescue and evacuation etc.

Response measures are those which are taken instantly prior to and following a disaster aimed at limiting injuries, loss of life, damage to property, environmental losses and rescuing those who are affected or likely to be affected by disaster. Response process begins as soon as it becomes apparent that a disastrous event is imminent and lasts until the disaster is declared to be over. Since response is conducted during periods of high stress in a highly time constrained environment and with limited information and recourses (in majority of the cases) it is by far the most complex of four functions of disaster management. Response includes not only those activities that directly address the immediate needs such as search and rescue, first aid and shelters but also includes systems developed to coordinate and support such efforts. For effective response all the stakeholders need to have a clear perception/vision about hazards, its consequences and actions that need to be taken in the event of it.

Table 7.1: Response Planning Phases during Early Warning

Pre-Disaster	Responsible Deptt.	Post-Disaster	Responsible Deptt.
Activate control room if necessary	DDMA will activate the control room at district level. Control room at Sub-Division and Tehsil level will be activated by concerned disaster management authority.	Quick Damage and Need Assessment	Multi-Sectoral committees encompass all line departments constituted by DDMA
Review situation	DDMA will review all the situation on the basis of data and reports provide by the line departments	Search and rescue	Home Guard/Civil Defence/Fire with coordination with Police and NDRF (if required)
Communicate warning (Inform community likely to be affected by the impending disaster, Inform line departments/agencies to mobile resources/teams for quick deployment)	DEOC will communicate the warning to all potential affected areas with support of DPRO, DRDA, Police, Home Guard, Fire and Local Administration.	Activate Line Departments/Agencies to Quick restoration of basic utilities and critical infrastructure e.g. Roads, Life Line Buildings i.e. Hospital, Blood Bank, Schools and Banks, Admin Building, Electricity , Water/Sanitation,	DDMA will coordinate with all line departments for quick restoration
Coordination with all line departments	Chief Executive Officer appointed by DDMA will coordinate	Activate all Quick response Team (QRTs)/ First Responder Team	DDMA will coordinate with all available QRTs in the District
Stocking of essential and basic life line Items and materials	All frontline departments i.e. Medical, Food and Civil Supplies, IPH, PWD, HPSEB, Police	Sharing, reporting and communicating the info to the State and National Level and requisition for assistance to prompt response or relief	Chief Executive Officer appointed by DDMA will coordinate
Identification of temporary shelter	Revenue Department will identify the shelter with support of PWD, MC and Education	Activate and deploy the Incident Response Teams	DDMA Chairman

Evacuate people to temporary shelter with essential facilities	Police and Home guard will evacuate the people to safer place or identify temporary shelter in support of Fire Deptt., NYKS, NCC, NSS and Paramilitary Forces in the district	Provide temporary shelter and basic necessitate facilities to people	Revenue Department will coordinate with all line departments
Remove assets from dangerous areas	PWD will facilitates all these activities in coordination with RTO and HRTC		

Table 7.2: Response Planning Phases during No early warning

Activities	Responsible Department
Activate control room and forward the report to state and national level	DDMA will activate the control room at district level. Control room at Sub-Division and Tehsil level will be activated by concerned disaster management authority. CEO of DDMA will report to higher Authority
All heads of the departments will report to the Control Room	DDMA will coordinate with line departments
Activation of damages and needs assessment teams to undertake damages and needs assessment	Multi-Sectoral committees encompass all line departments constituted by DDMA will undertake an assessment of damages of assets and infrastructure and also to assess the needs of the community.
Restoration of critical and life line infrastructure	PWD, IPH, HPSEB, Health and family Welfare, Food and Civil Supplies will initiate efforts to restore the infrastructure starting especially with the most critical infrastructure that could assist relief
Activate and deploy the Incident Response Teams	Chief Executive Officer appointed by DDMA will coordinate
Provide relief to the affected communities	DDMA will coordinate with food and civil supplies, health and family welfare, Police, RTO, HRTC, PWD and IPH
Coordinate relief operations	DDMA and Revenue Department will coordinate with Incident response team at hierarchical administration level viz. SDM, BDO, Tehsildar, ZP
Request for possible help from external sources/ Resource Mobilization	Chief Executive officer appointed by DDMA will coordinate

❖ **Disaster Response Functions to be carried out by District Administration**

✓ **Early Warning Phase:**

1. Activation of Control Room/EOC: As soon as Early Warning Message/Information is available through IMD/CWC/GSI, DDMA will activate EOC/CR.
2. Inform Community likely to be impacted.
3. Inform Line Departments/Agencies.
4. Hold Meetings of DDMA
5. Requisition of National Disaster Response Force (NDRF)
6. Requisition of Paramilitary-IRB/TBP/SSB

✓ **Immediate Post Disaster Phase**

1. **Search & Rescue:** Home Guard/Civil Defence/Fire will carry search and rescue in coordination with Police and NDRF and the existed Paramilitary Forces within or nearby the district.
2. **Quick Damage Assessments:** DDMA will constitute a multi-sectoral damage and need assessment team which will carry out the process of damage and need assessment and report to the DDMA for further action. The multi-sectoral teams will be constituted and its members having local knowledge and will comes from different expertise to do the synthesis damage and need assessment compressively. The team will conduct damage assessment in the special following sectors

Table 7.3: Damage Assessment in Context to Response

Sr. No	Damages
1	Roads and Bridges
2	Life Line Buildings
3	Food and Civil Supplies
4	Houses
5	Water lines and Tanks
6	Electricity
7	Communication
8	Medical Infrastructure
9	Monuments
10	Agriculture Crops and Horticulture
11	Livestock
12	Forest

7.2 Quick Need Assessments

Need assessment will be undertaken by a multi-sectoral team with a special focus on the following sectors mentioned in table 7.4

Table 7.4.: Need Assessment in Context to Response

Sr. No.	Sector of Need
1.	Temporary Shelter
2.	Food and Civil Supplies
3.	Medical/health
4.	WASH
5.	Special Needs
6.	Psychosocial care
7.	Security needs in context of varying social groups
8	Restoration of essential services like, roads, water facilities, power and communication

7.3 Resource Mobilisation

Resource mobilisation is one of the most important and crucial activity when any disaster occurs in the district for responding to disaster in an efficient manner. The IDRN portal has information regarding different kind of resources available for multi-hazard with various departments along with their location across district. It can lead to quick and immediate procurement of the required resources from the nearest available site and department for response to any disaster.

Various resources required in damage needs assessment will be mobilised by the concerned departments. Following is the list of the departments which are responsible for mobilising various needs identified in damages need assessment:

Table 7.5: Resource Mobilization and Responsible Department

Sr. No	Identified Need	Action	Nature of resources	Responsibility
1.	Temporary Shelter	DDMA/Revenue Department will arrange relief camps/shelters. Wherever required Tents will be pitched to accommodate affected people. Departments of Education, Health and Family Welfare will provide support	Tents, sleeping bags, blankets, clothing's, Sanitizer, sanitary pads and stretchers	Revenue Deptt/DDMA/Health/
2.	Food and Civil Supplies	Food and Civil Supplies Deptt. will Provide food, Fuel and Drugs	Essential food items and fuel	Food and Civil Supplies Deptt.
3.	Medical	Medical Deptt will arrange the lifesaving medicines, blood, Doctors and Paramedical staff	Medicines, doctors, ANM, nurses, Asha Workers	Health and Family Welfare Deptt./Red Cross
4.	WASH	IPH will provide chlorine tables for water purification, drinking portable water,	Drinking water, sanitation	IPH

		sanitation kits		
6.	Psychosocial care	Health and Family Welfare Deptt./Red Cross will take care of reported Physco and Mental Trauma cases	Psychosocial care	Health and Family Welfare Deptt./Red Cross
7.	Security needs in context to varying social groups	Maintain Law and Order, security of social group and tackle the human trafficking situation	Trained personnel	Police/Home Guard, Civil Defence
8.	Road clearance	To restore the road functions, remove the debris and clearance of any blockage	Earth removers and man power	HPPWD, BRO
9.	Power storage	To restore the power, provide the temporary chargeable generators and batteries, Him Urja will provide the Solar Lights	DG sets, wires, manpower, batteries, search lights,	HPSEB and Him Urja
10	Communication	To restore the communication network	Network restoration, v-sets, satellite phones, walkie talkie	BSNL, NIC, Police

7.4 Response Management

7.4.1. Activation of EOC

The DEOC will function to its fullest capacity on the occurrences of disaster. The district DEOC will be fully activated during disasters. The activation would come into effect either on occurrence of disaster or on receipt of warning. On the receipt of warning or alert from any approved agency which is competent to issue any early emergency warning or on the basis of reports from SDO (Civil) or any other agencies on the occurrence of a disaster, all community preparedness measures including counter-disaster measures will be put into operation. The Deputy Commissioner will assume the role of the Chief of Operations for Disaster Management. The entire line department senior official will be immediately reported to the DEOC. The DDMA will expand the Emergency Operations Centre to include Branch arrangements with responsibilities for specific tasks depending on the nature of disaster and extent of its impact. All the occurrences report would be communicated to the SEOC/SDMA, NEOC/NDMA and Supporting Agencies by means of telephone and subsequent fax periodically. The occurrence of disaster shall be immediately communicated to the stakeholders such as NGOs, trained SAR volunteers through SMS gateway (or through telephone in case of communication exist or any available communication network) for which specific provision of group mobile directory would be made.

✓ Main Roles of DEOC after activation:

- a. Assimilation and dissemination of information.
- b. Liaise between Disaster site and State Head Quarter.
- c. Monitoring, coordinate and implement the DDMP.

- d. Coordinate actions and responses of different departments and agencies.
- e. Coordinate relief and rehabilitation operations
- f. Hold press briefings.

7.4.2. Incident Command System

As per the report received from the Rapid Damage Assessment Team, DEOC will be activated and the representative from all the nodal departments in the district will send their representative in the DEOC. The Deputy Commissioner shall assume the charge of the Incident Commander at the DEOC level. Immediately the member of the DDMA will prepare the Incident Action Plan and direct the respective departments to execute the plan on the incident site.

7.4.3. Establishment of Incident Command Post

To execute the Incident Action Plan, the Incident Command Post shall be established on site to execute the operation under unified command system. Every team will operate under the field incident command that will SDM for revenue, BDO for Rural Development, the Xen of the concerned department if departments involved are PWD, IPH, HPSEB, and District Fire Officer for fire Department, Commandant Home Guards, Dy. Sp for police department, RM for HRTC etc. These field incident commands will monitor the work of all their respective teams and SDM will also work as coordinating command between different departments /agencies involved.

7.4.4. Composition of various Incident Response Teams

To manage the disaster in an effective way every department will constitute Incident Response Teams in the district consisting 3-7 persons along with machinery/equipments which will operate under the supervisory officers who will be designated as leader and who will be reporting to the officer who will be designated as supervisor who will be controlling 3-7 such types of teams ,who will further report to the officer who will be looking after 3-7 such types of divisions finally to the section chief who will be Xen of the departments for PWD,IPH, HPSEB departments.

7.4.5. Relief distribution

Relief distribution will be coordinated by sub divisional, tehsil and respective disaster management committees. The onsite distribution will be done by incident response team. The updated needs will be communicated to DDMA and it will ensure the regular supply of the required items. The relief distribution will include essential items which serves the basic needs of the affected community like LPG , medicines, clothes, food items, drinking water, soaps, blankets, items of special needs for women's, children's, handicapped and old aged.

7.4.6. Search and rescue management

Search and Rescue activities include but are not limited to locating, extricating, and providing immediate medical assistance to victims trapped in emergency situation. People who are trapped under destroyed buildings or are isolated due to any disaster need immediate assistance. The District Commissioner in conjunction with local authorities will

be responsible for search and rescue operations in an affected region. At present, Nodal department for this activity is NDRF and Home Guard/Civil Defence Department. The helping departments for search and rescue are P.W.D., Nagar Panchayat/Nagar Palika, Self-help groups, N.S.S, N.C.C, and PRIs etc. There are other bodies too that help these departments in this work like Health department and Fire department. In doing so, the Deputy Commissioner will be guided by relevant disaster management plans and will also be supported by Government departments including local authorities. Dedicated search and rescue teams from various line departments have been formed to support the search and rescue operations in the district. Team members have to be periodically trained and retrained on the elements of collapsed structure, confined space search & rescue and rope rescue etc.

7.4.7. Information management and media management

Media has to play a major role during disaster. They will aid in information dissemination about help-line, aid-distribution camps, emergency phone number or the needs of the people. Further, they will also help in quashing rumours, for crowd management and prevent panic situation. Media will also help in mobilising resources [money, volunteers etc.] from other areas. To disseminate information about various hazards in the district and the relevant dos and don'ts during and after a disaster encompass under the media management. This will be done through various media such as newspapers, television, radio, internet, media, through information van and street theatre etc. The DDMA will establish an effective system of collaborating with the media during emergencies. At the District Emergency Operation Centre (DEOC) a special media cell will be created during the emergency. Both print and electronic media are regularly briefed by some senior official designated from DDMA at pre-determined time intervals about the events as they occur and the prevailing situation on ground. The DPRO in consultation with the DDMA would take appropriate steps in this direction.

7.4.8. VIP management

It may be possible that the scale of a disaster may in addition prompt visits of the VVIPs/VIP which further requires the active management to ensure the effortlessly ongoing response and relief work without any interruption. DDMA will designate senior official to handle the VVIPs/VIPs visits to the affected areas and further to brief the VVIP/VIP beforehand about the details of casualties, damage and the nature of the disaster. The Police and Home guard will handle all the security of VVIPs/VIP during their visit. It would be desirable to restrict media coverage of such visits in which case the police should liaise with the government press officer to keep their number to minimum.

7.4.9. NGO Coordination and Management

Non-governmental organisations (NGOs) will play as one of the most effective alternative means of achieving an efficient communications link between the disaster management agencies and the effected community due to their outreach at the grassroots level. As per the section 35 and 38 of the DM Act 2005 stipulates that the DDMA shall specifically emphasize the coordination of actions with NGOs. In typical disaster situation, DDMA with the support of DRDA will coordinate NGOs/CBO's and further manage their

work in prompt response, relief and rescue and also in monitoring and feedback at grassroots level by the agreeable community participation?

7.4.10. Disposal of dead bodies and carcass

District administration will coordinate to arrange the mass cremation burial of the dead bodies with support of police & forest department after observing all codal formalities & maintain the video recording of such unclaimed dead bodies after properly handing over the same to their kith or kin. Department of animal husbandry in association with the local administration shall be responsible for the disposal of the animal carcass in case of mass destruction.

7.4.11. Debris Management

- Debris may be the result of natural, human-induced and technological hazards.
- Some or all jurisdictions within Shimla may experience events which result in large amounts of debris that may adversely affect public safety.
- Communities have varying and unique circumstances that could impact the types and amounts of debris and the responses to debris cleanup. These may include types of local business/industry, land use, size of the community, topography, and economics.
- Jurisdictions must be prepared to conduct emergency debris removal on their own during the initial phases of an emergency or disaster and must consider public safety as their first and top priority.
- Individuals will be responsible for removal and disposal of debris on private property.
- Debris management activities can be a major burden on the time and resources of everyone affected.
- Extraordinary demands will be placed on public and private resources for debris management following a disaster event.
- A coordinated community effort will be required to effectively collect, remove, and dispose of debris following a disaster.
- In order to combine local resources (personnel, equipment, supplies) various jurisdictions like District Administration, Municipal Corporation-Shimla & Districts Panchayats may join together to establish a local area of operations for collecting and handling the debris.
- Mutual aid from adjacent jurisdictions will be coordinated with pre-disaster planning.
- Temporary debris storage and reduction sites will be located in each of the local jurisdictions area of operations in order to provide a close by site thus reducing transportation time and costs.
- Pre-disaster planning will provide the jurisdictions knowledge of debris management and how to organise locally to conduct debris removal operations thus ensuring that cost effective and environmentally sound practices will be used.
- During major emergencies requests for state and/or federal disaster assistance may be necessary.

7.4.11. Tourism Management

Shimla has been blessed with all the natural bounties which one can think of. It has got a scenic location and is surrounded by green hills with snow capped peaks. The spectacular cool hills accompanied by the structures made during the colonial era create an aura which is very different from other hill. Shimla is also well connected by roads, rail and air therefore the tourist flow in the district is very high in summers and winter season. Tourism in Shimla is probably more exposed to natural disasters than any other 'group' in the population. Tourism concerns are required to be addressed and at the same time are an important resource proactive approach. It is dependent on an intact ecosystem and on institutional structures that can respond to the needs of local people and visitors.

The tourism sector constitutes an important part of Shimla's economy and societies and should therefore be actively involved in Disaster Risk Reduction (DRR) for a number of reasons. Foremost, tourism is about people. Tourists are potentially particularly vulnerable to natural disasters because they are mobile, difficult to account for and not easy to reach with relevant information (e.g. warnings). Often, tourists travel in environments unfamiliar to them and their connectedness with the local communities is very small, they may face language barriers, they are potentially confused about traffic rules and their predisposition towards positive holiday experiences might obstruct their capacity to absorb information related to natural hazards or disasters. Tourist destinations and their operators therefore have responsibility to ensure tourists that they are protected from disasters or receive assistance following a disaster.

Having a plan is no guarantee that damage or loss is avoided but it does help in establishing important partnerships before an event and it also provides outline that allow quick action in specific situations and it help managers and operators to communicate effectively to the different target audiences. Such a proactive approach to disaster management is likely to protect the image of the destination and assist its long term sustainability. A comprehensive approach to DRR involves disaster reduction, readiness, response and recovery. This will be achieved by improving the local authorities and the private sector's ability to manage natural and man-made disasters and by training the residents and tourists on how to properly prepare and react to disasters.

❖ Measures to be taken in case of earthquake disaster by the City Disaster Management Authority, Municipal Corporation, Shimla

The Municipal Corporation Shimla is entrusted with the development related matters of the MC areas and providing basic civic amenities. However at the Disaster phase the Shimla Town will be managed largely with the coordination of Municipal Corporation, Shimla.

✓ Impact Assessment

- The City Disaster Management Authority and City Emergency Operation Center would be fully activated and pre-designed response plan shall immediately be triggered according to the magnitude and epicenter of the earthquake.

- The Municipal Corporation/City Administration will gather information regarding the damages in respect of deaths, injuries and damages to the buildings/infrastructures.
 - If required the Municipal Corporation will conduct an aerial survey to determine the scope of the damage, casualties, and the status of key facilities.
 - City administration/City EOC/Municipal Corporation will identify areas and assess the requirement of police, armed forces, volunteer etc for search and rescue operations. The priority of conducting these operations will be established by the City Disaster Management Authority, Municipal Corporation, Shimla.
- ✓ **Deployment of Search and Rescue Teams**
- As an immediate measure City Administration would deploy local SAR teams of Civil Defence/Home Guards, Police and Local Volunteers etc.
 - The police force will also be deployed to undertake different types of search and rescue activities.
 - Requirement of Armed Forces – Army, Air Force, CPMFs, NDRF etc. would be worked out and demand for the same shall be placed with DDMA Shimla and SDMA.
 - The ESF Department/City Administration shall arrange for local transportation (from airport/railway station to affected site) of NDRF teams and supplies for their equipment/vehicles of NDRF.
 - The police department shall control traffic to ensure that NDRF teams/other SAR and relief teams could reach the earthquake affected areas without delay.
 - ESF Department/City Administration shall provide access routes for transportation of NDRF, other SAR and Relief Teams to the affected sites. If needed, roads and bridges will be repaired or reinforced even on a temporary basis or emergency detours be provided.
- ✓ **Emergency Medical Relief**
- The City Hospitals – IGMC, DDU etc., primary health centers, health department etc. would activate their respective emergency medical plan forthwith.
 - NDRF teams are also trained in Emergency Medical Services (EMS) such as Medical First Response techniques with basic knowledge of life saving of disaster victims. Each NDRF battalion has 9 Doctors and 90 paramedics. NDRF teams shall provide EMS to the areas of their deployment during post disaster phase.
 - If needed Ministry of Defence through DDMA Shimla and State Government would be requested to provide mobile field hospitals, Heli-ambulances. They will be activated to reach the earthquake affected areas immediately along with dressing material, splints, portable X-ray machines, mobile operation theatres, resuscitation equipment and life-saving drugs, etc.
 - The Department of Health and Family Welfare at the City Level would coordinate with its counterpart at District and State level for medical assistance required for the State.
- ✓ **Supply of Relief Materials to affected States**

- The City Disaster Management Authority would assess requirement of relief items and material required for the affected areas. It would also project its demand to the District and State Government.
- The Emergency Support Functionaries (ESFs) departments both city and district level would arrange to supply relief material to the affected locations.
- The MC Shimla would consolidate demands received from the city and would coordinate with Deputy Commissioner for State assistance, if any.
- The City Disaster Management Authority/Municipal Corporation would appoint Nodal Officers at airports/helipads to coordinate, receipt and channelization of relief material. Adequate arrangement would be made for the transportation of relief material to different parts of the affected areas of city.
- A mechanism would be put in place for proper accounting for and distribution of the relief material received in the city.

✓ **Establishment and Running of Relief Camps**

- Municipal Corporation/City administration would establish relief camps as per requirement.
- ESF departments would arrange for all basic amenities in these camps.
- These relief camps would be run and managed by the ward level DM Committees.
- Temporary shelters would be constructed as per requirement by the MC.

✓ **Repair and Restoration of Roads, Communication, Electricity and Water Supply**

- The Public Works Department (PWD) would undertake repair, build temporary bridges, access ways and other temporary structures for restoration of National and State Highways and other roads.
- The PWD would also repair damaged helipads and make temporary helipads as per requirement.
- Communication network would invariably be damaged in an earthquake. The BSNL and other service providers would take immediate steps to restore communication in the affected areas. Secondary ESF departments/agencies for communication would also provide communication facilities for disaster communication and relief.

✓ **Damage Assessment of Public Building and Infrastructure and Individual Houses**

- All Departments would constitute teams of officers/technical persons to:-
 - Inspect buildings and structures that are critical to emergency service operations and mass care activities. Designate those that may be occupied and identify/mark those that are unsafe.
 - Inspect buildings and structures that may threaten safety. Identify/mark those that are unsafe and may not be occupied.
 - Inspect less critical damaged structures. Designate those that may be occupied and identify/mark those that are unsafe to occupy.

- Municipal Corporation/City Administration shall constitute teams of qualified technical personnel for damage assessment of individual houses. These teams shall also identify/certify those houses that are unsafe and may not be occupied.
- The Disaster Management Authority under Municipal Corporation and city administration in consultation with the IITs and NITs develop guidelines for assessment of damaged individual housing units.

✓ **Information Management and Helpline**

- Municipal Corporation, District Disaster Management Authority and City Administration shall set up Emergency Information Centre (EIC) at the City EOC level or other suitable location for release of consolidated information to all stakeholders including Media at the City Level.
- Helpline would be established at City EOC or other suitable location for providing information about victims to the next of kin, friends and others.
- EIC shall maintain all records and document of all major actions taken in managing the incident.

7.5 Relief Measures & Management

✓ **Food & Nutrition**

People affected by disasters may be deprived of food and therefore food aid shall be provided to sustain life. The following measures will be taken:

- Where necessary free distributions of food shall be made to those who need the food most.
- The food distribution will be discontinued as soon as possible.
- Wherever possible dry rations shall be provided for home cooking.
- Community kitchen for mass feeding shall be organised only for an initial short period following a major disaster particularly where affected people do not have the means to cook.
- While providing food assistance local food practices shall be kept in mind and commodities being provided must be carefully chosen in consultation with the affected population.
- Food must be of good quality, safe to consume and appropriate and acceptable to recipients.
- Rations for general food distributions shall be adopted to bridge the gap between the affected population's requirements and their own food resources.
- Food distribution should be of appropriate quality and fit for human consumption.
- Food should be stored, prepared and consumed in a safe and appropriate manner at both household and community levels.
- Food should be distributed in a responsive, transparent and equitable manner.
- NGOs, CBOs and other social organisations should be involved for supplementing the efforts of Government.
- The nutritional needs of the population should be met and malnutrition and micronutrient deficiencies of identified at risk groups addressed.

✓ **Water**

Water supply is invariably affected in natural disasters. Safe drinking water might not be available particularly in hydro-meteorological disasters. The following measures shall be taken by the District Administration:

- The District Administration shall identify alternative sources of water and make necessary arrangements for supply to the affected population.
- The District Administration shall ensure that affected people have adequate facilities and supplies to collect, store and use sufficient quantities of water for drinking, cooking and personal hygiene.
- It shall be ensured that drinking water supplied conforms to the prescribed quality standards
- It shall be ensured that water made available for personal and domestic hygiene should not cause any risk to health.

✓ **Health**

During post disaster phase many factors increase the risk of diseases and epidemics. These include poverty, insecurity, overcrowding, inadequate quantity and quality of water, poor environmental and sanitary conditions, inadequate shelter and food supply.

✓ **Medical Response**

Medical response has to be quick and effective. The execution of medical response plans and deployment of medical resources warrant special attention at the State and District level in most of the situations. The following measures shall be taken by the District Administration:

- A mechanism for quick identification of factors affecting the health of the affected people shall be established for surveillance and reporting.
- An assessment of the health and nutritional status of the affected population shall be done by experts with experience of emergencies and if possible local knowledge.
- The voluntary deployment of the nearest medical resources to the disaster site, irrespective of the administrative boundaries will be warranted.
- Adequate supply of medicines, disinfectants etc. shall be made.
- Where necessary inoculation shall be done.
- Vaccination of the children & pregnant women shall be undertaken.
- Vector-borne diseases are a major cause of sickness and death in many disaster situations. Vector control measures shall be undertaken.
- Water borne diseases may cause sickness and deaths and therefore adequate measures shall be taken to prevent such outbreaks.

✓ **Psychosocial Care**

Disasters cause tremendous mental trauma to the survivors. Psycho- social support and mental health services should be made available immediately in the aftermath of disaster so as to reduce the stress and trauma of the affected community and facilitate speedy recovery. The following measures shall be undertaken by district:

- A Nodal Mental Health Officer shall be designated for the District.
- Rapid needs assessment of psycho-social support shall be carried out by the Nodal Officer/ Health Department.
- Trained man power for psycho-social and mental health services shall be mobilised and deputed for psycho-social first aid and transfer of critically ill persons to referral hospitals.
- Psycho-social first aid shall be given to the affected community/ population by the trained community level workers and relief and rescue workers.
- Psycho-social first aid givers shall be sensitized to local, cultural, traditional and ethical values and practices.
- Psycho-social support and mental health Services shall be arranged in relief camps set-up in the post disaster phase.
- Where large number of disaster victims have to be provided psycho-social support a referral system for long term treatment shall be followed.
- The services of NGOs and CBOs may be requisitioned for providing psycho-social support and mental health services to the survivors of the disasters
- Community practices such as mass prayers and religious discourse etc. should be organised with four preventive and promotive mental health services.

✓ **Shelter**

In a major disaster a large number of people are rendered homeless. In such situations shelter becomes a critical factor for survival of the affected people in the initial stages of a disaster. Further, shelter becomes essential for safety and security and for protection from the adverse climatic conditions. Shelter is also important for human dignity and for sustaining family and community life in difficult circumstances. The following measures shall be taken by State/District authorities for providing shelter to the affected people:

- Disaster affected people who have lost their dwelling units or where such units have been rendered damaged/useless shall be provided sufficient covered space for shelter.
- Disaster affected households shall be provided access to appropriate means artificial lighting to ensure personal security.
- Disaster-affected households shall be provided with necessary tools, equipment and materials for repair, reconstruction and maintenance for safe use of their shelter.

✓ **Relief Camp**

The following steps will be taken for setting up of relief camps in the affected areas:

- Adequate numbers of buildings or open space shall be identified where relief camps can be set up during emergency.
- The use of premises of educational institutions for setting up of relief camps shall be discouraged.
- One member of the Incident Command Team of the district, trained in running and management of relief camps will be deputed for its management.
- The requirements for operation of relief camps shall be worked out in detail in advance.
- Agencies to supply the necessary stores will be identified in the pre- disaster phase.
- The temporary relief camps will have adequate provision of drinking water and bathing, sanitation and essential health-care facilities.
- Adequate security arrangements shall be made by local police.
- Adequate lighting arrangements shall be made in the camp area at water points, toilets and other common areas.
- Wherever feasible special task forces from amongst the disaster affected families will be set up to explore the possibility of provision of food through community kitchens, provision of education through the restoration of schools and anganwadis.
- Efficient governance systems like entitlement cards, identification cards, bank accounts for cash transfers etc. shall be developed.

✓ **Sanitation and Hygiene**

Sanitation services are crucial to prevent an outbreak of epidemics in post disaster phase. Therefore a constant monitoring of any such possibilities will be necessary. It should be ensured that disaster affected households have access to sufficient hygiene measures. Soap, detergents, sanitary napkins and other sanitary items should be made available to ensure personal hygiene, health, dignity and well-being. In the relief camps, toilets should be sited, designed, constructed and maintained in such a way as to be comfortable, hygienic and safe to use

✓ **Provision of Intermediate Shelters**

In the case of devastating disasters, where extreme weather conditions can be life threatening or when the period of stay in temporary shelters is likely to be long and uncertain, the construction of intermediate shelters with suitable sanitary facilities will be undertaken to ensure a reasonable quality of life to the affected people. Such shelters shall be designed to be cost effective and as per local needs.

✓ **Management of Relief Supplies**

Speedy supplies of relief materials shall be ensured in relief operations. A supply chain management system shall be developed. Standard Protocols shall be put in place for ensuring the procurement, packaging, transportation, storage and distribution of relief items. A mechanism shall be developed for receiving donations in cash or kind and their distribution. DDMA Shimla shall take all appropriate measures for transparency in the relief operations. Affected people shall be apprised of the nature and quantum of relief admissible to them. Proper formats will be developed to acknowledge the receipt of relief materials and their further distribution.

Chapter 8

Reconstruction, Rehabilitation and Recovery

The State has not faced any major catastrophic disaster in the recent past requiring large scale post-disaster reconstruction of houses, infrastructure and livelihood of people. However it has been regularly facing large number of minor disasters in every part of the State throughout the year. The affected people are being provided humanitarian relief as per the norms of the State Disaster Response Fund (previously Calamity Relief Fund). These norms cater to the immediate needs for subsistence but hardly meet the requirements of long term recovery and reconstruction. Therefore the needs of post-disaster reconstruction remain largely unfulfilled even for minor disasters. In case of catastrophic disasters the needs for large scale reconstructions would be much more compelling. Hazard Vulnerability and Risk Analysis of Himachal Pradesh makes it absolutely clear that the potential risks of catastrophic disasters in the State are very high. Earthquakes of magnitude 8 and above are real time possibilities and Probable Maximum Loss (PML) in such disasters has been projected to impact severely on the State GDP for several years, affecting the gains achieved for human, social and economic development of the State. This highlights the need for reconstruction of the multi-dimensional damages due to disasters in planned, systematic and organized manners. The Shimla district falls under zone IV & V.

8.1 Reconstruction, Rehabilitation and Recovery Process

It demands co-ordinate focus on multi disciplinary aspects of reconstruction and rehabilitation for recovery and is essential to understand disaster reconstruction, rehabilitation under the holistic framework of post disaster recovery. It will be in the form of recommendation rather than the rule. Rehabilitation and reconstruction are primarily carried out by the local bodies (Gram Panchayats, District, Talukas, Municipal Corporations, Municipalities, etc.) and different Government departments and boards. The reconstruction and rehabilitation plan is designed specifically for worst case scenario. Post disaster reconstruction and rehabilitation should pay attention to the following activities for speedy recovery in disaster affected areas. The contribution of both government as well as affected people is significant to deal with all the issues properly. Immediate and Long Term recovery plan includes following broad activities:

- Damage assessment
- Disposal of debris
- Disbursement of assistance for houses
- Formulation of assistance packages
- Monitoring and review
- Relocation
- Town planning and development plans
- Reconstruction as Housing Replacement Policy
- Awareness and capacity building

- Housing insurance
- Grievance redressal

Table 8.1: Sector specific approach and processes for Reconstruction, Rehabilitation and Recovery

Sectors	Approach	Process
<p>Public assets:</p> <ul style="list-style-type: none"> • Roads and bridges • Culverts • Public buildings like hospitals and schools 	<p>Multi hazard resistant construction to be followed while reconstruction of public assets. For example</p> <ul style="list-style-type: none"> • Hazard resistant buildings to be made with the help of certified engineers. • Use of non-shrinking mortar • Evacuation plans to be made for the public buildings • Non-structural mitigation measures to be taken into consideration <p>Risk sensitive development will be ensured in each of the reconstruction Programme. For example:</p> <ul style="list-style-type: none"> • landslide and flood zone mapping to be implemented • Detailed geological survey of the land to be used for reconstruction. • Recommendations from PDNA (post disaster needs assessment) report to be considered. 	<ul style="list-style-type: none"> •Detailed damages and needs assessment: Multi sectoral/ multi-disciplinary teams are to be made which can do a detailed damage and need assessment of the entire area. •Develop a detailed recovery plan through multi departmental participation. Specific recovery plan through consultative process of different line department are to be made. •Arrange for funds from Central government, state government, multi-lateral agencies (World Bank or ADB)” •Multi sectoral Project Management Unit to be made. • The process of monitoring and manipulation is to be done by SDMA.
<p>Utilities</p> <ul style="list-style-type: none"> • Water supply 	<p>Multi hazard resistant construction to be followed.</p>	<ul style="list-style-type: none"> •Detailed damages and needs assessment: Multi sectoral/multi-disciplinary teams are to

<ul style="list-style-type: none"> • electricity • communication 	<p>For example:</p> <ul style="list-style-type: none"> • Water pipelines, communication equipment used can be of such material which can resist impact of certain hazards <p>Risk sensitive development will be ensured</p> <ul style="list-style-type: none"> • Electric and communication junctions to be installed after considering landslide and flood zonation. • Recommendations from PDNA report to be considered. 	<p>be made which can do a detailed damage and need assessment of the utilities of the entire area.</p> <ul style="list-style-type: none"> •Develop a detailed recovery plan through multi departmental participation including specific line departments and other stake holders. •Arrange for funds from Central government, state government, multi-lateral (World Bank or ADB)” •Multi sectoral Project Management Unit to be made. •Monitoring and evaluation: The process of monitoring and manipulation is to be done by SDMA.
Housing	<ul style="list-style-type: none"> • Multi hazard resistant construction to be followed. • Risk sensitive development will be ensured • Owner driven approach will be preferred. For example: <ul style="list-style-type: none"> • National and State schemes like Pradhan Mantri Awas Yojna (rural/ urban) and Mukhya Mantri Awas Yojna can be included in construction of the individual houses. • Non-structural mitigation measures to be taken into consideration • Use of non-shrinking mortar • Further loans can be sourced through banks and other financial 	<p>Detailed damages and needs assessment: Multi sectoral/ multi-disciplinary teams are to be made which can do a detailed damage and need assessment of the entire area.</p> <p>Develop a detailed recovery plan through multi departmental participation: Specific recovery plan through consultative process of different line department are to be made.</p> <ul style="list-style-type: none"> -Arrange for funds from Central government, state government and multi- lateral (World Bank or ADB)” -Multi sectoral Project Management Unit to be made. -Monitoring and evaluation: The process of monitoring and manipulation is to be done by SDMA.

	institutions.	
<p>Economic restoration</p> <ul style="list-style-type: none"> • Agriculture • Horticulture • Industry • Allied sectors • Tourism etc. 	<ul style="list-style-type: none"> • Multi sectoral assessment • Assess direct and indirect losses. • Develop sectoral strategies the sectors that affected the most poor. • the sectors which are most critical for district's economy • Risk sensitive development will be ensured • Owner driven approach will be preferred • Provision of single window insurance claim system • Promote insurance facility for all sectors through government and private institutions 	<p>-Detailed damages and needs assessment: Multi sectoral/ multi-disciplinary teams are to be made which can do a detailed damage and need assessment of the entire area.</p> <p>-Develop a detailed recovery plan through multi departmental participation: Specific recovery plan through consultative process of different line department are to be made.</p> <p>-Arrange for funds from Central government, state government, multi lateral (World Bank or ADB)"</p> <p>-Multi sectoral Project Management Unit to be made.</p> <p>-Monitoring and evaluation: The process of monitoring and manipulation is to be done by SDMA.</p>
<p>Livelihood restoration</p>	<ul style="list-style-type: none"> • Nature, number and types of livelihoods affected • Interim and long term strategies • Focus on livelihood diversification • Issues related to most poor people, women, and marginalized sections • Livelihoods of people without assets (labor) • Role of NGOs 	<p>Detailed damages and needs assessment: Multi sectoral/ multi-disciplinary teams are to be made which can do a detailed damage and need assessment of the entire area.</p> <p>Develop a detailed recovery plan through multi departmental participation: Specific recovery plan through consultative process of different line department are to be made.</p> <p>Arrange for funds from Central government, state government, multi lateral (World Bank or ADB)"</p> <p>Multi sectoral Project Management Unit to be made.</p> <p>Monitoring and evaluation: The process of monitoring and manipulation is to be done by SDMA.</p>

Psychosocial restoration	<ul style="list-style-type: none"> • Provisions like trainings from institute like NIMHANS(National Institute of Mental Health and Neurosciences) Mental hospitals and other specialized institutes. • Spiritual leaders can help the community to cope up from the trauma. 	Arrange for funds from Central government, state government, multi-lateral (World Bank or ADB)”
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CHAPTER 9:

Financial Resources for Implementation of District Disaster Management Plan

9.1 Existing sources of Funds for Disaster Management in the District:

- **State Disaster Response Fund (SDRF):** SDRF is a fund constituted under section 48(1) (a) of the Disaster Management Act, 2005 (53 of 2005), these guidelines are being issued under section 62 of the DM Act, 2005.
 - **Calamities Covered under SDRF:** The SDRF shall be used only for meeting the expenditure for providing immediate relief to the victims of cyclones, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanches, cloud burst and pest attack.
- **National Disaster Response Fund (NDRF) :** NDRF is a fund constituted under section 46 of the Disaster Management Act 2005. These Guidelines are issued under section 46 (2) of the Disaster Management Act, 2005 (hereinafter DM Act, 2005), to supplement funds from the State Disaster Response Fund (SDRF) of a State, to facilitate immediate relief in case of calamities of a severe nature.
 - **Calamities Covered under NDRF:** Natural Calamities of Cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, avalanches, Cloud burst and pest attack considered being of severe nature by Government of India and requiring expenditure by a State Government in excess of the balances available in its own State Disaster Response Fund (SDRF), will qualify for immediate relief assistance from NDRF.
- **Flexi-funds under Centrally Sponsored Schemes:** NITI Aayog has issued instructions for Rationalization of CSS, vide OM No. O-11013/02/2015-CSS & CMC dated 17th August, 2016. These instructions are applicable for Centrally Sponsored Schemes with one of the key objective "To undertake mitigation/ restoration activities in case of natural calamities, or to satisfy local requirements in areas affected by internal security disturbances. Therefore the CSS mentioned in Chapter 4 of this plan are one potential source of funding for mitigation/restoration activities.

9.2 Funds to be created under DM Act 2005

- **District Disaster Response Funds (DDRF)**

DDRF is proposed to be created at the District Level as mandated by Section 48 of the DM Act. 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.

- **District Disaster Mitigation Funds (DDMF)**

District Disaster Mitigation funds would be created at the District Level as mandated under Section 48 of the DM Act 2005. DDMF is to be used for the mitigation funds by the DDMA for the purpose of mitigation as per the HP State Disaster Management Rules 2011.

9.3 Responsibilities of the State Departments and Agencies

All State Government Departments, Boards, Corporations, PRIs and ULBS have to prepare their DM plans under Section 40 of The DM Act 2005. These Departmental DM Plans are already under preparation at the State Level including the financial projections to support these plans. The necessary financial allocations will be

made as part of their annual budgetary allocations, and ongoing programmes. They will also identify mitigation projects and project them for funding in consultation with the SDMA/DDMA to the appropriate funding agency.

9.4 Techno-Financial Regime

Considering that the assistance provided by the Government for rescue, relief, rehabilitation and reconstruction needs cannot compensate for massive losses on account of disasters, new financial tools such as catastrophe risk financing, risk insurance, catastrophe bonds, micro-finance and insurance etc., will be promoted with innovative fiscal incentives to cover such losses of individuals, communities and the corporate sector. In this regard, the Environmental Relief Fund under the Public Liability Insurance Act, 1991, enacted for providing relief to chemical accident victims is worth mentioning. Some financial practices such as disaster risk insurance, micro-finance and micro-insurance, warranty on newly constructed houses and structures and linking safe construction with home loans will be considered for adoption.

9.5 Other Financing Options

DDMA in coordination with the departments will identify other financing options for restoration of infrastructure/livelihoods, like utilization of flexi fund within Centrally Sponsored Scheme for mitigation/restoration activities in the event of natural calamities in accordance with the broad objective of the Central Sector Scheme.

Opportunities of Corporate Social Responsibility (CSR) & Public-Private Sectors funds investments would also be explored and elaborated by the DDMA for increasing disaster resilience.

Chapter 10

Procedure and Methodology for Monitoring, Evaluation, Updation and Maintenance of DDMP

The District Disaster Management Plan is the sum and substance of the Horizontal and the Vertical disaster management plans in the district. District Disaster Management Plan of Shimla is a public document which is neither a confidential document nor restricted to any particular section or department of administration. The underlying principle of disaster management is that it has to be part of all departments and none can fold fingers against it.

10.1 Authority for maintaining & reviewing the DDMP

The District Disaster Management Authority (DDMA), Shimla will update the DDMP annually and circulate approved copies to the entire stakeholders in Shimla District. DDMA, Shimla will ensure the planning, coordination, monitoring and implementation of DDMP with regard to the following mentioned clauses of the DM Act, 2005:

- Preparation of plan is the ultimate responsibility of the District Disaster Management Authority DDMA (Shimla)/ESFs or the person / sub- committee appointed by the DDMA /ESFs in the district. The first draft plan is to be discussed in the DDMA /ESFs and later the Chairman of the DDMA/ESFs shall rectify it.
- The same procedure is to be followed in updating of the plan document. The District plan is to be updated annually by the District Disaster Management Authority or the committee appointed by the DDMA/ESFs. In order to update the document, all Vertical and Horizontal plans shall be collected and incorporated to the District Plan.
- A copy of the updated document shall be circulated to each department of Government in district Shimla.
- Section 31, Clause (4) of DM Act 2005, mentions that the District Plan shall be reviewed and updated annually.
- As per sub-section (7) 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 consider necessary for the implementation thereof.

10.2 Proper monitoring & evaluation of the DDMP

Half-yearly meeting will be organized by the DDMA under the chairmanship of the Chairman, DDMA, Shimla to review disaster management activities in the state and updating the DDMP accordingly. All concerned departments and agencies have to participate and give recommendations on specific issues on Disaster Management and submit their updated reports quarterly.

10.3 Post-disaster evaluation mechanism for DDMP

The DDMA Chairman shall make special arrangements to collect data on a particular disaster irrespective of size and vulnerability. This post disaster evaluation mechanism shall be set up with qualified professionals, experts and researchers and the collected data shall be thoroughly cross checked and documented in the EOC for further reference. The DDMA will evaluate the DDMP by conducting meetings and consultation with all stakeholders.

10.4 Schedule for updation of DDMP:

Besides the above (2 and 3) procedure of updating the DDMP shall be updated by:

- Regular data collection system from the district Emergency Operations Centre (EOC)
- Analysis of data

- Review by Chairperson, DDMA
- Updating and disseminating the updated plan

The updated data of DDMP will also be maintained at the DEOC website, ready for use in any situation under the supervision of DDMA, Shimla.

The Chairman, DDMA will ensure regular updation of the DDMP by consulting the nodal officers of the line departments will update it on a biannual basis taking into consideration:-

- ❖ Inventory of equipment in the district (DDMRI),
- ❖ Human Resources, their addresses and contact details (DDMRI),
- ❖ Valuable inputs from actual disasters and updating Matrix of past disasters and HVCRA within the District
- ❖ Major change in the operational activities and location through SOPs & Checklists
- ❖ Lessons learnt from training, near-missed incidents
- ❖ Inputs from mock drills/ simulation exercises
- ❖ Changes in disaster profile
- ❖ Technological developments/ innovations in identifying potential hazards
- ❖ Updation of databases using new technologies like GIS
- ❖ Change in demography of surrounding population
- ❖ Changes in geo-political environment

Table 10.1: Purposed Activities for Review of District Disaster Management Plan

S.No.	Month	Purposed Activities
1	Oct	Review of DDMP by line departments
2	Oct-Nov	Submission of recommendations to DDMA
3	Nov-Dec	Amendments are distributed to all stakeholders
4	Dec-Jan	Submitted to SDMA for Approval/Uploading of updated plan at DDMA/SDMA website

10.5 Uploading of updated plans at DDMA/SDMA websites:

District Disaster Management Plan of the district is a public document & would be uploaded at the DDMA/SDMA websites under the supervision of the District Information Officer after each updation with prior approval of the Chairman DDMA.

10.6 Conducting of Mock Drills:

Section 30 (2) (x) of DM Act 2005, states that “District Authority shall review the state of capabilities for responding to any disaster or threatening disaster situation in the district & give directions to the relevant departments or authorities at the district level for their up gradation as may be necessary”. Similarly, Section 30 (2) (xi) of DM Act 2005, also states that “District Authority shall review the preparedness measures & give directions to the concerned departments at 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”.

Mock-drills help in evaluating disaster preparedness measures, identify gaps and improving coordination within different government departments, non-government agencies and communities. They help in identifying the extent to which the disaster plan, ESF’s, and SOPs are effective and help in revising the plan

through lessons learnt and gaps identified. These drills enhance the ability to respond faster, better and in an organized manner during the response and recovery phase.

10.6.1 The Responsible parties for organizing district drills

Mock Drills will be conducted within District Shimla at various levels:

Level 1: District Level

Conducting of District level Mock drills will be the responsibility of the Deputy Commissioner Shimla, along with Additional District Magistrate Shimla, in association with **Key Participants Involved in Conducting a Mock drill** as the incident of disaster may be:-

- DDMA Shimla comprising of DC; Shimla; ADC/ADM Shimla; SP Shimla; SE(HPPWD, I&PH, Electricity); CMO Shimla, President Zila Parishad.
- Revenue Department
- SDM (C), Tehsildar, Block Officer
- Municipal Corporation
- Elected representatives of Panchayat Samiti -Sarpanch, Gram Sevak,
- Fire Brigade Personnel's
- Home Guards, Volunteers.
- DPRO
- Transport Department
- Food and Civil Supply Department
- Para- military forces, ITBP and SSB
- NDRF, SDRF as the situation of the incident may demand
- Rest as per the IRS framework in chapter 4.

Level 2: Sub Divisional Level

The Sub Divisional Magistrate (Civil) will be the concerned authority to conduct mock exercise at the Sub-Division level.

Level 3: Block Level

At Block Level the Block Development Officer will be the concerned authority to get the mock exercise conducted.

Level 4: Panchayat Level

The Pradhans will be nodal officer for organizing the mock drills at Gram Panchayat level with Village Disaster Management Committees in each village of district Shimla.

Level 5: Departmental Level

At the Departmental levels the HOD's of the concerned departments/ units are responsible for the on – site mock drills and off- site drills with the district administration for their respective departments and concerned areas.

Levels 2, 3, 4 and 5 will carry out the mock exercise with intimation of the same to the District Administration and sending in reports of the lessons learnt and gaps identified for further up gradation of the plans after the drill.

10.6.2 Schedule for organizing drills

District administration shall hold mandatory mock drill **twice annually** for the monitoring, evaluation, updation and maintenance of DDMP. First Mock drill will be held before the beginning of the tourist season in the Month of March or April as the case may be. Second drill will be held as per decision by DDMA at Shimla for checking the efficiency of the departments for any unforeseen incidence from taking place.

All the above mentioned levels will conduct mock drills at least **once in every six months** to evaluate their disaster management plans.

10.7 Monitoring & gap evaluation:

10.7.1 Check on Personnel's involved in Execution of DDMP are trained with latest skills

The District Authority shall check whether all the personnel involved in execution of DDMP are trained & updated on the skills necessary in line with the updated SOPs. As per Section 30 (2) (xii) of DM Act 2005, the District Authority shall organize & coordinate specialized training programmes for different levels of officers, employees & voluntary rescue workers in the district.

Half yearly meeting for DDMP updation shall be organized by DDMA, under the chairmanship of Deputy Commissioner Shimla. DC should ensure for maintenance of DDMP and analyse the identified gaps. All concerned departments and agencies have to participate and give recommendations on specific issues of District Disaster Management Plan, and submit their report.

10.7.2 Check on-site / off site Plans of Major Accidental Hazard Units

All industrial units and power projects within Shimla district will submit their on-site/ off-site plans, after regular updation and maintenance to the DDMA for review and evaluation. They will regularly conduct on-site / off- site mock exercises annually or biannually as the case may be, to review, evaluate, and update their plans.

Chapter 11

Coordination Mechanism for Implementation of District Disaster Management Plan

The Coordination between District and State is vital for the proper disaster management. It requires both inter departmental and intra departmental coordination with all the stakeholder line departments and local bodies like, HPPWD, I&PH, HPSEB, Health and Family Welfare, Fire and Home guards, Police, BSNL, Food and Civil Supply, Forest, Revenue, Education, Agriculture Horticulture, HRTC, Red Cross, MC, NGOs, CBOs and other local authorities. These partnerships recognize that each level of the disaster management arrangements must work collaboratively to ensure the effective coordination of planning, services, information and resources necessary for comprehensive disaster management.

The DDMP of Shimla district is a step based disaster management coordination based on bottom to top approach i.e. Village level, Tehsil level, Sub-Division level and District Level. This system enables a progressive escalation of support and assistance. Shimla being the Capital city of the state the coordination at state level is equally significant as the each departments' Directorates are at Shimla which enables to speed up the decision making process.

The arrangements comprises of several key management and coordination structures. The principal structures that make up the Arrangements are:

- (A) Disaster management committees/ Task forces are operational at Village, Tehsil, Sub-Division and district level. The above committees are responsible for planning, organising, coordinating and implementing all measures required to mitigate, prevent, prepare, respond and recover from disasters the affected area under their jurisdiction.
- (B) Emergency Operation Centers at Sub-Division and district level supports disaster management groups while coordinating information, resources, and services necessary for disaster operations.
- (C) Functional agencies of district administration, DDMA and DEOC, are responsible to coordinate and manage specific threats and provide support to other agencies on and as required.

11.1 Intra Departmental Coordination:-

Each stakeholder department i.e, HPPWD, I&PH, HPSEB, Health and Family Welfare, fire and home guards, police, BSNL, Food and Civil Supply, Forest, Revenue, Education, Agriculture, Horticulture, HRTC, Red Cross will constitute departmental level Disaster Management committee headed by a gazetted officer pertaining to that department. The committees will organise quarterly meetings of the committee members to analyse the preparedness level of the department in regard to disaster management. The committee will also decide the measures to be taken for reducing the gaps in their capacities and keep the proper record of the same.

11.2 Sub division level coordination mechanism:-

As per the institutional mechanism, SDM/Sub Divisional Officer (Civil) will call for the quarterly meeting the sub division level disaster management committee to review the preparedness level and plan to reduce the gaps identified. The SDO/SDM will further report the situation to the DDMA and send the requisition of resources if required.

11.3 Tehsil level coordination mechanism:-

As per the institutional mechanism, tehsildar will call for the quarterly meeting at the tehsil level disaster management committee to review the preparedness level and plan to reduce the gaps identified at Tehsil level.

11.4 Arrangements at local level:-

It is the local level that manages disasters within their own communities. Tehsil, Sub division and District levels are to provide additional resources, support, assistance and expertise as required. Local government is the key management agency for disaster events at local level. Local government achieves coordinated disaster management approach through Local Disaster Management committees.

11.5 Coordination system with inter departments and at district level:-

The District Magistrate/DC is the head of the District administrative set up and chairperson of the DDMA as per the DM Act, 2005. She / He has been designated as the responsible officer in the District. 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.

- **Pre Disaster coordination:** Minimum Annual meetings for review of preparedness and discussing the roles and responsibilities of the line departments, Tehsils and Sub Divisions. The meeting agenda would be discussing the capacity of each department in terms of SAR equipment's and manpower and regular updation of the same .
- **Disaster phase coordination:** Coordination through phone or any other mode of communication in a disaster phase is not possible hence all the line departments and training institutes in the district should report to the DEOC as soon as the disaster strikes. After loss/damage assessment at the DEOC, the RO

(D.C) would direct various stake holders to deploy their resources and task forces in the affected areas. Relief camps would be setup at a pre-defined location.

- **Post disaster coordination:** In the post disaster phase, the RO would take updates on the conditions of basic amenities like water, food, roads, law and order etc from the respective departments. An assessment of relief given and need of rehabilitation would also be taken in the post disaster phase.

11.6 Coordination mechanism with community:-

The community will be coordinated through the village disaster management committees. The mentioned committees generally comprises of

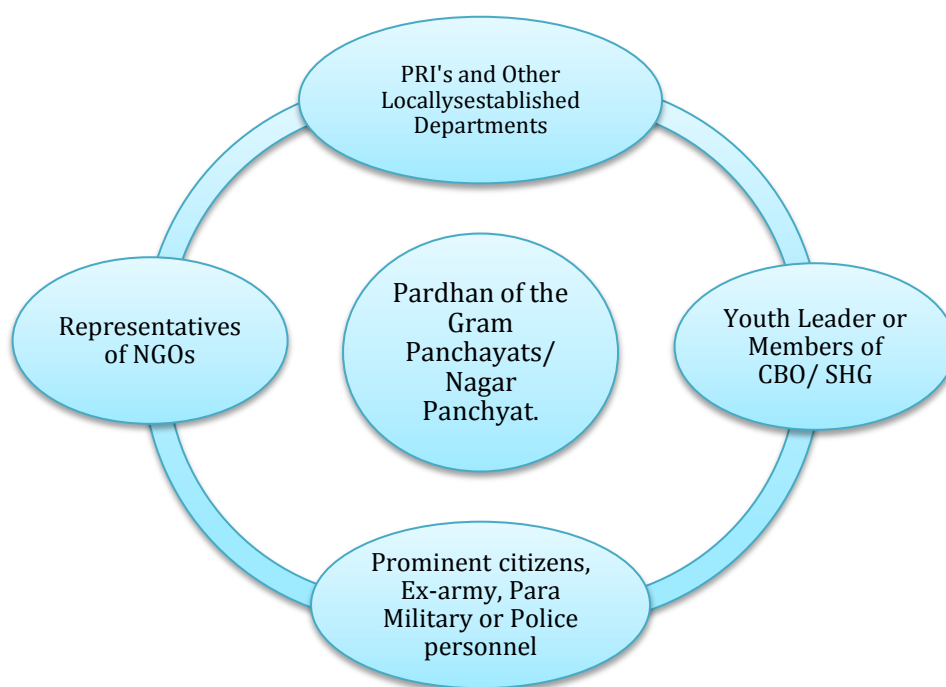


Figure 11.1 Coordination Mechanism with Community

- **Frequency of local Committee meetings**

Local Committee meetings must be held at least once in every six months at particular time and place decided by the chairperson of the group. In addition, the chairperson of a Local Committee must call a meeting if asked, in writing, to do so by:

- a) The District Authority for the Disaster district in which the Local Committee is situated; or
- b) At least one-half plus one of the members of the Local Committee.

- c) To help the Local government to prepare a local disaster management plan for its area;
- d) To identify, and provide advice to the relevant District Authority about support services required by the Local Committee to facilitate disaster management and disaster operations in the area;
- e) To ensure the community is aware of ways of mitigating the adverse effects of an event, and preparing for responding to and recovering from a disaster;
- f) To manage disaster operations in the area under policies and procedures decided by the district Authority;
- g) To provide reports and make recommendations to the relevant District Authority about matters relating to disaster operations;
- h) To identify, and coordinate the use of resources that may be used for disaster operations in the area;
- i) To establish and review communication systems in the Local Committee, and with the relevant District Authority and other Local Committees in the situation of disaster.
- j) To ensure that information about a disaster in the area is promptly given to the relevant District Authority, and
- k) To ensure risk management and contingency arrangements of essential services within the Local government area. Further information about the functions of the Local Authority may be found under sections 41 of the DM Act 2005

11.7 Coordination mechanism with NGOs, CBOs, Self Help Groups (SHGs),

The strong linkages which NGOs, CBOs have with grassroots communities can be effectively harnessed for creating greater public awareness on disaster risk and vulnerability, initiating appropriate strategies for strengthening the capacity of stakeholder groups to improve disaster preparedness, mitigation and improving the emergency response capacities of the stakeholders.

In addressing the emerging concerns of climate change adaptation and mitigation, NGOs can play a very significant role in working with local communities and introducing innovative approaches based on the good practices followed in other countries.

NGOs can bring in the financial resources from bi-lateral and multilateral donors for implementing pragmatic and innovative approaches to deal with disaster risk and vulnerability, by effectively integrating and converging the various government programs, schemes and projects to create the required synergy in transforming the lives of at-risk communities.

The DDMA will maintain a proper record of the NGO's and CBO's working in the district and also map the available resources for them. The DDMA will appoint a Nodal officer for coordination with NGO's, CBO's and SHG's. The DDMA will call annual meeting of NGO's, CBO's & SHG's for mapping their resources. The meeting will be coordinated by the designated Nodal officer.

11.8 Coordination with other districts and state:

The DDMA will call annual meeting with neighboring district authorities pertaining to Disaster risk reduction and capacity building by reducing the existing gaps through regular coordination. The DDMA will participate in the meetings called by SDMA or other State level authorities to promote coordination with other districts and state authorities.

Chapter 12

Standard operating Procedures (SOPs) and Checklist

The following SOPs are designed to guide and initiate immediate action. The DDMA and the district administration will initiate action and build and expand the scope of these actions based on unfolding situation.

12.1 Early Warning Management

Table 12.1: Early Warning Management: Actions and Responsibilities

Actions	Responsibility
<ul style="list-style-type: none">Obtain early warning inputs from IMD, CWC, MHA / NDMA / SDMA control rooms, GSI, Snow and Avalanche study centre	In charge – DEOC
<ul style="list-style-type: none">Notify the early warning to Chairman and the members of the DDMA, Nodal officers of the line departments, ADMs, SDM, SPs	In charge - DEOC
<ul style="list-style-type: none">Disseminate early warning to divisions, blocks and Panchayats	ADM/SDM. Superintendent of Police
<ul style="list-style-type: none">Flash warning signals on all television and radio networks	District Information Officer
<ul style="list-style-type: none">Establish disaster dash board on the official district website	District Information Officer
<ul style="list-style-type: none">Inform communities / public / villagers about the disaster warning using vehicles mounted with loudspeakers	Tehsildars / Naib Tehsildars / Patwari
<ul style="list-style-type: none">Use PA systems facilities at Temples, Mosques, Gurudwaras and Churches to announce about the impending disasters	Tehsildars / Naib Tehsildars / Patwari
<ul style="list-style-type: none">Share early warning information with educational information and instruct closure of institutions if required	Tehsildars / Naib Tehsildars / Patwari

12.2 Evacuation when there is early warning

Table 12.2: Evacuation when there is Early Warning: Actions and Responsibilities

Actions	Responsibility
<ul style="list-style-type: none">Obtain early warning inputs from IMD, CWC, MHA / NDMA / SDMA control rooms, GSI, Snow and Avalanche study centre	In charge – DEOC
<ul style="list-style-type: none">Notify the early warning to Chairman and the members of the DDMA,, Nodal officers of the line departments, ADMs, SDM, SPs	In charge - DEOC
<ul style="list-style-type: none">Hold meeting to assess situation and make a decision whether to evacuate specific communities / population	Chairman DDMA
<ul style="list-style-type: none">Communicate decision regarding evacuation to concerned Revenue and Police officers	Chairman DDMA
<ul style="list-style-type: none">Evacuating people to safer places	Concerned SDMs and Tehsildars
<ul style="list-style-type: none">Deploy teams for law and order maintenance, traffic management as wells as cordoning specific areas	District Superintendent of Police
<ul style="list-style-type: none">Establish routes, shelters and other logistics arrangements	Revenue department

• Establish information desk	Revenue department
• Establish helpline numbers	BSNL

12.3 Evacuation when there is No Early Warning:

Table 12.3 Evacuation when there is No Early Warning: Actions and Responsibilities

Actions	Responsibility
• Activation of the DEOC	In charge DEOC
• Notify about the disaster event to Chairman and the members of the DDMA,, Nodal officers of the line departments, ADMs, SDM, SPs	In charge - DEOC
• Hold a meeting to assess situation and make a decision whether to evacuate specific communities / population	Chairman DDMA
• Communicate decision regarding evacuation to concerned Revenue and Police officers	Chairman DDMA
• Evacuating people to safer places	Concerned SDMs and Tehsildars
• Deploy teams for law and order maintenance, traffic management as wells as cordoning specific areas	District Superintendent of Police
• Establish routes, shelters and other logistics arrangements	Revenue department
• Establish information desk, helpline etc	Revenue department

12.4 Search and Rescue

Table 12.4 - Search and Rescue: Actions and Responsibilities

Actions	Responsibility
• Activation of the DEOC	In charge DEOC
• DDMA to review disaster situation and make a decision to deploy search and rescue teams in anticipation of a disaster	Chairman DDMA
• Deploy district level search and rescue teams in identified locations	Chairman DDMA
• Deploy Fire & Emergency Service teams for search and rescue	District Fire Officer
• Deploy Home Guards rescue teams	District Commandant – Home Guards
• Requisition of NDRF	Chairman DDMA
• Establish on site coordination mechanism	ADM / SDM
• Assign area of search and rescue responsibility for different teams deployed on site	ADM/ SDMA
• Establish Staging Area for search and rescue resources	ADM/SDM
• Establish Camps for the responders with adequate food, water, sanitation facilities	ADM/SDM
• Deploy teams for law and order maintenance, traffic management as wells as cordoning specific areas	District Superintendent of Police
• Identify nearest helipad and ensure it is in operating condition	ADM/SDM

<ul style="list-style-type: none"> Establish triage 	CMO/ MO
<ul style="list-style-type: none"> Transport critically injured 	CMO/MO / 108 Ambulance service / Red Cross
<ul style="list-style-type: none"> Establish onsite medical camps or mobile camps for first aid 	CMO/MO
<ul style="list-style-type: none"> Establish information desk and dead body identification 	ADM/SDM
<ul style="list-style-type: none"> Evacuating people to safer places 	Concerned SDMs and Tehsildars
<ul style="list-style-type: none"> Deploy volunteers for supporting auxiliary functions such as crowd management, route management, first aid, information management 	ADM/SDM
<ul style="list-style-type: none"> Rescue animals in confined spaces 	Assistant Director – Animal Husbandry

12.5 Relief Operations

Table 12.5 - Relief Operations: Actions and Responsibilities

Actions	Responsibility
<ul style="list-style-type: none"> Undertake sub division wise / block wise / tehsil wise relief needs assessment in terms of food, water, shelter, sanitation, clothing, utensils, medical and other critical items 	ADM/SDM
<ul style="list-style-type: none"> Identify suitable and safe facilities and establish relief camps 	ADM/SDM/Tehsildar
<ul style="list-style-type: none"> Establish adequate lighting arrangement at the relief camps 	HPSEB
<ul style="list-style-type: none"> Ensure adequate security arrangement at the relief camps and for the affected communities 	District Superintendent of Police
<ul style="list-style-type: none"> Ensure adequate water and sanitation facilities in relief camps and other affected communities 	SE – IPH
<ul style="list-style-type: none"> Set up RO plants / water purification plants or other suitable facilities for immediate water supply 	SE-IPH
<ul style="list-style-type: none"> Supply, procure and provide food to the affected communities 	District Supply Officer
<ul style="list-style-type: none"> Airdrop dry and un-perishable food to inaccessible location safe drinking water 	DM/ADM/SDM
<ul style="list-style-type: none"> Provide essential items lost due to disasters such as utensils 	ADM/SDM
<ul style="list-style-type: none"> Supply, procure and provide water to the affected communities 	SE – IPH
<ul style="list-style-type: none"> Make required shelter arrangements including temporary camps 	ADM/SDM/Tehsildar
<ul style="list-style-type: none"> Establish medical facilities at relief camps and at communities 	CMO/MO / Red Cross / 108 Ambulance
<ul style="list-style-type: none"> Ensure suitable vaccination to prevent disease outbreak 	CMO/MO
<ul style="list-style-type: none"> Arrange for psychosocial support for victims at the camps 	CMO/MO
<ul style="list-style-type: none"> Ensure child friendly food for the children in the camps 	DSO
<ul style="list-style-type: none"> Ensure nutritious food for pregnant and lactating mothers in the camps 	DSO
<ul style="list-style-type: none"> Ensure medical care facility for pregnant women for safe delivery 	CMO/MO
<ul style="list-style-type: none"> Involve and coordinate NGO participation 	SDM / Tehsildar
<ul style="list-style-type: none"> Put in place grievance handling mechanism to prevent discrimination 	SDM/ADM/Tehsildar
<ul style="list-style-type: none"> Ensure adequate availability of daily need items such as food, medicine, consumables etc to ensure their access to affected 	ADM/SDM/DSO

communities	
<ul style="list-style-type: none"> Provide adequate , appropriate clothing to the affected communities and especially address the needs of women, children, aged and physically challenged according to weather. 	ADM/SDM/DSO
<ul style="list-style-type: none"> Ensure adequate transportation facility to transport relief items 	District RTO
<ul style="list-style-type: none"> Maintain proper records and documents of beneficiaries and relief distribution 	ADM/SDM/Tehsildar
<ul style="list-style-type: none"> Ensure adequate and appropriate heating facilities depending on the weather situation 	DFO
<ul style="list-style-type: none"> Supply fire wood, cooking gas, POL for the kitchen 	DSO / DFO
<ul style="list-style-type: none"> Record and maintain documents of ex-gratia payments 	ADM/SDM/Tehsildar
<ul style="list-style-type: none"> Provide first aid and medical treatment to the injured animals 	Veterinary Officer
<ul style="list-style-type: none"> Establish animal shelters wherever required 	Director – Animal Husbandry
<ul style="list-style-type: none"> Arrange fodder for animals 	Director – Animal Husbandry
<ul style="list-style-type: none"> Wherever required involve Animal Welfare Board and the Civil Society Organisations 	Director – Animal Husbandry
<ul style="list-style-type: none"> Establish banking facilities for people to withdraw cash 	District Lead Bank

❖ Guidelines for setting and running the Relief Camps:

- On receipt of report from Revenue officials, the DC/SDO(C) will order to set up a relief camp at pre-decided location as per District/ Sub-divisional disaster management plan
- In case new location is to be selected for the camp due to unavoidable circumstances, following points should be considered for arriving at a decision.
 - Camp should preferably be set up in an existing built up accommodation like a community hall.
 - It should be located at a safe place which are not vulnerable to landslides, flood etc.
 - It should be accessible by motor vehicles, if possible.
 - Adequate space for roads, parkings, drainage should also be there.
- The area should not be prone to endemic disease like malaria.
 - Wide publicity should be given about the location of the camp and affected people should be evacuated and brought to the camp directly.
 - Emergency relief materials which include drinking water, food, bedding (mattresses, sheets & blankets), baby food, mosquito repellents etc. should be arranged as early as possible.
 - Control room/ help desk should be setup in the relief camp immediately.

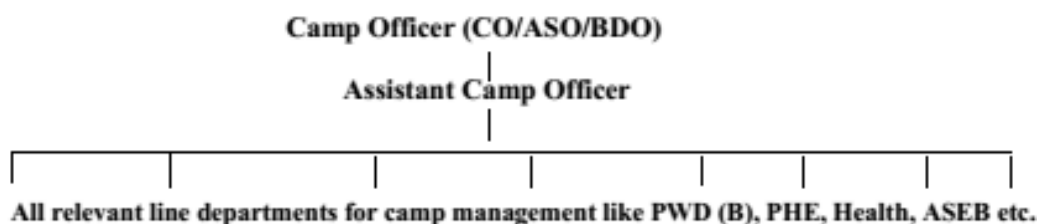
➤ Shelter

- The shelter should be such that people have sufficient space for protection from adverse effects of the climate.
- Ensure sufficient warmth, fresh air, security and privacy for their health and wellbeing.

- Tents should not be constructed too closely together and reasonable distance should be kept between the camps to provide some form of privacy.
- Priority should be given to widows and women headed households, disabled and elderly people in tent/room distribution.

➤ General Administration of the Camp

- One responsible officer preferably CO/ASO should be designated as Camp Officer by the DC/SDO(C) who will ultimately be responsible for general management of the Relief Camp. He/She will co-ordinate & supervise the works of other officers in the camp. Administrative structure of the camp should be as follows:



- One help desk/ control room/ officer room should be designated where inhabitants can register their complaints

➤ Basic Facilities

✓ Lighting Arrangement and Generator Set

- A technical person, preferably from electricity or PWD (E) department should be detailed to supervise the proper lighting arrangement in and around the camp and operation and maintenance of the generator set.
- One big candle and one match box should be provided in every room/tent.
- Petromax or emergency light should be arranged in sufficient numbers in the camp.
- Approach to toilet and water source should properly be illuminated

✓ Water Facilities

- Total requirement of drinking water, water for toilets, bath & washing of clothes and Utensils should be assessed and proper arrangement should be made accordingly

- One Sr. Officer of IPH Deptt. should be directed for maintaining water supply in the camp.
- Separate bathing units must be constructed for male & female
- ✓ Sanitation, Food- Storage & Distribution, Clothing
 - Toilet should be minimum 10 mtrs and maximum 50 mtrs away from shelter/tent/room
Sufficient stock of bleaching powder, harpic and others item should be maintained
- ✓ Food- Storage & Distribution
 - As far as practicable and as per available space, cooked food may be served in hall or at one place for convenience of cleaning, hygiene, disposal of waste and smooth arrangement.
 - Food should be culture specific and as per food habits of the community. People of rural area may not like bread & butter
 - Packed food like biscuit, tined food, ready to eat meals, noodles etc. should be properly checked that they are not expired before distribution.
 - Separate queue may be allowed for women infirm & elderly people to collect relief aid.
- ✓ Clothing
 - People in the camp should be provided sufficient clothing to protect themselves from the adverse effects of the climate
 - Culturally appropriate clothing should be made available.
 - Women and girls should be provided necessary sanitary protection
- ✓ Medical Facilities & Psycho-social Support
 - One Doctor along with team of paramedical staff should be detailed on roster system around the clock in the camp
 - A separate room or tent should be made available for the medical team.
 - A rapid health assessment of all the inhabitants in the camp should be done on weekly basis
 - Cases of snake bites are also reported from relief camp. Necessary arrangement should be made in nearest health institution for adequate stock of anti-venom injection.
 - Psychological support is best obtained from the family. Therefore, even in abnormal conditions, family should be kept together
- ✓ Special Arrangement for women, Children, and Physically Challenged and Elderly persons
 - Since women are more vulnerable during disaster, their specific needs must be identified and taken care of.

- Female gynaecologist and obstetrician should be available at hand to take care of maternity and child related health concern.
 - Ensure that children inoculated against childhood disease within the stipulated time period.
 - For safety and security of the women and children vigilance committees should be formed consisting of women.
 - Women Police Officer should be stationed within the camp to record and redress any complaints made by women.
 - Security measures should be taken in the camps to prevent abduction of women ,girls and children.
- ✓ Vermin control
- Insect and rodents are the unavoidable pests in the relief camp. They spread diseases, spoil foods and other material
 - Fogging may be arranged to prevent mosquitoes and other flying insects.
 - Waste segregation should be promoted and collected on daily basis
- ✓ Security
- Security, peace and order must be maintained in the relief camp. The youths in the camp may be involved for providing better security environment.
 - Police personnel should be detailed on roster basis.
 - Adequate employment of force should be ensured on the boundary and gate of the camp.
- ✓ Entertainment, Recreation & IEC Programme
- Literary clubs/ Organizations may be promoted to arrange books & magazines for camp populations.
 - Camp population may be kept engaged by providing entertainment & recreational facilities to them.
 - Temporary Anganwadi centres may be opened in the camp with the help of ICDS project officers for small children.
 - Temporary schools may be setup in the camp involving volunteers from the camp inhabitants. SSA may provide free textbook, stationery etc.
 - Reputed NGOs may also be allowed to run temporary schools in the camp.

12.6 Restoration of Essential Services

Table 12.6 - Restoration of Essential Services: Actions and Responsibilities

Actions	Responsibility
<ul style="list-style-type: none"> Assess, prioritise and develop work plan for debris removal and road clearance 	SE / EE –PWD
<ul style="list-style-type: none"> Constitute teams with equipment for debris removal and road clearance 	SE / EE PWD
<ul style="list-style-type: none"> Assess and prioritise and develop work plan for restoration of power supply 	SE/ EE HPSEB
<ul style="list-style-type: none"> Constitute teams / crew to undertake restoration of power supply 	SE / EE HPSEB
<ul style="list-style-type: none"> Assess, prioritise and develop work plan for restoration of water supply 	SE/EE - IPH / Concerned ULB
<ul style="list-style-type: none"> Constitute teams / crew to undertake restoration of water supply 	SE/EE - IPH / Concerned ULB
<ul style="list-style-type: none"> Assess, prioritise and develop work plan for restoration of telecommunication services 	SE/EE - BSNL
<ul style="list-style-type: none"> Constitute teams / crew to undertake restoration telecommunication services 	SE/EE - BSNL
<ul style="list-style-type: none"> Deploy temporary / portable exchanges in critical locations for immediate restoration of telecommunication services 	SE/EE – BSNL
<ul style="list-style-type: none"> Assess, prioritise and develop work plan for restoration of road network 	SE/EE – PWD
<ul style="list-style-type: none"> Constitute teams / crew to undertake restoration of road network 	SE/EE - PWD
<ul style="list-style-type: none"> Constitute teams / crew to undertake restoration of road network in rural areas 	SE / EE Rural Development
<ul style="list-style-type: none"> Coordinate with Army / SDMA for erection of bailey bridges / temporary road links where bridges are washed out 	DC/ADM

12.7 Dead Body Disposal

Table 12.7 - Dead Body Disposal: Actions and Responsibilities

Actions	Responsibility
<ul style="list-style-type: none"> Establish village / ward level committee for identification of dead bodies 	ADM/SDM / ULB
<ul style="list-style-type: none"> Prepare a record of details of the bodies retrieved in the Dead Body Inventory Record Register, allocate individual Identification Number, photograph, and prepare Dead Body Identification Form 	Tehsildar / SDM
<ul style="list-style-type: none"> Identification of the dead bodies and handing over to the next of kin 	Village level / ward level committee
<ul style="list-style-type: none"> Transport unidentified dead bodies to the nearest hospital or mortuary at district / sub division / block level 	SDM/ADM
<ul style="list-style-type: none"> Make public announcement for establishing identity 	SDM/ADM
<ul style="list-style-type: none"> Handover the identified dead bodies to the next of kin 	SDM/ADM/Tehsildar
<ul style="list-style-type: none"> In case of unidentified dead bodies – prepare inventory, allocate individual identification number, photograph, finger print, obtain DNA sample if possible and fill Dead Body Identification Form 	SDM/ADM/Tehsildar
<ul style="list-style-type: none"> Preserve the information recorded as forensic information 	SDM/ADM/Tehsildar

<ul style="list-style-type: none"> Undertake last rights of unclaimed / unidentified dead bodies as per established religious practices 	SDM/ADM/Tehsildar
<ul style="list-style-type: none"> Coordinate with NGOs and obtain their support 	SDM/ADM/Tehsildar
<ul style="list-style-type: none"> Preserve the bodies of foreign nationals (if any) by embalming or chemical methods and then placed in body bags or in coffins with proper labelling for handing over and transportation of such bodies to Ministry of Extern Affairs, or to the Consular offices of the concerned countries and other actors such as International Committee of the Red Cross 	SDM/ADM/Tehsildar

12.8 Carcass Disposal

Table 12.8 - Carcass Disposal: Actions and Responsibilities

Actions	Responsibility
<ul style="list-style-type: none"> Prepare a record of details of the animal carcasses retrieved 	SDM/ADM/Tehsildar/Patwari
<ul style="list-style-type: none"> Identify owners of the livestock and hand over the animal carcasses 	SDM/ADM/Tehsildar/Patwari
<ul style="list-style-type: none"> Photograph all unidentified animal carcasses preferably before transportation for disposal 	SDM/ADM/Tehsildar/Patwari
<ul style="list-style-type: none"> Transport unidentified or unclaimed animal carcasses to the designated site for disposal 	Assistant Director Department of Animal Husbandry
<ul style="list-style-type: none"> Maintain a record of carcasses buried or handed over 	SDM/ADM/Tehsildar/Patwari
<ul style="list-style-type: none"> Follow suggested guidelines for burial of carcasses or composting 	SDM/ADM/Tehsildar/Animal Husbandry

❖ GUIDELINES FOR DISPOSAL OF ANIMAL CARCASSES

✓ Guidelines for Burial

- Burial shall be performed in the most remote area possible.
- Burial areas shall be located a minimum of 300 feet down gradient from wells, springs and other water sources.
- Burial shall not be made within 300 feet of streams or ponds, or in soils identified in the country soil survey as being frequently flooded.
- The bottom of the pit or trench should be minimum 4 to 6 feet above the water table.
- Pits or trenches shall approximately be 4 to 6 feet deep. They should have stable slopes not steeper than 1 foot vertical to 1 foot horizontal.
- Animal Carcasses shall be uniformly placed in the pit or trench so that they do not exceed a maximum thickness of 2 feet. The cover over and surrounding shall be a minimum of 3 feet. The cover shall be shaped so as to drain the runoff away from the pit or trench.
- The bottom of trenches left open shall be sloped to drain and shall have an outlet. All surface runoff shall be diverted from entering the trench.
- Burial areas shall be inspected regularly and any subsidence or cavities filled.

✓ Guidelines for Composting

- Select site that is well drained, at least 300 feet from water sources, sinkholes, seasonal seeps or other landscape features that indicate hydrological sensitivity in the area.
- Lay 24-inch bed of bulky, absorbent organic material containing sizeable pieces 4 to 6 inches long. Wood chips or hay straw work well. Ensure the base is large enough to allow for 2-foot clearance around the carcass.
- Lay animal in the centre of the bed. Lance the rumen to avoid bloating and possible explosion. Explosive release of gases can result in odour problems and it will blow the cover material off the composting carcass.
- When disposing large amounts of blood or body fluid, make sure there is plenty of material to absorb the liquid. Make a depression so blood can be absorbed and then cover, if a blood spill occurs, scrape it up and put back in pile.
- Cover carcass with dry, high-carbon material, old silage, sawdust or dry stall bedding (some semi-solid manure will expedite the process). Make sure all residuals are well covered to keep odours down, generate heat or keep vermin or other unwanted animals out of the window.
- Let it sit for 4 to 6 months, then check to see if carcass is fully degraded.
- Reuse the composted material for carcass compost pile, or remove large bones and land apply.
- Site cleanliness is the most important aspect of composting; it deters scavengers, and helps control odours and keeps good neighbourly relations.

Note: Animals that show signs of a neurological disease, animals that die under quarantine and those with anthrax should not be composted.

12.9 Information and Media Management

Table 12.9 - Information and Media Management: Actions and Responsibilities

Actions	Responsibility
• Establish a media centre at EOC or Deputy Commissioner's office	District PRO
• Designate Official Spokes Person	Dy Commissioner
• Prepare Press releases	DPRO
• Decide on the time of press releases	District PRO
• Decide on time and frequency of press conference	DPRO
• Arrange for press conferences at the designated place and time	DPRO
• Set up interaction times of media with senior officers	District PRO
• Provide logistics support to the media during their visits to the disaster sites	District PRO
• Scan media reports on disaster response and take necessary action	District PRO

✓ Guidelines for Information Management

- flash warning signals on all television and radio networks .
- Coordinate, collect, process, report and display essential elements of disaster-related information.
- Update and feed information to key government agencies.
- Provide accurate information through print and electronic media as well as its website for easy availability and appropriate access to the members of public.
- Provide situation updates to all television and radio networks at regular intervals.
- Keep the public updated and well informed about the status of the disaster

- Develop appropriate graphics and pictures to disseminate useful information among all participating agencies as well as the people.
- Provide ready formats to collect information on different aspects of the disaster from the concerned state/district to facilitate accurate communication.
- Document all response/relief and recovery measures.
- Prepare situation reports every 3-4 hours during the initial response phase of a disaster and thereafter twice or once daily.

12.10 VIP Visit Management

Table 12.10- VIP Visit Management: Actions and Responsibilities

Actions	Responsibility
• Receive information about VIP visits	Dy Commissioner / Protocol Officer
• Make arrangements for receiving VIPs	Dy Commissioner / Protocol Officer
• Prepare a detailed plan and minute to minute schedule for VIP visit	Dy Commissioner / Protocol Officer
• Prepare latest detailed folder containing detailed information and submit the same to the visiting VIP	Dy Commissioner / District Information Officer
• Designate nodal officials for each location of VIP visit such as Hospital, Disaster affected communities, Relief camps etc	Dy Commissioner / Protocol Officer
• Organise adequate security	Superintendent of Police
• Activate VIP visit protocols such as Ambulance, Fire tender, Security & Escort,	Dy Commissioner / Protocol Officer
• Hold liaison meetings with Intelligence Department, SPG and NSG based on requirement	Superintendent of Police
• Make appropriate arrangement for rest and stay of visiting VIP and her / his entourage	Dy Commissioner / Protocol Officer
• Arrange visits to disaster sites along with necessary security arrangement	Dy Commissioner / Protocol Officer
• Ensure availability of helipad if required	Dy Commissioner / Protocol Officer
• Make arrangements for holding press conference	Protocol Officer / DPRO

12.11 Suggestions for improvement of working of Hospitals:

Table 12.11 - Suggestions for improvement of working of Hospitals: Actions and Responsibilities

Actions	Responsibilities
• Generator sets to be kept functioning w.r.t wiring lines, operation manual and in very good condition.	Hospital Administration/H.O.D. of the Hospital
• There should be an arrangement that each and every generator set can supply electricity to ICU and Labor Room.	Hospital Administration/H.O.D. of the Hospital

<ul style="list-style-type: none"> At least minimum of 200 litres of diesel be earmarked to be kept in reserve so that it can be used during emergency. 	Hospital Administration/H.O.D. of the Hospital.
<ul style="list-style-type: none"> It should be ensured that all the medicines prescribed by doctors of the hospital are made available in hospital medical store. 	Hospital Administration/H.O.D. of the Hospital
<ul style="list-style-type: none"> Test tubes should be made available to all the nursing rooms in the wards and may be provided to the doctors/nurses for taking blood samples. Reports of the sample may be made available to the doctors on their computers. It should be practically implemented. 	Hospital Administration/H.O.D. of the Hospital
<ul style="list-style-type: none"> Some of the tests are conducted only in IGMC Shimla & the attendants have to visit IGMC. For solving this problem, samples may be sent to IGMC in the ambulances moving between IGMC & KNH. Reports should be available on the computer of doctors and computer of SRL lab in KNH. 	Hospital Administration/H.O.D. of the Hospital
<ul style="list-style-type: none"> Food may be provided to the attendants in the hospital mess on payment basis. 	Hospital Administration/H.O.D. of the Hospital

Note: Above mentioned suggestions should be implemented in all the Government as well as private hospitals.

Annexure: 1 - District Profile

Statistical Profile : Shimla				
Sr. No.	Item		Particular	
1.	Total Geographical Area		5131 Sq. kms	
2.	Area Under Forest		3418 Sq Kms.	
3.	Area under cultivation		89454 hect.	
4.	Total Population		8,13,384 Persons	
5.	Density Population		159 person/sq.km	
6.	Sex Ratio		916 females/1000 males	
ADMINISTRATIVE DIVISION / SUB-DIVISION/ TEHSIL/ SUB- TEHSIL/VIDHAN SABHA CONSTITUENCIES				
District	Sub-Division	Tehsil	Sub-Tehsil	Constituency
Shimla	Shimla(U)	Shimla(U)		Shimla(U)
	Shimla(R)	Shimla(R) Seoni	Junga	Shimla(R) Kasumpti
	Theog	Theog Kotkhai	-	Theog
	Rampur	Rampur Kumarsain	Nankhari	Rampur
	Chopal	Chopal	Nerwa Chetal (Kupwi)	Chopal
	Rohroo	Rohroo Jubbal Chirgaon	Tikker	Rohroo Jubbal
	Dodra Kwar	Dodra Kwar		
POPULATION				
Tehsil/Sub-Tehsil	Population Rural/Urban	Persons	Males	Females
Rampur	Total	77,396	40,568	36,828
	Rural	67,086	34,971	32,115
	Urban	10,310	5,597	4,713
Nankhari	Total	26,216	13,234	12,982
	Rural	26,216	13,234	12,982
	Urban	0	0	0
Kumarsain	Total	43,262	21,987	21,275
	Rural	42,361	21,457	20,904
	Urban	901	530	371
Seoni	Total	35,379	17,611	17,768
	Rural	32,788	16,223	16,565
	Urban	2,591	1,388	1,203
Shimla(R)	Total	84,240	43,883	40,357

	Rural	82,181	42,450	39,731
	Urban	2,059	1,433	626
Shimla (U)	Total	69,758	93,364	76,394
	Rural	0	0	0
	Urban	69,758	93,364	76,394
Junga	Total	13,398	6,832	6,566
	Rural	13,398	6,832	6,566
	Urban	0	0	0
Theog	Total	84,672	43,227	41,445
	Rural	80,321	40,962	39,359
	Urban	4,351	2,265	2,086
Chopal	Total	31,133	15,970	15,163
	Rural	29,277	14,937	14,340
	Urban	1,856	1,033	823
Cheta	Total	19,459	10,085	9,374
	Rural	19,459	10,085	9,374
	Urban	0	0	0
Nerwa	Total	36,490	18,713	17,777
	Rural	36,490	18,713	17,777
	Urban	0	0	0
Jubbal	Total	37,232	19,136	18,096
	Rural	35,596	18,210	17,386
	Urban	1,636	926	710
Kotkhai	Total	39,151	20,020	19,131
	Rural	37,991	19,363	18,628
	Urban	1,160	657	503
Tikkar	Total	13,865	7,244	6,621
	Rural	13,865	7,244	6,621
	Urban	0	0	0
Rohru	Total	49,336	25,534	23,802
	Rural	42,458	21,776	20,682
	Urban	6,878	3,758	3,120
Chirgaon	Total	46,027	23,749	22,278
	Rural	46,027	23,749	22,278
	Urban	0	0	0
Dodra Kavar	Total	6,370	3,329	3,041
	Rural	6,370	3,329	3,041
	Urban	0	0	0

Annexure 2: List of Non-Governmental Organisations (NGOs)

NGOs Database								
S. N o.	Name of the Organization	Registration No.	Address	Chief Functionary	Primary Contact No.	Secondary Contact No.	Email Address	Area of Work
1	MAHILA MANDAL BADWA SHAKRAH	3339/84	Mahila Mandal Badwa, Village & P.O. Shakrah, Tehsil Shimla, Ghanatti, Himachal Pradesh	Meera Thapa	0177-2774273	8894346588	anilgnggroup@gmail.com	
2	AB THEATRE GROUP	366/2010	Dayal store 150/3 lower Bazar Shimla-171001, Shimla, Himachal Pradesh	Dayal Prashad	0177-2802963	9805532226	abtheatregroup@gmail.com	Art and Culture
3	ALTERNATIVELY VERY NEW IDEOLOGY AVNI	259/2009	C/o B.N.Gupta Niwas, H.No. 27/1 Boileauganj, Shimla - 1710005 Himachal Pradesh	Ashok Kumart Gautam	0177-2831049 / 0177-2831049	9805366680	directoravni@gmail.com	Animal Husbandry, Legal awareness and aid
4	ANUSUCHIT JATI SUDHAR SMITI DHAMRAH	chopal 11/05	Village h.b.dhamrah p.o. manjholi tehsil chopal distt. shimla h.p.-171217	Salig Ram Ranta		9805442268	srdhamrah@rediffmail.com	Upliftment of Dalits

5	ARYAVART EDUCATION AL WELFARE AND CHARITABLE SOCIETY	703/2013	Shiwalik Bhawan, Opp. Tara Hall School, Upper Kaithu, Shimla Himachal Pradesh 171003	Shiv Prasad Nautiyal	0177- 6530444	945980289 6	aryavartwelfare@g mail.com	Education Sector
6	BLACK BLANKET WELFARE EDUCATION AL SOCIETY	220-2009	A-2 titla hotel jakhoo shimla hp 171001	Deepak Sundriyal		921865947 9	black.blanket@yah oo.in	
7	BRAG KISSAN VIKAS JAN KALAN SAMITI	529/2011	Chunjar near Kharapathar P.O. Sheel Tehsil - Rohru Distt. - Shimla H.P. PIN - 171205	Mr Kulvinder Singh Bragta	01781- 251182	980502187 3	bragkvs@yahoo.in	Civic Issues, Disaster Management, Legal Aid
8	EDUCATION SOCIETY FOR INFORMATI ON TECHNOLOG Y	25/99	Hari-Sadan near SJVNL, New Shimla PIN:- 171009	Viren Vashishth		921872759 9	infoesit@gmail.co m	env and women empowermen t
9	FOUNDATIO N FOR	5-RMP/98	PLAN Foundation Prakash Kunj, Shanti Vihar Sanjauli	Jitendra Sharma	0177- 2841204	921860061 3	planhp@rediffmail .com	

	PARTICIPAT ORY LEARNING AND ACTION NETWORK PLAN FOUNDATIO N		Shimla H.P. 171006					
10	GLOBAL SOCIAL NETWORK WELFARE SOCIETY	374/2006	Wings Academy 73/5 Ram Bazar Shimla-1 (H.P.)	Vishal		931804521 0	gsnws.ngo@gmail. com	IT Sector
11	GRAMIN VIKAS AVAM MANAV KALYAN SAMITI SHIMLA	39/2000	Divya Kunj, Near D.A.V.School New Tuto, Post Totu(Shimla), Distt. Shimla Himachal Pardesh Pin Code- 171011	Jitender Verma		941813691 1	gvmks_shimla@ya hoo.com	Animal Husbandry,Di saster Management, Rural Development, Youth affairs
12	GRAMIN VIKAS YUVAK DAK	91/96	Village Dak p.O. dhar Chandna Tehsil Chopal Distt. shimla Himachal Pradesh	Tulsi Ram Jamalta	01783- 273042	981659809 3	jamaltatulsiram@y ahoo.com	Rural development
13	HEALTHY HIMACHAL	680/2013	chaitnaya apartments block a set no 2 airport road lower totu shimla - 11	Shelly		941802720 7	healthyhimachal@ yahoo.in	Disaster Manageme nt, Elderly issues, Women Empowerm ent

14	HELP SOCIAL ORGANISATION	36/2004	Help Social Organisation Near Sunrise Hotel V. P.O Ghanahatti District Shimla 171011	Hemender Salariya	9625361629	09816-200029	helpsocialorg@yahoo.com	hsoindia@gmail.com
15	HIMACHAL GYAN VIGYAN SAMITI	208	Himachal Gyan Vigyan Samiti Shivalik Sadan, Engine Ghar, Sanjauli, Shimla 171006, Himachal Pradesh	Dr. Om Prakash Bhuraita	0177-2842972 / 0177-2645072	9418454867	opbhuraita@rediffmail.com	Literacy and women empowerment
16	HIMACHAL MANAV SEVA	69/94	RUPA COTTAGE VPO CHOPAL	Dr S P Katyal	1783-260481	9418153052	himseva@rediffmail.com	
17	HIMACHAL PRADESH VOLUNTARY HEALTH ASSOCIATION	5947/87	B-37, PHASE-I, SECTOR-II, NEW SHIMLA, HIMACHAL PRADESH, 171009	Mohan Lal Sharma	0177-2670132 / 0177-2671307		hvpvha3@gmail.com	Health awareness
18	HIMALAYA GATHA	152/2008	BHUNANDAN KRISHAN NIWAS LOWER PANTHGHATI SHIMLA-171001	Sudarshan Vashishtha	0177-2620858	9418085595	sourabhvashishtha@gmail.com	
19	HIMALAYAN ASSOCIATION FOR RESEARCH AND INNOVATION	632-2012	Himalayan Association for Research & Innovation Near-UCO Bank, Chhaila-171220, Teh. Theog, District-Shimla, Himachal Pradesh, India	Jayoti jamwal	01783-236280	9459543400	himalayanassociation@gmail.com	Social activities, Disaster Management
20	HIMALAYAN EDUCATION	33-2002	himalayan public sr sec school rohru distt shimla himachal	Dinesh Sharma	01781-240204	9805842941	sharmadinesh396@gmail.com	Education

	AL SOCIETY ROHRU		pradesh pin no 171207					
21	HIMALAYAN HUMAN AND NATURAL RESOURCE MANAGMENT ORGANISATION	207-2005	barang(r/peo)kinnaur HP 172107	Narayan jeet negi		9459039903	hhnroindia@gmail.com	Agriculture, Horticulture, Rural Development
22	HIMALAYAN RESEARCH GROUP	17/97	Umesh Bhavan, Chotta Shimla, Shimla-171002 H.P.	Dr Lal Singh	0177-2626820		lalhrg@gmail.com	science/technology based livelihood
23	HIMALYAN BIOTECHNOLOGY AND ENZYME RESEARCH	567/2012	Dr. Shashi Kant Bhatia Dept. of Biotechnology, Himachal Pradesh University, Shimla-171005	Dr Shashi Kant Bhatia	094590-37299		shashibiotechhpu@gmail.com	
24	HIND SEWA SANGATHAN	43/97	Hind Sewa Sangathan IIRD Complex Bye-Pass Road, Shanan, Sanjauli Shimla Pincode : 171006	Dr L C Sharma	0177-2640761	0177-2843528	ceohss@gmail.com	Disaster Management, Elderly issues, Women Empowerment
25	HP ACADEMY OF ARTS CULTURE AND LANGUAGES	5213/86	Computer Training Centre H.P, O/o HP Academy of Arts Culture and Languages, Cliff-End Estate, Shimla- 171001.	Mrs Manisha Nanda Principal Sec LAC HP Govt	0177-2623149 / 0177-2624330		ctcshimla_ncpul@rediffmail.com	
26	IDARA ISLAHUL	24/96	1st Floor vidya Bhawan Opp.Himland Hotel Shimla	Mohammed Afzal	0177-2628405	9816159238	iifsr@gmail.com	Education Sector and

	FIKR SOCIETY FOR SOCIAL REFORMS		171001					Health
27	INNOVATIVE SCIENCE RESEARCH SOCIETY	758/2013	Innovative Science Resrch Society Kumar Kunj, Bhawati Nagar, Lower Khalini Shimla-171009	Dr Atul Thakur	9882452 272		isrsindia@gmail.com	
28	INSTITUTE OF MISSION HEALTHY INDIA	224/2009	Dr Renu Ohri, sehgal Cottage Jakhoo, Shimla-171001	Dr Renu Ohri	0177-2655579	981602378 6	renuohri007@yahoo.com	
29	ISLAMIA MADRASA TALIMI SOCIETY	5296/198 6	ISLAMIA MADRASA TALIMI SOCIETY KUTHAR PO - GIANA TEH - CHOPAL DISTT - SHIMLA HIMACHAL PRADESH PIN - 171210	Hukum deen		931880606 0	idris198khan@gmail.com/ khanayub276@gmail.com	Welfare related
30	JAKH YUVA MANDAL	RMP-HC-IX(6)/200 0-10	Hans Bhawan Racholi P.O. Khaneri Teh. Rampur Bushahr Distt. Shimla H.P. 172001	Pradeep Azaad	01782-233686	941820818 6	jakh.ngo@gmail.com	health department
31	JAN ABHIYAN SANSTHA	43/2000	3 Abbey Feale Lodge, Lakkar Bazar Shimla-1	Richa Minocha		981605101 3	richaminocha@jasi ndia.org	environment, young child, right to education and ecotourism
32	MAHARANA PRATAP JAN KALYAN	301/992	Sh. P.S. Omta Director Mahaarana Pratap Jan Kalyan Sansthan, Jubbal, Himachal	PS Omta	01781-253169	988208511 6	jubbalmjks@gmail.com	Terry, solar energy, environment,

	SANSTHA		Pradesh					vocational training
33	MAHILA MANDAL CHALOG DEVDHAR	5118/86	Mahila Mandal Chalog-Devdhar Post Office Shakrah Tehsil Shimla Distt. Shimla Himachal Pradesh-171011	Shanti Verma	9817813792	9817813791	anilgsimla@gmail.com	
34	MAHILA MANDAL SHAYA	45/THG/2002	Mahila Mandle Shaya, P.O. Kuthar, Teh.- Theog, Distt. Shimla. H.P, Picode. 171226	Kaushalya Devi	01783-260334	9816203507	mksscpl@gmail.com	social welfare, awareness, foeticide
35	MAHILA VIKAS SANSTHAN	46/2001	Mahila Vikas Sangthan Green View, Master Building Near Power House, Tuto, Shimla-171011 Himachal Pradesh	Veena Sood	0177-2831319	9817096998	mvs3053@gmail.com	skill development, awareness capms, training programs
36	MANAV KALYAN SEVA SAMITI	6852/1988	BABA KUTEER NEAR CIVIL HOSPITAL CHOPAL, P.O. & TEHSIL CHOPAL DISTT SHIMLA H.P. 171211	KESHAV RAM LOTHTA	01783-260334	9816312732	mksscpl@yahoo.co.in	Social work, rural development, health activities, vocational job training
37	MARTANDA K SOCIAL WELFARE SOCIETY	53/2003	Verma Niwas, Kasumpti, Shimla- H.P. 171009	Munish Kumar		9418189977	martandak@gmail.com / martandak_society@yahoo.com	Health, hygiene, education and environment

38	Church's Auxiliary for Social Action (CASA)	3795/2006	HK Niwas, House no 437 opposite DAV School Sector 4 New Shimla	Amit Kumar Gautam	0177-2672439	9418285052	amitircs@yahoo.com	livelihood, management and disaster
39	MOUNTAIN RESEARCH AND DEVELOPMENT ASSOCIATES	51/99	Mountain Research and Development Associates, Pranav Niwas Near Durga Temple Dhalli Shimla 171012	Dr Taru Sharma	9816782780		santvan@hotmail.com	Research oriented
40	MUNIR CULTURAL FORUM	Aug-93	siri niwas, chakkar, shimla, 171005	Parvesh Jassal		9418088692	jassalparvesh@yahoo.com	Cultural activities
41	NARI AVAM SHISHU SEVA SADAN KHALANTUA	Sep-91	Village Khalantua, PO Deiya, Sub-Tehsil Chopal Distt. Shimla HP 171210	Brijbala	01783-260239	9805683278	pclothta@gmail.com	
42	NATIONAL ENVIRONMENTAL PROTECTION AND RESEARCH CENTRE	18/2003	National Environmental Protection And Research Center at Hotel Barowalia Resorts, North Bank Estate (below Kali Bari Temple), Shimla-17100, H.P, India.	Abhishek	9418902243	9418052900	mail@barowalia.com/barowaliaresorts@yahoo.com	forest conservation
43	NAV CHETNA	253/2005	Attri Niwas, Near R.K, Traders, Khalini Shimla-171002(H.P)	DEVENDER SINGH	0177-2622293	9816917068	navchetna_05@yahoo.co.in	Health and family

				RAWAT				
44	OCEAN HP	113/RMP/ GA-06	Hans Bhawan Racholi P.O. Khaneri Teh. Rampur Bushahr Distt. shimla H.P. 172001	Pradeep Azad	01782- 233686	945940818 6	oceanngo68@gmail.com	
45	OECEED	81	Durga Sadan, Lane-15, sector- 4, New Shimla, Shimla-9 (H.P.) India	Sharad Dixit		941827487 2	oeceed@rediffmail.com	Ecology conservation
46	PANCHAYAT VIKAS SAMITI KIRAN	65/02	Village Boagdhar, PO Thangar, Sub Tehsil Nerwa, Distt. Shimla, HP 171210	Roop Dass	07183- 260105	862797387 4	virenklothta@gmail.com	
47	PARTICIPAT ORY RESEARCH INTEGRATED DEVELOPME NT AND ENVIRONME NT FOUNDATIO N	861/2014	Kanwar Niwas, Post Office- Basantpur, Tehsil- Sunni, District Shimla, HP PIN 171018	H S Kanwar		941801245 6	kanwarhardev@gmail.com	Rural development, environment and education

48	REACH	535/2012	Seraj-Sadan Village-Sargheen, Panthaghati, PO Beolia, Shimla-171009, H.P Shimla	Parikkshit Thakur		981683452 9	projectreach01@g mail.com, thakurparikshit82@gmail.com	
49	RESEARCH AND WELFARE ORGANISATI ON	88/2001	Hari Niwas, Kamla Nagar, Sanjauli, Shimla-171006, Himachal Pradesh, India	Sanjay Thakur	0177- 2842943	945936664 3	sanjaythakur.smlh p@gmail.com	Upliftmemnt of the underprivileg ed and disadvantage d, violation of human rights, reservation and conservation of wildlife and some special studies on women, children, labourarers, senior citizens and down troden class especially the people below

								poverty line. program running for child labour abolition program CLAP).
50	RPM YUWA	645/2013	DURGA NIWAS BELOW HIMFED BUILDING BCS NEW SHIMLA 9	KULDEEP BHANDARI	98827-31111	9882112372	rpmyuwa@gmail.com	Activities for upliftment of youth
51	RURAL DEVELOPMENT ASSOCIATION	G.A(39)/2013-32	Sai Niwas Racholi P.O. Khaneri Teh. Rampur Distt. Shimla H.P. 172001	Virender Khurana	01782-233686	9816970002	rdashimla@gmail.com	
52	SAHAAS	Aug-06	Sahaas Brotherhood CYWO Him star view, jawahar colony, sanjauli, bhatta kuffer, shimla -6 H.P. -171006	Anil Sharma	0177-6450336 / 0177-2841153	9990168588	anilsharmasml@gmail.com	
53	SAHYOG SOCIAL ACTION FOR HARMONIO	60/2000	C/o Vikrant Niwas, Near Forest Colony Theog, Post Office & Tehsil Theog	C R Azad		9816096012	sahyog.theog@yahoo.co.in	

	US YEOMAN OUTLOOK GENERATIO N							
54	SAKAAR SOCIETY FOR SOCIAL SERVICE	380/2010	Panchayat Market Building, Totu, Shimla - HP 171011	Pradeep Joshi		941805198 0	sakaarsociety@gm ail.com	
55	SAMAJ KALYAN AVEM VIKAS MANDAL	29/92	Project office: V.P.O. Karsog- 175011, District Mandi (H.P.) Main Office: Village Shawala, P.O. Nerwa Tehsil Chopal District Shimla (H.P.)-175011	Kewal Ram Siranta		981621947 7	skvm_siranta@yah oo.co.in	Natural Resource Management, Health and sanitisation, sustainable life development
56	SAMIDHA	33/2000	abhinandan krishna newas lower panthaghati shimla- 171009	Sudarshan vashishtha	0177- 2620858	941808559 5	vashishthasudarsh an@yahoo.com	Culture related
57	SANDESH SAMITI	60/2001	Village & P.O. Dhar Chandna Tehsil chopal Distt. Shimla Himachal Pradesh	Padam Sharma	01783- 273011	981644858 0	gautamdipta@yah oo.co.in	Awareness camps related to women upliftment
58	SANKALP	Feb-92	kunti niwas ram nagar shimla 3 himachal Pradesh	Rupesh bali	0177- 2835767	941827656 4	sankalpshimla@g mail.com	Art and Culture (Theatre)

59	SENTIENT EDUCATION AL AND SOCIAL WELFARE SOCIETY	727/2013	73/5, Ram Bazar	Rahul Sharma	9736433 884		sent.edu.sws@gm ail.com	Educational field and related to RTI
60	SERVE HIMALAYA SOCIETY	48 SLN of 2003	Dr.M.S.Thakur President/Secretary Serve Himalay Society Gupta Cottage Nr Central School Playground Lakkar Bazaar Shimla-171001(H.P.)India	Mahender Singh	0177- 2812514 / 0177- 2621282	941818922 1	servehimalayasoci etyshimla@gmail.c om	Livelihood and environment
61	SEWAHAR	53/99	sewahar society for education of woman awareness & health upliftment, pine cottage, chota shimla -2, Ph: 0177-2626423	SK joshi	0177- 2626423	981614365 5	sewahar@gmail.co m	
62	SHAAVERI	164/2008	SHAAVERI SHUSHAN BHAWAN 2nd FLOOR CEMETRY ROAD SANJOULI SHIMLA 171006 HP.	Kishor Sharma	0177- 2623636	941830009 7	kishor0369@gmail. com	
63	SHRI LAXMI NARAYAN WELFARE SOCIETY	236/2009	SHRI LAXMI NARAYAN WELFARE SOCIETY GROUND FLOOR,NEAR HATESHWARI TEMPLE, SHYAM COTTAGE, SECTOR NEW SHIMLA 171009	Ravi Kant		941832500 9	visualplanetit@gm ail.com	Education
64	SMARGA VIKAS KHADI GRAMODHY OG SAMITI	6875/88	Virender Kumar, Secretary, Villagage Ghalla, PO Deiya, Sub-Tehsil Nerwa, Distt. Shimla HP. 171210	Virender Kumar	01783- 260105	980561805 3	virenlohta1983@ gmail.com	
65	SPARK HP	17/2007	SPARK NGO C/o Mohinder Verma Vill. Shageen P.O. Tara	Hemant Kumar	01782- 233686	941850852 9	sparkshimla@gmai l.com	Health

			Devi Teh & Distt. Shimla H.P 171010					
66	THE BEGINNERS	523/2011	Kapil Dev Sharma C/O Nand Lal, Thakur Niwas, Jakha- Navbahar Sanjouli-171006	Kapil Dev Sharma	0177- 6535677	945953762 7	beginner.journey @yahoo.in	Culture and Theatre
67	THE LITTLE GROUP CLUB	Jun-97	C/o Mr. kamal kumar, Karol building, flat no. 2nd B, Clliston Shimla 1	Ashok Sharma		981028478 4	dlittlegroupclub@g mail.com	Theatre
68	UDAAN PARENTS AND GUARDIANS SOCIETY	79/2002	Udaan C-35,Sector 2 Bus Stand New Shimla-171009	R S Rana	0177- 2672216		udaanhp@gmail.c om	Mental Studies
69	ULLAS FOUNDATIO N	820/2014	Mahant Niwas, Devnagar, Kasumpti Shimla-9	Sanjeev Kumar	0177- 2625781	981665366 5	ullasfoundation@g mail.com	Health and Education related
70	UNION FOR CIVIL LIBERTIES AND HUMAN RIGHTS	58/94	3/4 Bindlesh Bhawan Near Gulmarg Hotel Shimla-171003	Rakesh Tejpal	8894280 234, 8894245 701, 9816188 214	981618821 4	rakeshtejpal@gma il.com	Protection of fundamental rights
71	UTTHAN CHARITABLE SOCIETY	785/2014	Village & PO KANGAL,Teh. Kumarsain Distt.Shimla.171018	Er LALIT CHAUHAN		931803309 9	utthancharso@gm ail.com	Senior Citizen
72	VISION EDUCATION SOCIETY	188/2005	Charan Dass Building, Main Market Shoghi Shimla HP- 173219	Vljay Kumar Sharma	0177- 2860535	921853717 7	vijay.80@hotmail.c om	IT Education
73	VMIT EDUCATION AL TRUST	2682	Krishna Bhawan Auckland School Gate Lakkar Bazar, Shimla 171001	Jugal Thakur	0177- 3200130	988203643 6	vmiteducationaltru st@rediffmail.com	

74	YUVA JAGRITI SANGTHAN	460/2006	Vill. Sholi P.O. Sholi Sub Teh. Nankhari Tehsil Rampur Bushar Distt. Shimla Himachal Pradesh 172001	Sushil Kumar	01782- 225506	941843284 1, 783102407 7	yuvajagriti44@gm ail.com	Agriculture
75	Doers	902/2015	Kalta Bhawan, Dyerton Estate, Beerkhana, Shimla 171006 Himachal Pradesh	Anuradha	0177- 2674939	809103040 5	mail@doers.org.in	Sustainable Development, Climate Change, Disaster Management.

Annexure 3: List of Helipads in District Shimla

List of Helipads: District <i>Shimla</i>					
Sr. No.	Name of Helipad/Station	Latitude	Longitude	REF	Altitude
1	ANNADALE	31.06.7	77.09.5	SH.064/5	6000
2	CHOPAL	30.56.9	77.35.2	A.113/24	
3	DODRAKAWAR	31.11.9	78.05.2	A.082/48	8200
4	DEHA (Shimla)	31° 28 m	77° 27 m		2082
5	JHAKHARI	31.30.20	77.42.71		3800 Ft.
6	JUBBAL	31.07	77.39.5	A.088/26	
7	KALYANI (RETREAT)	31.07.8	77.17.6	A.080/7	8,800 ft.
8	KANDA	31.34.0	77.09.5	A.359/27	
9	KUMARSAIN	31.19.3	77.26.7	A.048/19	
10	KUPVI	30	77		
11	NERWA	30.55.2.3	77.38.29		
12	RAMPUR	31.28.0	77.37.7	A.051/30	4050
13	ROHRU	31°12'37.01"	77°44'42.19"	A.078/31	5550
14	SARAHAN	31.30.4	77.47.5	A.053/40	
15	THEOG	31.08.0	77.02.3	A.082/11	
16	THARU NANKHARI	31.20.2 N	77.33.32 E	67X57 meter	1600M
17	SUNNI	31.14.43	77.07.14	-	3053 FT.
18.	SUNDLI	31°5'10.38" N	77°40'2.27" E	-	-
19.	MAHASU	31°5'10.38" N	77°31'11.25" E		2500 Mtrs.
20.	SARSWATI NAGAR	31° 07'29.44" N	77°45'04.80" E		5029 ft..
21.	GHASIGAON (KOTKHAI)	31°12'68.77"N	77°53'81.51" E	-	1985 meters
22.	SHILLAROO SPORTS COMPLEX	31°12'6"N	77°25'21" E		

Annexure 4: Major Hospitals (Both Govt. & Pvt.) in District Shimla

Sr. No.	Hospitals	Address	Contact Details
1	IGMC Shimla	Indira Gandhi Medical College, Shimla – 171001	0177-2804251, 0177 2658339/ 2808011, (Fax), 2651854-59, 2803073, 2654713(EPBX), Principal-igmc-hp@gov.in ; info@igmcshimla.org
2	Rippon Dean Dayal Upadhaya	Shimla GPO, Shimla, H.P. - 171001	0177-2658941 msdduripon@gmail.com
3	Kamla Nehru Hospital (KNH)	38, HN-22, Mall Road, Near Shiva Mandir, Shimla	0177-2625097
4	Indus Hospital	Indus Drive, Mount Jakhoo Shimla 171002	0177-2841401/ to 05 Fax : 0177-2842017
5	Sri Ram Hospital	18-D, Sector-1, New Shimla, Shimla, Himachal Pradesh 171009	0177-2671398
6	Sanitariums Hospital	Chaura Maidan Road, Chaura Maidan, Himachal Pradesh	0177-2811821
7	Tenzin Hospital	NH 22 & Bye Pass Rd, Panthaghati, Kasumpti, Shimla, Himach	0177-2625663

Annexure 5: List of Schools in District Shimla

	Name Of School	Name Of Principal	Phone Number	Landline
1	Arhal	Vacant	8679167162 (Supdtt)	1781245357
2	Badhal	Rajesh Kumar	94182-14357	
3	Badshal	Vacant	9736359699	
4	Bagain	Vacant	9816599302	
5	Bagalti	Vacant	9,41,86,27,92,69,41,84,00,000	
6	Baghal	Mukesh Pal	8894631528 TGT	
7	Baghi	Rajesh Mogta	98164-89577	1783242544
8	Bahali	Amarjeet	94180-90184	1782223308
9	Bajrolipul	Sandeep Kumar	94184-85018	
10	Balag	Parag Sharma	94184-34106	
11	Baldyan	Deepak Puri	98160-71280	
12	Balsa	Vidya Devi	98055-44386	
13	Bamta	Janak Raj	98762-17965,884756577	
14	Banuna	Devender Prabha	9418150292,9459245560	17727677131

15	Baragaon	Roshan Lal	94180-47192	1782245740
16	Barthata	Mohinder Chand	94181-51578	1781257400
17	Bartoo	Bhupinder kumar	94180-40210 98051-30210	
18	Basadhar	Rajinder Singh	98168-50809	
19	Basantpur	Dev Raj	94180-09076	1772784432
20	Baur	Krishan Kumar	9418488815	
21	Beolia	Meenakshi	94180-27719	1772751403
22	Bhaloo	Vacant	9459263127	
23	Bhaloon	Ranbir Singh	97369-38009	
24	Bharach	Satish Kumar	94184-07299	
25	Bharanoo	Bhupinder Singh Sisodia	9805878441	
26	Bhararia	Brij Lal	94590-37382	
27	Bhatta Kuffar	Vidya Chauhan	98164-89852	1772844014
28	Bhont	lakshmi Devi	94188-60444	1772739101
29	Bhutti	Dharm Pal	94180-44235	
30	Bijmal	Dinesh Steta	94186-47749	

31	Boileauganj	Vidya Negi	94184-61007	
32	Bychari	Udham Singh Guleria	94182-06550	
33	Chalal Thachi	Naresh Gupta	94180-95224	1772793483
34	Chanair	Tara Singh	94180-50207,9459731095	
35	Chanawg	Vijay kumari	98169-27934	
36	Cheog	Sharda Chandel	94592-53937	
37	Cheridharan	Surender Kumar	97364-39918	
38	Chhota Shimla	Rattan Singh Verma	94180-42961	1772620348
39	Chikhar (Kusumpti)	Shashi Kiran	9816222527	
40	Chirgaon	Meena Ram	98165-99302	
41	Chopal	Ashwani Kumar	94189-42190,9817772269	1783260015
42	Dalgaon	Vacant	9418050550	
43	Dansa	Bansi Lal	94181-46525	
44	Dargi	Yogesh Sharma	94184-80244	1772798686
45	Darkali	Vacant	7807219640,9816758148	
46	Deem	Mohan Singh	80911-11478	

47	Deha	Gopal Singh Chauhan	98161-62206,9459828689	1783231385
48	Deiya	Vacant	9459316090	
49	Delath	Parveen Kumar	94180-04686	1782229500
50	Deori-khaneti	Lakh Raj	94189-39388	1783246410
51	Deot	Jagdeep Singh	94184-17313	
52	Deothi (Chopal)	Amita Kashyap	98052-75046	
53	Deothi (Rampur)	Vacant	9459740402	
54	Devgarh	Ashok Kumar	94180-37229	
55	Dhabas	Rakesh Chander		
56	Dhadi-Rawat	Tilak Raj	9816448583	
57	Dhalli	Usha Chauhan	98165-97419	1772614044
58	Dhamandari	prakash Chand	94596-14636	
59	Dhamwari	Vacant		
60	Dhar	Usha Chauhan	94187-03550, 98165-97419	
61	Dhar-Chandna	Vacant	9816106891	
62	Dharampur Madhan	Surekha Thakur	94180-06213	

63	Dharech	Rajinder Kumar	94180-95713	1783201748
64	Dhar-Gaura	Praveen Gupta	94184-71168	
65	Dharogra	Lal Singh	94181-65041	
66	Dodra	Anil Kumar	98052-97418	
67	Dofda	Satya jPal	94180-38903	
68	Dubloo	Desh Raj Kapur	94183-82726	
69	Dumehar	Chain Singh	94181-35008	
70	Durgapur	Seema Marwah	97364-52188	1772747401
71	Duttnagar	Krishan Negi	78072-54915	
72	Gadakufri	Sh. Hans Raj	9459035996	
73	Galani	Pawan Dev	98173-16147	
74	Ganvi	Anil Kumar	94180-66514	
75	Gaonsari	Trilok Singh	98051-14629 94189-76829	
76	Ghaini	Ashok Kumar	94180-15581	
77	Ghanahati	Anila Sharma	94184-41936	1772775401
78	Ghoond	Partap Chand	9459261786	

79	Giltari	Vacant	9816107676	
80	Gonth	Vacant	9816594393	
81	Gumma (Chopal)	Vacant	9816161254	
82	Gumma (Kotkhai)	Somesh Kumar	94592-45544	1783253575
83	Gumma (Rohru)	Anil Kumar		
84	Gumma Kusumpti)	Navnit Thakur	9459032692	1772781950
85	Halau	Jiwan Lal	9805780845	
86	Halog Dhami	Suman Sharma	94181-37013	1772790133
87	Himri	Lalita	98162-19505	
88	Hirah	Anil Kumar	94590-61881	
89	Irra	Vijay Kumar	94182-19639 , 94181-40617(Lec)	
90	Jais	Anita Pathiana	94184-73387	
91	Janedghat	Sanjeev Kumar	94186-94657	
92	Jangla	Sarvdaman Singh	98166-33036	
93	Jarkot(Saras)	Karishana Rawat	78318-18620	
94	Jauni	Dalip Singh	94592-63692	1783211101

95	Jeori	Vinay Singh Negi	94181-10908	1782728539
96	Jhagtan	Hoshiar Singh	94183-78333, 88946-21245	
97	Jhakri	Arvind Negi	94181-41435 94165-41435	1782275146
98	Jharag-Nakrari	Lokinder Singh	94184-88862	
99	Jhiknipul	Noor Mohammed	94592-80786	
100	Jiskoon	Agya Dutt	8988378734 TGT	
101	Jokhar	Vacant	9418208420	
102	Jubbal(B)	Narinder Singh	94180-79780	
103	Jubbal(G)	Abbal Singh	94184-61493	1781252943
104	Juggar	Lata Sani	98165-83052	
105	Junga	Pratibha Thakur	94186-86703	1772752435
106	Kadiwan	Ramesh Chand	88940-90395	
107	Kaflah	Ram Singh	94181-99995	
108	Kaina	Surender Sharma Sharma	94183-41666	
109	Kair	Prakash Chand	9418170514	
110	Kalbog	Arun Kumar		1783240008

111	Kaloti	Ashok Kumar	94182-86919	9418057275
112	Kanda Banah	Suresh Chand	88942-90145,9418642215	
113	Kandal	Naresh Kumar	94186-76920	
114	Kangal	Ved Prakash	98161-11546	1782247140
115	Karasa	Atama Ram	98164-79834	
116	Karyali	Pyare Lal	94184-73462	1772764485
117	Kashapat	Raj Kumar	98178-31020	
118	Kedi	Lokesh Panwar	94187-61815	
119	Kelvi	Mohan Lal Sharma	94187-55571	
120	Kewar	Vacant	9459975474,9418351725	
121	Khader	Rajmal Singh Negi	94182-30022	
122	Khaira	Parveen Kumar	98169-21132 94189-21139	1772780956
123	Khalag	Rajesh Chauhan	94184-78135	1772736201
124	Khamadi	Prem Chand	97361-65322	
125	Khaneti-Sadhoach	Rajinder Pal	94183-39864	1782228387
126	Khashdhar	Prabhav Chand	86290-68689 98172-25412	

127	Khatnol	Rahul Sharma	94596-21619	1772781940
128	Khunni	Bipin Bihari	94181-52557	
129	Kiara	Vinod Kumar	98170-48348	1783228050
130	Kiari	Narpal Singh	98571-89105	
131	Kiarkoti	Sukesh Sharma	94181-19082	
132	Kinnu	Vacant	9418837133,9418025329	
133	Kiobil	Shakti chand	9805322033,9418257173	
134	Kohbag	Neelam Gupta	94183-41213	1772777591
135	Kot Shilaru	Diwan Chandel	94183-10601	
136	Kotgarh	Vacant	9418029259	1782222859
137	Kotgeha	Kusum Sharma	8894838419	
138	Koti	Rashima Sharma	98160-97244	1772733211
139	Kotighat	Vinod Kumar	98164-03804	
140	Kotkhai(B)	Pratima Sharma	94597-97480	1783255306
141	Kotkhai(G)	Pitamber Pirta	94180-25758	1783255366
142	Kudu	Prem Lata	94186-69987	
143	Kufri	Shanta Sharma	94185-20322	1772648362

144	Kui-Bachhunchh	Vacant	9816101783	
145	Kumarsain	Kamal Chand	94595-61929	1782240059
146	Kungal-Balti	Joginder Pal	98172-64830	
147	Kupvi	Susheel Kumar	94183-89437,7807186481	1783270370
148	Kutara	Birmbal Kumar	94183-68977	
149	Kuthar	Duni Chand	94184-69826	
150	Kuthari-Ghasni	Vacant	9816462710	
151	Lakkar Bazar	Geeta Rani	94592-61366	1772652878
152	Lower-Koti	Ajeet Verma	98161-61000	
153	Machoti	Suresh Kumar	98161-30729 94181-29225	
154	Mahasu	Anil Kumar	9459263404	
155	Mahori	Rattan Chand	94180-52324	1783227200
156	Mailan	Haminder Chand	94184-57274	
157	Majhar	Vacant	9817049254	
158	Majheoti	Sudesh Kumar	94593-83118	
159	Majholi-Tipper	Prem Singh	94180-1664	
160	Malat	Pardeep Kumar	94185-79709	

161	Malendi	Surinder Singh	98172-60429 98172-60429	
162	Mandal	Ram Lal	94184-91366	
163	Mandhole	Jai Dev Negi	94184-96996	1781243243
164	Mandhorghat	Rakesh Kumar	98161-06891	
165	Maneoti	Alka Yadav	86791-03280	
166	Maraog	Ramesh Chand	94184-88320	1793261415
167	Masli	Shabhu Ram	9459739248	
168	Masshobra	Bhag Chand	94180-19400	1772740096
169	Matal	Rakesh Chand	94181-57822	
170	Matiana	Kundan Lal	84180-76992	1783225328-225255
171	Melthi	Vacant	9418107290	
172	Mundaghat	Suman Sharma	98173-38029	
173	Munish Bahali	Mathur Prasad	94181-46834	
174	Nagjubbar	Randhir Singh	94184-55919	
175	Nahol	Ram Swaroop	93189-24027 93185-89019	
176	Nandpur	Bhopal Singh	94181-09080	

177	Nanhar	Vacant	9816082638	
178	Nankhari	Raj Kumar	94184-57875	1782207135
179	Narain	Hans raj	94182-15249	
180	Narkanda	Karishan Chand	94184-64569	1782242734
181	Naura-Baura	Neel Kanth	94184-86564	
182	Neen	Nitika Bharara	94182-32646	
183	Neri Nagar	Vijay Kumar	94180-55883	
184	Nerwa	Kewal Ram		1783264426
185	Nogli	Poonam Bisht	94184-57485	1782271300
186	Ogli	Rajesh Kumar	94186-09706	
187	Okhroo	Anju Lata	94180-35650	
188	Paban	Vacant	9805762241	
189	Pahal	Suman Jaswal	98170-81154	1772748446
190	Pandoa	Jagbir Singh	94188-49322	
191	Pandranu	Pawan Kumar	94184-70238	
192	Patukhar	Pawan Kumar	98055-79965	

193	Pauria	Dharm Pal	94593-36250	
194	Pekha	Desh Raj	9816827455	
195	Phagli	Veena Sharma	98820-58827	1772835088
196	Piran	Jayant Kumar	94186-48657	
197	Portmore(G)	Nisha Bhallowani	94181-09130	1772623897
198	Pujarli -04	Sunil Sharma	94181-01333	
199	Pujarli-3	Vacant	9816117433	9805474729
200	Pulbahal	Ram Swaroop	98167-07665	
201	Purag	Prabh Dayal	94182-54666	
202	Racholi	Yog Raj	94599-77678,7018902627	
203	Rajhana	Saroj Rathor	98161-37693	
204	Ramnagar	Vacant	9806039123	
205	Rampur Keonthal	Shalini Sharma	94184-92901	
206	Rampur(B)	Bhagwan Dass	94180-21103	1782233153
207	Rampur(G)	Mehar Chand	98165-56203	1782233997
208	Rathal	Rajinder Singh	94184-88315	1781252819

209	Ratnari	Karishan Lal	98168-39350	
210	Rawlakaiar	Virender Kumar	98160-28871 94189-85861(Clk)	
211	Rohru(B)	Binder Singh	98160-70231	1781240708
212	Rohru(G)	Surinder Chauhan	94180-02192	
213	Ruslah	Vir Singh	94180-66198	
214	Sainj	Rajinder Thakur	94594-82082	1783235601
215	Saintari	Sudrshan Kumar	88943-22947	
216	Samoli	Prem Kumar	98174-55960	
217	Sandhu	Hemant Kumar	94181-19019	1783221498
218	Sanjauli	Pawan Kumar soni	88948-67541	1772640023
219	Sansog	Vacant	9418530875	
220	Sarahan	Padam Chand	94181-19762	
221	Sarain	Prem Singh Gazta	70181-36192,9418010094	
222	Saraswatinagar	Vidya Sagar	94180-38848	1781239152
223	Sari (Kot Khai)	Champa Thakur	94180-56322	
224	Sari Chopal)	Kuldeep Chand	98167-30474	

225	Saribasa	Shyam Singh	88943-91314	
226	Sarog	Haminder Singh	9418164013	
227	Sarot	Navinder Singh	94182-88123	
228	Sarpara	Sanjeev Kumar	78073-89501	
229	Shakrah	Hari Sharma	98171-54613	1772830748
230	Shamathla	Minakshi Kashyap	94184-54322	1782221300
231	Shamlaghat	Sunita	9459623147	
232	Shamtha	Sukh Prit Kaur	9805667601	
233	Sharontha	Vacant	9459227054	
234	Sheel	Sukh Chain Singh	78072-39065	1781255533
235	Shilla	Vacant	9805134568	
236	Shimla(B)	Lekh Raj	98057-36845	1772652486
237	Shingla	Rajni Dogra	94180-19838	
238	Shiwan	Ved Prakash	78073-75157	1782245004
239	Shoghi	Anita Sharma	94180-46030	1772860289
240	Sholi	Megh Singh	94185-44744	

241	Solang	Vacant	9816521758	
242	Summerhill	Tanzin Dolma	98177-90423	1772831024
243	Summerkot	Kahan Chand	86288-74141	
244	Suni	Surjit Singh	94185-73718	1772786668
245	Taklech	Vacant	9418035500	1782272276
246	Tangnu	Vacant	8628891230	
247	Telor	Vacant	9456546331	
248	Thaila	Chaman Lal	94184-53242	
249	Thaili-Chakti	Pushpa Nand	94184-25293	1782224577
250	Tharoach	Mohan Singh	94184-90302	
251	Tharola	Vijay Singh	94183-44918	
252	Theog(B)	Bharat Singh	94181-77877	1783238503
253	Theog(G)	Brij Lal	94599-68886	1783238395
254	Tikkar(Chopal)	Daya Nand Rawat	88949-75360(TGT)	
255	Tikkar	Ashok Kumar	98162-63391	
256	Tikkari-Newal	Kuldeep Kumar	94181-32580	

257	Totu	Asha Sharma	94184-62297	1772837874
258	Tyali	Mohan Lal Tekta	94180-00886	
259	Virgarh	Surbhi	94184-77118	

Annexure 6: Communication Plan (**Important Telephone Numbers**)

Important Telephone Numbers

1. ADMINISTRATIVE SETUP OF DISTRICT SHIMLA

Sr. No	Name & Designation	Office	Mobile Number	Email id
1	Deputy Commissioner	0177-2655988		dc-shi-hp@nic.in
2	A.D.C Shimla	0177-2657003		adc-sml-hp@nic.in
3	ADM(L&O)	0177-2650005		admlo-sml-hp@nic.in
4	ADM(P)	0177-2653436		admp-shi-hp@nic.in
5	SDM Shimla (Urban)	0177-2657007		sdmshu-shi-hp@nic.in
6	SDM Shimla (Rural)	0177-2657009		sdmshr-shi-hp@nic.in
7	SDM, Theog	01783-238502		sdmthg-shi-hp@nic.in
8	SDM, Rampur	01782-233002		sdmrampurushahr@gmail.com
9	SDM, Rohru	01781-240009		sdmroh-shi-hp@nic.in
10	SDM, Chopal	01783-260014		sdmchp-shi-hp@nic.in
11	SDM, Dodrakawar	01781-272001		sdmckr-shi-hp@nic.in
12	SDM Kumharsain	01782-240033		
13	AC to DC Shimla	0177-2657011		ac-shi-hp@nic.in
14	DRO, Shimla	0177-2657013		dro-shi-hp@nic.in
15	BDO Mashobra	0177-2740248		
16	BDO Basantpur	0177-2784533		bdoasantpurn@gmail.com
17	(Addl. Charge), BDO Theog	01783-237210		bdotheog@gmail.com
18	BDO Nankhari	01782-225606		bdonankhari@gmail.com
19	BDO Rampur	01782-233025		bdorampur_2010@yahoo.com
20	BDO JubbalKotkhai	01781-252024		bdo.jubbal@gmail.com
21	BDO Chopal	01783-260024		blockchopal@gmail.com
22	BDO Narkanda	01782-242428		bdonarkandashimla@gmail.com
23	BDO Rohru	01781-240037		bdorohru@gmail.com
24	BDO Chauhara	01781-277229		bdochhohara@gmail.com

25	Tehsildar Chaupal	01783-260039		
26	Tehsildar Jubbal	01781-252014		
27	Tehsildar Shimla Urban	0177-2807241		
28	Tehsildar Kumharsain	01782-240033		tehsildarkumarsain@gmail.com
29	Tehsildar Rohru	01781-240088		
30	Tehsildar Chirgaon (Tangnu)	01781-277232		
31	Tehsildar Shimla Rural	0177-2813064		
32	Tehsildar Rampur	01782-233003		
33	Tehsildar Theog	01783-238242		
34	Tehsildar Sunni	0177-2786625		
35	Tehsildar Kotkhai	01783-255368		tehsildarkotkhai@gmail.com
36	Tehsildar Kupvi	01783-270292		
37	Naib-Tehsildar, Chaupal	01783-260039		
38	Naib-Tehsildar, Shimla Urban	0177-2807241 (Exchange)		
39	Naib-Tehsildar, Shimla Rural	0177-2651202		
40	Naib-Tehsildar, Sunni	0177-2786625		
41	Naib-Tehsildar, Dodra Kwar	01781-240088		
42	Naib-Tehsildar, Rohru	01781-240088		
43	Naib-Tehsildar, Dhami	0177-2790909		tehoprdhami@gmail.com
44	Naib-Tehsildar, Kotkhai	01781-252014		tehsildarkotkhai@gmail.com
45	Naib-Tehsildar, kumarsain	01782-240033		
46	Naib-Tehsildar, Jubbal	01781-252014		itprojubbal@gmail.com
47	Naib-Tehsildar, Junga	0177-2752520 (Telefax)		
48	Naib-Tehsildar, Nerwa	01783-264386		
49	Naib-Tehsildar, Theog	01783-238242		
50	Naib-Tehsildar, Nankhari	01782-225625		
51	Naib_TehsildarDeha	01783231150		
52	Naib-Tehsildar, Kumharsain	01782-240033		
53	Naib-Tehsildar, Rampur	01782-233003		
54	Naib-Tehsildar, Chirgaon	01781277232		

55	Naib-Tehsildar, Tikkar	01781233547		
56	Naib-Tehsildar Kotgarh	01781-252014		

2. SUPERINTENDENT OF POLICE OFFICE

Sr. No	Name &Designation	Office	Mobile Number	Email id
1	S.P. Shimla	0177-2656535		sp-shi-hp@nic.in
2	Addl. S.P.ShimlaUrban	0177-2803212		addlsp-shi-hp@nic.in
3	Addl. S.P.Shimla	0177-2652497		aspc-shi-hp@nic.in
4	D. S.P(City) Shimla	0177-2652123		dspc-shi-hp@nic.in
5	D.S.P (HQ) Shimla.	0177-2652123		dsp-smlhq-hp@nic.in
6	D. S.P. Traffic			

LIST OF THE POLICE STATION OF DISTRICT SHIMLA

Sr. No.	Police Station	Phone No.
1	Police Station Chirgaon	01781-277397
2	Police Station Chopal	01783-260023
3	Police Station Dhalli	0177-2841377
4	Police Station Jhakri	01782-275554
5	Police Station Jubbal	01781-252010
6	Police Station Kotkhai	01783-255345
7	Police Station Kumarsain	01782-240027
8	Police Station Nerwa	01783-264020
9	Police Station New Shimla	0177-2671765
10	Police Station Rampur Bushear	01782-233010
11	Police Station Rohru	01781-240030
12	Shimla East Police Station	0177-2620954
13	Shimla Sadar Police Station	0177-2652860
14	Shimla West Police Station	0177-2830193
15	Police Station Theog	01783-238205
16	Police Station Deha	07183-231231

3. MUNICIPAL CORPORATION OFFICE

Sr. No	Name &Designation	Office	Mobile Number	Email id
1	Commissioner	0177-2812899		mcs-shimla@yahoo.com
2	Joint &Assistant Commissioner	0177-2652452		mcs-shi@gmail.com
3.	MunicipalEng/XEN (Water supply)	0177-2650313		ee-ds@gmail.com
4	Executive Eng./XEN (R&B)	0177-2802771		

5	XEN-Project	0177-2650203		pd-smc@hp.nic.in
6	HEALTH OFFICER	0177 - 2802772		
7	Asstt. Comm. Office	0177-2656576		
8	Superintendent Engineer			
9	Project Director (JNNURM)	0177-2650203		
10	Municipal Eng. (WS & SD)			
11	Architect Planner			

4. (PWD) MECH., NH, CIVIL & ELECT.

Sr. No	Name & Designation	Office	Mobile Number	Email id
1	Chief Engineer, Shimla Zone	0177-2620474		hp-shi4@nic.in
2	S.E, 4th Circle Shimla	0177-2653455 0177-2805097 (Fax): 2805097		hp-shi3@nic.in
3	S.E. 11th Circle, Rampur	01782-233044		hp-shi1@nic.in
4	S.E., 14th Circle Rohru	01781-240921		hp-shi2@nic.in
5	E.E. Shimla.I.	0177- 2658385		ee-sml1-hp@nic.in
6	E.E., Shimla.(Rural) at Dhami	0177-2790534		ee-sml2-hp@nic.in
7	E.E. Shimla.III	0177- 2652832		ee-sml3-hp@nic.in
8	E.E. Theog	01783- 238376		ee-the-hp@nic.in
9	E.E. Rampur	01782- 233017		ee-ram-hp@nic.in
10	E.E. Kumarsain	01782- 240075		ee-kum-hp@nic.in
11	E.E.Rohru	01781- 240087		ee-roh-hp@nic.in
12	E.E.Jubbal	01781- 252004		ee-jub-hp@nic.in
13	E.E.Chopal	01783- 260033		ee-cho-hp@nic.in
14	E.E.Dodra Kavar	01783- 272016	-	ee-dod-hp@nic.in

5. HPSEB

Sr. No	Name & Designation	Office	Mobile Number	Email id
1	SE (OP)	0177-2622129		seoperationshimla@gmail.com
2	Sr Xen (E), City (E) Division	0177-2653338		xencity.hpseb@gmail.com

3	Sr Xen (E) , Shimla No. 1	0177-2623952 (Telefax)		xendivno1hpsebshimla@gmail.com
4	Sr Xen (E) , Shimla No. 2	0177-2620102		shimlaxen2@gmail.com
5	Sr Xen (E), Theog	01783-238247		ed.hpsebltheog@gmail.com
6	Sr Xen (E), Sunni	0177-2786538		srxensunihpseb@gmail.com
7	SE (OP), Rohru	01781-240866		sukal.sharma@yahoo.com seoprohruhpseb@yahoo.in
8	Sr Xen (E), Rohru	01781-240259 (Telefax)		xenoprohru@yahoo.com
9	Sr Xen (E), Jubbal	01781-252056 (Telefax)		ed12jbe@gmail.com
10	Sr Xen (E), Chopal	01783-260021		xenhpseb.chopal@gmail.com
11	Sr Xen (E), Rampur	01782-233019		xenrampur233019@gmail.com
12	Sr Xen (E), Kumarsain	01782-240062 (Telefax)		srxenedkumarsain@gmail.com

6. IRRIGATION AND PUBLIC HEALTH DEPARTMENT.

Sr. No	Name & Designation	Office	Mobile Number	Email id
1	Chief Engineer (Shimla Zone)	0177-2654651		ce_south@rediffmail.com
2	S.E. Shimla-9	0177-2620380 0177-2625913		seiphs9@gmail.com
3	S.E. WS & S Circle Shimla-1 (MC Shimla)	0177-2650680		gswssc@gmail.com
4	S.E. Rohru	01781-240987		seiphrohu@yahoo.co.in
5	E.E. Div. No-I Shimla-9	0177-2620591		kasumptidivision@gmail.com
6	E.E. Sunni	0177-2786632		eeiphdn_suni@yahoo.co.in eeiphdnsuni@gmail.com
7	E.E. Arki.	01796-220774		ipharki@gmail.com
8	E.E. Rohru XEN	01781-240117		eeiphrohu@gmail.com
9	E.E. Jubbal	01781-252094		eejbl68@yahoo.in
10	E.E. Nerwa	01783-264437		iphnerwa@rediffmail.com
11	E.E. Rampur	01782-233125		eeiph_rmp@rediffmail.com

7. FIRE DEPARTMENT

Sr.No	Name & Designation	Office	Mobile Number	Email id
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1	Chief Fire Officer	0177-2629945		
2	Div. Fire Officer	0177-2657087 0177-2652939		0177-2657087 (Fax) Divfire-shi-hp@gov.in
3	Station Fire Officer (Mall Road)	0177-2629945 0177-2658976		0177-2652939 (Fax)

8. FOREST DEPARTMENT

Sr.No	Name &Designation	Office	Mobile Number	Email id
1	CFO Shimla	0177 2624850 (Telefax)		shimlaforestcircle@gmail.com
2	DFO Shimla Rural	0177 2623412 (Telefax)		dfoshimlar@gmail.com
3	DFO Urban	0177 2629915		indereco@rediffmail.com
4	(DFO Rohru)	01781-240035		rohrudfo@gmail.com

9. JUBBER HATTI AIRPORT

Sr. No	Name &Designation	Office	Mobile Number	Email id
1	Director, Jubberhatti Airport,	0177-2736835 Fax. 2736673		apdshimla@aai.aero
2	ATC Incharge	0177-2736675		atc_vism@aai.aero

10. RAILWAY

Sr. No	Name &Designation	Office	Mobile Number	Email id
1	Station Superintendent	0177-2652696		
2	A.E.	0177-2653901		adensml05@gmail.com

11. HIMACHAL ROAD TRANSPORT CORPORATION

Sr. No	Name & Designation	Office	Mobile Number	Email id
1	Divisional Manager, HRTC	0177-2812328		dmsmlhrtc@gmail.com
2	RM, HRTC, Local	0177-2647295		roloc@gmail.com
3	DDM, HRTC, Taradevi	0177-2830363		rotdvhrtc@gmail.com
4	RM, Rural	0177-2647562		rorurhrtc@gmail.com
5	Incharge HRTC Control room, ISBT, Tutikandi	0177-2656326 0177-2657326		—
6	RTO Office Number SHIMLA	0177-2658379		rto-hp@nic.in

12. HOMEGUARD

Sr. No	Name & Designation	Office	Mobile Number	Email id
1	Commandant, Homeguard, 2 nd Bn, Shimla	0177-2621467 (Telefax)		hg2bn-hp@nic.in
2	Commandant, Homeguard, 3 rd Bn, Shimla	0177-2651423 (Telefax)		hg3bn-hp@nic.in

13. MISCELLANEOUS

Sr. No	Name	Designation	Office	Mobile Number	Email id
1		Sr. M.S (IGMC)	0177-2658845		srmsigmcshimla@gmail.com

2		Blood Bank (IGMC)	0177-2803073 2883440		bbigmc@gmail.com_
3		CMO (DDU)	0177-2657225 (PA)		cmoshimla@gmail.com
			0177-2657847 (Superintendent)		
4		Sr. M.S (DDU)	0177-2658941		msdduripon@gmail.com
5		Blood Bank, (DDU)	0177-2658940		—
6		Secretary, Red Cross Society, Shimla	0177-2629969 01772621868 (telefax)		hpstateredcross@gmail.com
7		Divisional Engineer, BSNL	0177-2655185		deodcsasml@gmail.com
8		General Manger, Tourism Department, The Mall Shimla	0177-2652704		gm@hptdc.in
9		Deputy Director, Tourism Department.	0177-2625939		dtdoshimla@gmail.com
10		RTO, Shimla	0177-2658379		rto-shi-hp@nic.in
11		District Controller, Food, civil supplies and consumer affairs, Shimla	0177-2657022		dfsc-shi-hp@nic.in
12		DPRO, Shimla	0177-2657024		dproshimla@gmail.com
13		Dy. M.S. IGMC Shimla	0177-2658936		
14		Coordinator NYKS	0177-2657178		nykshimla@gmail.com

14.LIST OF DC OFFICE DRIVERS

Sr.No	Name of Officer	Vehicle No	Driver Name	Mobile Number
1	Deputy Commissioner Shimla	HP03B-0001 HP07-0066 HP07B-0777	Rakesh Ajay	94184-72007 97362-20469
2	ADC	HP03B-0002	Summer Rana	94181-10454
3	ADM(L&O)	HP03D-0030	Prem	94592-28155

4	ADM(P)	HP06-0002		
5	AC	HP10A-2133	Subhash	94182-33566
6	SDM(U)	HP03A-0005	Prem	94186-22081
7	SDM(R)	HP52-0007	Rakesh	86790-10254
8	DRO	HP03A-0888	Dinesh	94592-13971
9	Pool Vehicle	HP52-0005		
10	Pool Vehicle	HP03A-0900	Dina Nath	94597-33649
11	ZilaParishad Chairman	HP07B-1002	Dhani Ram	94189-84136
12	DF&SC	HP03-1075	Tej Ram	94184-58132
13	DPRO	HP52-0052	Ramesh	94186-64774
14	DPO Panchayat	HP01S-1291	Purshotam	94181-19080
15	Project Officer	HP03D-2064	Sanjeev	98163-57838

15. EMERGENCY SERVICES

Sr. No	Name & Designation of Officer	Telephone No
1	Fire Station, The Mall Shimla	101,2658976
2	Fire Station, Chotta Shimla	2623269
3	Fire Station, Boileauganj	2830664
4	Ambulance	102, 108
5	Traffic Police	2651850
6	Police Control Room	2657430
7	Inter State W/less	2621728
8	CID Control Room	2622408
9	Sectt. Control Room	2622204

STATE DISASTER MANAGEMENT AUTHORITY, HIMACHAL PRADESH

Sr. No	Designation in SDMA	Post Held	Telephone Nos	
			Office	Residence
1	CHAIRPERSON	CHIEF MINISTER	0177-2625819	0177-2627803
2	CO-CHAIRMAN	REVENUE MINISTER	0177-2621938 0177-2880701	0177-2623086
3	VICE CHAIRMAN	RAJINDER RANA(EX-MLA)	0177-2620105	94181-45999
4	MEMBER	CHIEF SECRETARY	0177-2621022 0177-2880714	0177-2621658 9805402323
5	MEMBER	PRINICIPAL SECRETARY(HOME)	0177-2624538	9736098600 9999017444
6	MEMBER	ADDITIONAL CHIEF SECRETARY(PWD)	0177-2620560 0177-2880788	0177-2624480 9418022448
7	MEMBER	ADDITIONAL CHIEF SECRETARY(HEALTH)	0177-2621867 0177-2880774	9418813499 0177-2629499

8	MEMBER	DIRECTOR GENERAL OF POLICE	0177-2626222 0177-2880721	0177-2623132 9418018444 0177-2808444
9	MEMBER SECRETARY	ADDITIONAL CHIEF SECRETARY(REVENUE)	0177-2622382 0177-2880721	9418018444 0177-2808444

STATE EXECUTIVE COMMITTEE

Sr. No	Designation in SEC	Post Held	Telephone Nos	
			Official	Residence
1	CHAIRPERSON	CHIEF SECRETARY	0177-2621022 0177-2880714	0177-2621658 9805402323
2	MEMBER SECRETARY	ADDITIONAL CHIEF SECRETARY(REVENUE)	0177-2622382 0177-2880721	9418018444 0177-2808444
3	MEMBER	PRINICIPAL SECRETARY(HOME)	0177-2624538	9736098600 9999017444
4	MEMBER	ADDITIONAL CHIEF SECRETARY(PWD)	0177-2620560 0177-2880788	0177-2624480 9418022448
5	MEMBER	ADDITIONAL CHIEF SECRETARY(HEALTH)	0177-2621867 0177-2880774	9418813499 0177-2629499

LINKAGES WITH OTHER DDMA's

Sr. No	Designation	Telephone number	
		Office	Fax
1	DDMA BILASPUR -		
	Chairman-Cum-Deputy Commissioner, Bilaspur	01978-224155	01978-223065
	Chief Executive Officer-Cum-Additional District Magistrate, Bilaspur	01978-224763	01978-223065
2	DDMA CHAMBA		
	Chairman-Cum-Deputy Commissioner,Chamba	01899-224847	01899-225371
	Chief Executive Officer-Cum-Additional District Magistrate,Chamba	01899-222540	01899-2220488
3	DDMA HAMIRPUR -		
	Chairman-Cum-Deputy Commissioner , Hamirpur	01972-224300	01972-222437
	Chief Executive Officer-Cum-Additional District Magistrate , Hamirpur	01972-224343	01972-224325
4	DDMA KANGRA-		
	Chairman-Cum-Deputy Commissioner, Kangra	01892-222103	01892-223322
	Chief Executive Officer-Cum-	01892-223321	01892-223321

	Additional District Magistrate, Kangra – Balbir Thakur	94184-60974	
5	DDMA KINNAUR		
	Chairman-Cum-Deputy Commissioner, Kinnaur	01786-222252	01786-223342
	Chief Executive Officer-Cum- Additional District Magistrate, Pooh	01785-232222	
6	DDMA KULLU –		
	Chairman-Cum-Deputy Commissioner, Kullu	01902-222727	01902-225396
	Chief Executive Officer-Cum- Additional District Magistrate, Kullu	01902-222226	01902-
7	DDMA LAHAUL & SPITI		
	Chairman-Cum-Deputy Commissioner, Lahaul	01900-222501	01900-222502
	Chief Executive Officer-Cum- Additional Deputy Commissioner, Kaza	01906-222202	01906-222215
8	DDMA MANDI –		
	Chairman-Cum-Deputy Commissioner, Mandi	01905-225201	01905-225213
	Chief Executive Officer-Cum- Additional District Magistrate, Mandi	01905-225205	01905-225213
9	DDMA SOLAN		
	Chairman-Cum-Deputy Commissioner, Solan	01792-220656	01792-220086
	Chief Executive Officer-Cum- Additional District Magistrate, Solan	01792-223705	01792-220086
10	DDMA SIRMAUR		
	Chairman-Cum-Deputy Commissioner, Sirmaur	01702-225025	01702-223175
	Chief Executive Officer-Cum- Additional District Magistrate, Sirmaur	01702-222410	01702-222410 01702-223175
11	DDMA UNA		
	Chairman-Cum-Deputy Commissioner, Una	01975 - 225800	01975 - 223781
	Chief Executive Officer-Cum- Additional District Magistrate, Una	01975-225188	01975-225188