

District Disaster Management Plan



District Disaster Management Authority
Chamba District

Introduction

On 23rd December, 2005, the Government of India took a defining step by enacting the Disaster Management Act, 2005, which envisaged creation of the National Disaster Management Authority (NDMA) headed by the Prime Minister, State Disaster Management Authorities (SDMA) headed by the Chief Ministers, and District Disaster Management Authorities (DDMA) headed by the District Magistrates or Deputy Commissioners as the case may be, to spearhead and adopt a holistic and integrated approach to disaster management (DM). There will be a paradigm shift, from the erstwhile relief-centric response to a proactive prevention, mitigation and preparedness-driven approach for conserving development gains and to minimize loss of life, livelihood and property.

According to "Section 2(e) "disaster management" means a continuous and integrated process of planning, organising, coordinating and implementing measures which are necessary or expedient for-

- (i) prevention of danger or threat of any disaster;
- (ii) mitigation or reduction of risk of any disaster or its severity or consequences;
- (iii) capacity-building;
- (iv) preparedness to deal with any disaster;
- (v) prompt response to any threatening disaster situation or disaster;
- (vi) assessing the severity or magnitude of effects of any disaster;
- (vii) evacuation, rescue and relief;
- (viii) rehabilitation and reconstruction;"

The definition encompasses the cycle of disaster management, which has the elements of pre-disaster phase such as prevention, mitigation, preparedness and capacity building. The SDMA and DDMA in the State were created on 1st June 2007 and these authorities would bring out a qualitative change in dealing with disaster in the State.

This District Disaster Management Plan for Chamba district is an essential part of the Disaster Management Act which will there after take care all the disaster risk reduction and disaster management issues in the district.

Contents

Sr. No.	Title	Page No.
	Introduction	1
1	Content	2
2	Abbreviations	3
3	Objectives of District Disaster Management Plan	5
4	Chapter 1: Chamba District- An Introduction	6
5	Chapter 2: Hazard Profile and Risk Analysis of Chamba District	11
6	Revenue village and Sub-division wise Risk Analysis	20
7	Churah: 20 Salooni: 44 Bharmour: 65	
8	Bhattiyat: 80 Chamba: 112 Dalhousie: 134 Pangi: 158	
9	Chapter 3: Institutional Mechanism	183
10	Chapter 4: Mitigation Strategy for the District	192
11	Chapter 5: Response Plan	201
12	Chapter 6: Role of Key departments at District Level	212
13	Chapter 7: Relief, Recovery, Rehabilitation and Reconstruction Plan	244
14	Chapter 8: Linking with Development Plan	246
15	Chapter 9: Govt Organisation-NGO and Inter-Agency Coordination	253
16	Chapter 10: Financial Mechanism	257
17	Chapter 11: Knowledge Management	258
18	Chapter 12: Monitoring and Evaluation	259
	Annexure	260
19	Important Telephone Numbers - District Administration - Annexure - A	261
20	List of Health Care Facilities and contact numbers - Annexure B	264
21	Telephone Numbers of State EOC, NEOC, NDRF, Regional Response Centres, Army etc. - Annexure - C	269
22	Flow Chart for Disposal of Dead Bodies- Annexure - D	277
23	Guidelines for Disposal of Animal Carcass - Annexure - E	278
24	Emergency Support Functions (ESFs) - Annexure - F	281
25	Standard Operating Procedures for Departments to perform ESF - Annexure - G	294
26	First Information Report Format - Annexure - H	324
27	Damage and Needs Assessment Format - Annexure -I	325
28	Guidelines for Requisitioning Armed Forces - Annexure - J	332
29	UNISDR definitions for disaster management - Annexure K	338

Abbreviations

ARMVs	-	Accident Relief Medical Vans
BIS	-	Bureau of Indian Standards
CBOs	-	Community Based Organisations
CBRN	-	Chemical, Biological, Radiological and Nuclear
CSR	-	Corporate Social Responsibility
CRF	-	Calamity Relief Fund
CWC	-	Central Water Commission
DDMA	-	District Disaster Management Authority
DDMP	-	District Disaster Management Plan
DCMC	-	District Crisis Management Committee
DM	-	Disaster Management
DMC	-	Disaster Management Cell
EOC	-	Emergency Operation Centre
GIS	-	Geographic Information System
GSI	-	Geological Survey of India
GoI	-	Government of India
GPS	-	Global Positioning System
HPC	-	High Powered Committee
HIPA	-	Himachal Institute of Public Administration
IAY	-	Indira Awas Yojana
IAG	-	Inter Agency Coordination
ICIMOD	-	International Centre for Integrated Mountain Development
IRS	-	Incident Response System
ICT	-	Information and Communication Technology
IDRN	-	India Disaster Resource Network
IDKN	-	India Disaster Knowledge Network
IMD	-	Indian Meteorology Department
ITK	-	Indigenous Technical Knowledge
MFA	-	Medical First Aid
MHA	-	Ministry of Home Affairs
NCCF	-	National Calamity Contingency Fund
NDEM	-	National Database for Emergency Management
NDMA	-	National Disaster Management Authority
NDMF	-	National Disaster Mitigation Fun
NDRF	-	National Disaster Response Force
NEC	-	National Executive Committee
NGOs	-	Non-Governmental Organisations
NIDM	-	National Institute of Disaster Management
NSDI	-	National Spatial Data Infrastructure
NYKS	-	Nehru Yuva Kendra Sangathan
PPP	-	Public-Private Partnership
PRIs	-	Panchayati Raj Institutions

Objectives of District Disaster Management Plan (DDMP)

The objective behind the preparation of the District Disaster Management Plan is:

- To create a resilient and robust emergency response system within the administration.
- To mitigate impact of natural and human induced disasters through preparedness at District level.
- To provide effective support and resources to all the concerned individuals, groups and departments during disaster time.
- To assist the line departments, district administration, communities in developing compatible skills for disaster preparedness and management.
- To disseminate factual information in a timely, accurate and tactful manner while maintaining necessary confidentiality.
- To develop immediate and long-term support plans for vulnerable people in / during disasters.
- To create awareness among the people about hazard occurrence and increase their participation in preparedness, prevention, development, relief, rehabilitation and reconstruction process.
- To have response system in place to face any eventuality.
- To affect or elicit the least possible disruption to the normal life process when dealing with individuals in disaster.
- To ensure active participation by the Government Administration, Communities, NGOs, CBOs and Volunteers Task Forces at all levels making optional utilization of human and material resources at the time of disaster.

Chamba District Profile

The Chamba district is one of the twelve administrative districts of Himachal Pradesh. The Chamba district in the present form came in to existence on 1st November 1966 which is bounded on North-West by Jammu and Kashmir, on the North-East and East by Ladakh area of Jammu and Kashmir state and Lahaul and Bara-Bangal area of Himachal Pradesh, on the South-East and South by the District Kangra of Himachal Pradesh and Gurdaspur District of Punjab. The district is Situated between North latitude 32° 11' 30" and 33° 13' 06", and East longitude 75° 49' 00" and 77° 03' 30" . The North Eastern side of the district is surrounded by high altitude Himalayas with deep narrow valleys lying between ranges of varying elevations. The biggest river of the district is Ravi flowing from South-East to North-West entering the J&K. The district has experienced floods from the Ravi river in the past.

Administration:

The area of the district is 6,528 sq. km with Chamba as its Headquarters. It has been divided into administrative divisions as below:

Sub-Divisions	7	Chamba, Salooni, Dalhousie, Bhattiyat at Chowari, Churah, Bharmour, Pangi
Tehsils	7	Chamba, Dalhousie, Tissa, Chowari, Bharmour, Pangi, Salooni
Sub-Tehsils	4	Bhalei, Sihunta, Holi, Dharwala
Development Blocks	7	Chamba, Mehla, Tissa, Bhattiyat, Bharmour, Pangi, Salooni
Panchayats	270	
Villages	1591	

The Administration of the Chamba District

Deputy Commissioner

Addl. District Commissioner

Project Officer DRDA

Block Dev. Officer

RC Bharmour

RC Pangi

AC to Dy. Commissioner

SDMs

Distt. Revenue Officer

Tehsildar / Naib Tehsildar

Superintendent of Police

Addl. Supdt. of Police

Dy. Supdt. of Police

History of Chamba District

Chamba has an ancient history, which is inseparable from that of the surrounding district of Chamba. The earliest rulers were Kolian tribes. In the 2nd century BC the Khasas and Audumbaras were in power in the region. In the 4th century AD during the Gupta period, the Thakurs and Ranas ruled. From the 7th century, the Gurjara Pratiharas or the Rajput dynasty came into power.

The Muslims never invaded Chamba, though it had its occasional fights with the neighbouring states in the hills having similar cultural background. Thus, the damage to Chamba from these invasions was seldom serious and never beyond the possibility of repair. Even the powerful Mughals were kept at bay on account of difficulties involved in communications and long distances. Akbar tried to extend a loose control over the hill states including Chamba and attached fertile tracts of these states to the imperial territory south of Dhauladhar. Aurangzeb once issued orders to the Raja of Chamba Chatter Singh (1664-1694AD) to pull down the beautiful temples of Chamba. But instead the raja in clear defiance to the Mughal ruler placed gilded pinnacles on the temples. He was ordered to come down to Delhi to face the imperial wrath. But Aurangzeb himself had to leave for the Deccan from where he could not disentangle till the end of his life. On the whole, the northern India experienced comparatively peaceful condition during the Mughal regime Raja Prithvi Singh (1641-1664 AD), a handsome and a gallant knight was favourite of Shahjahan and visited the imperial court many times. He introduced the Mughal style of court life including Mughal-Rajput art and architecture in Chamba.

By the last quarter of 18th century the Sikhs forced the hill states to pay tribute to them. Maharaja Ranjit Singh systematically deposed the hill princes including the more powerful Kangra ruler Sansar Chand Katoch but spared Chamba in lieu of the services Wazir Nathu (of Chamba) had rendered him on two occasions. In 1809 A.D. the Wazir had made himself useful to the Maharaja by negotiating his agreement with Raja Sansar Chand Katoch, of Kangra. Again in A.D.1817 he had saved Ranjit Singh's life by offering his horse at a critical moment during former's winter campaign in Kashmir. After Ranjit Singh's death Chamba became un-protected and was drawn into the vortex of the disintegration of the Sikh Kingdom. The Sikh army invaded the British territory in A.D. 1845 and the troops of Sikh army, which were stationed in Chamba, were withdrawn. When Sikhs were defeated it was decided to merge Chamba in Jammu and Kashmir but on account of the timely intervention of Wazir Bagha (of Chamba) it was taken under the British control and subjected to the annual tribute of 12,000 rupees. The Raja's who saw something of British hegemony were Sri Singh, Gopal Singh, Sham Singh, Bhuri Singh, Ram Singh and Laxman Singh. Their relations with the British political officers seem to be cordial and Chamba witnessed many reforms.

On 15th April 1948 merging three principal states formed A.D. Himachal. Chamba, Mandi-Suket, Sirmour and all the other state falling in Shimla hills.

Before Raja Sahilla Varman came on the scene the Chamba region was divided into bits and pieces of territory called Rahnus occupied by numerous Ranas and petty Chieftains who carried on relentless warfare with each other. Raja Sahilla Varman subjugated the Ranas and unified the territory. Rajas, therefore, for better administration divided Chamba into five zones known as Mandlas. These Mandlas were later renamed as Wizarats. This fivefold division of Chamba region continues till today. The Wizarats are now called Tehsils. These are Bharmour, Chamba, Bhattiyat, Churah and Pangi.

Climate and Rainfall

The town of Chamba is located at the junction of Ravi River and its tributary, the Sal River, with the Shah Madar hill forming the backdrop on its eastern side. The Ravi flows in east-west direction forming deep canyons. During the spring and summer months, the levels of the river rise significantly from snow melt and pose a flooding risk. Record levels were experienced in early July 2005, when the National Hydroelectric Power Corporation was forced to shut down the power generation on its 300-MW Chamera Power Station.

Located on the right bank of the Ravi river valley, built on successive flat terraces, the town is bounded topographically by the Dhauladhar and Zanskar ranges, south of the inner Himalayas. Chamba, despite its hill location, is well connected by road to the rest of the state and country, including Shimla, Delhi and Chandigarh along several routes. The nearest broad gauge railway stations are at Chakki Bank (Pathankot Cantt) and Pathankot, the latter of which is 125 kilometres (75 mi) away by road.

The temperatures in summer vary between 38 °C (100 °F) and 15 °C (59 °F) and in winter: 15 °C (59 °F) and 0 °C (32 °F). The maximum temperature recorded in summer is 39 °C (102 °F) and the minimum temperature in winter is -1 °C (30 °F). Climatically March to June is said to be the best period to visit Chamba, which is a well-known hill station. The average annual rainfall in the town is 785.84 millimetres (30.939 in).

Geomorphology and Soils

Chamba district presents an intricate mosaic of mountain ranges, hills and valleys. It is primarily a hilly district with altitudes ranging from 600 m amsl to 6400 m amsl. Physiographically the area forms part of middle Himalayas with high peaks ranging in height from 3000 to 6000 m amsl. It is a region of complex folding, which has undergone many orogenesis. There are many fault lines in the district. The topography of the area is rugged with high mountains and deep dissected by river Ravi and its tributaries. Physiographically the district can be divided into two units-viz. (i) high hills, which cover almost entire district, (ii) few valley fills. Three types of soils are observed in the district they are 1. Sandy Loam, 2. Loam, and 3. Sandy Clay Loam.

Demographic Details

Away from the urban centre, the tribal people of Chamba are divided into two major groups; the Gujjars and the Gaddis. The Gujjars, mainly nomads, came to Chamba across the state border from Kashmir along the trade routes. They belong to nomadic herdsmen of the Islamic community, and travel to lowland Punjab in the autumn with their livestock to avoid the harsh winter of the Chamba hills. Their features are middle-eastern and have a distinct language and culture aloof from the main town. The administrative language is Hindi, the local language of Pahari, and Himachali is common language spoken by inhabitants.

The Gaddis comprise several ethnic groups; namely the Brahmans, Rajputs, Thakkurs, Rathis and the Khattris, who form the majority. They are agricultural peoples, and the name "Gaddi" means "shepherd". They mainly inhabit an area of the Chamba district in the Dhauladhar mountains, known as Brahmaur Wazarat or "Gadaran", located between Chamba and Kangra. "Gadar" means sheep, so their land is informally referred to as "Gadaran", literally meaning "sheep country". They are believed to have come to Chamba in the 10th century, although an influx of Gaddi people migrated to Chamba from Lahore in the 18th century, during the Mughal Empire. They are said to practice animism combined with the worship of Lord Siva.

Demographic Profile of the District

Description	2011	2001
Actual Population	519,080	460,887
Male	261,320	235,218
Female	257,760	225,669
Population Growth	12.63%	17.19%
Area Sq. Km	6,522	6,522
Density/km2	80	71
Proportion to Himachal Pradesh Population	7.56%	7.58%
Sex Ratio (Per 1000)	986	959
Child Sex Ratio (0-6 Age)	953	955
Average Literacy	72.17	62.91
Male Literacy	82.59	76.41
Female Literacy	61.67	48.85
Total Child Population (0-6 Age)	70,359	69,579
Male Population (0-6 Age)	36,024	35,594
Female Population (0-6 Age)	34,335	33,985
Literates	323,842	246,169
Male Literates	186,064	152,533
Female Literates	137,778	93,636
Child Proportion (0-6 Age)	13.55%	15.10%
Boys Proportion (0-6 Age)	13.79%	15.13%
Girls Proportion (0-6 Age)	13.32%	15.06%

Demographic Profile of the district as Urban and Rural:

Description	Rural	Urban
Population (%)	93.04 %	6.96 %
Total Population	482,972	36,108
Male Population	241,963	19,357
Female Population	241,009	16,751
Sex Ratio	996	865
Child Sex Ratio (0-6)	955	924
Child Population (0-6)	67,015	3,344
Male Child(0-6)	34,286	1,738
Female Child(0-6)	32,729	1,606
Child Percentage (0-6)	13.88 %	9.26 %
Male Child Percentage	14.17 %	8.98 %
Female Child Percentage	13.58 %	9.59 %
Literates	293,683	30,159
Male Literates	169,271	16,793
Female Literates	124,412	13,366
Average Literacy	70.60 %	92.05 %
Male Literacy	81.51 %	95.31 %
Female Literacy	59.73 %	88.25 %

Chapter - 2

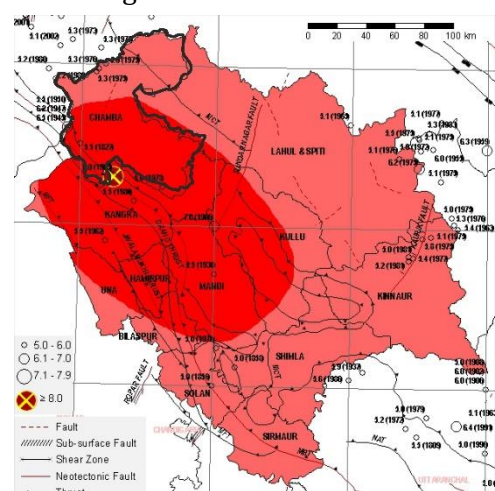
Hazard Profile and Risk Analysis of Chamba District

Chamba is the most north-western district of Himachal Pradesh. It is mountainous and rural, with 90% of its population living in villages. It is part of the Dhauladhar Range in the Himalaya consists of the middle of Himalayas, with the heights of the mountains ranging from 600 meters to 6500 meters above sea level. Chamba district presents an intricate mosaic of mountain ranges, hills and valleys. Physiographically the area forms part of middle Himalayas with high peaks ranging in height from 3000 to 6000 m amsl. It is a region of complex folding, which has under gone many orogeneses. The topography of the area is rugged with high mountains and deep dissected by river Ravi and its tributaries. Physiographically the district can be divided in to two units-viz. (i) high hills, which cover almost entire district, (ii) few valley fills. Most of the district is made up of unconsolidated material which is highly susceptible to erosion and is loose in nature. The region is fed by numerous perennial rivers which originate in the glaciers and supply water to the plains throughout the year. Besides that there are numerous seasonal rivers as well which drain into these rivers. Having a mountainous topography, this area is also prone to the incidents of cloud burst and flash flood. The hills across the district have been scarred by landslides which are triggered due to excessive rainfall. As has been seen in other parts of the state, landslides can wipe out entire villages as well as lead to blocking and cutting off of settlements for days from the rest of the state. Due to loose and unconsolidated material any kind of shaking can also trigger landslides or rock falls which also pose a threat to the district.

The district sits in the heart of Himalayas and is likely to be affected by earthquakes. Himalayas is the youngest mountains and are still growing. The area is home to numerous faults and has been affected by numerous shallow to deep earthquakes over the past few decades.

The district has a rugged topography and not all the places are habitable. The population is more in slopes, and due to this reason communities are more vulnerable to certain hazards. Since 90% of population lives in rural setting the kind of houses and structures are not designed to withstand landslide, earthquakes and flash floods. The houses are built to minimise the extreme minimum temperature and so many a time compromised with the structural safety and the communities do not have the technical knowledge for developing and constructing houses which can withstand such hazards and in turn minimize the risk.

Earthquakes: The entire district of Chamba falls under Seismic Zone IV and V as per the Seismic Zoning Map of India (IS Code: 1893:2002) which makes it likely to be affected by earthquake shaking of intensity VIII and above. The Main Boundary Thrust (MBT) fault passes just below the district and this is the continuation of the same fault which caused the 1905 Kangra earthquake. There are also several smaller faults that can also generate earthquakes of high intensities within Chamba district.



Impact of earthquakes felt in Himachal Pradesh in past 100 years			
Date	Locations affected	Magnitude Intensity /	Damage
4 April,1905	Kangra	Magnitude 8.0	Approx. 19,800 people died in Kangra District.
28 February, 1906	Shimla	Magnitude 6.5	26 people died, 45 severely injured
19 January,1975	Kinnaur	Magnitude 6.8	60 people died, 2000 dwellings housing devastated
26 April, 1986	Dharamsala	Magnitude 5.5	6 people died, Extensive damage to buildings
April, 1994	Chamba	Magnitude 4.5	Area at risk was Chamba town
24 March, 1995	Chamba	Magnitude 4.9	Fearsome shaking, More than 70 percent houses faced cracks
July, 1997	Sunder Nagar	Magnitude 5.0	Some part of Sunder Nagar affected
21 Aug, 2014	Chamba	Magnitude 4.9	No damage reported

Hazard Profile

Earthquake

Past History : As mentioned in the chart above many earthquakes had happened affecting the district developing cracks and causing damage to the houses although there is no human casualty in the last 100 years after the Kangra earthquake.

Frequency : Likely

Impact : On buildings and other infrastructure of whole district.

Vulnerability : Looking at the materials and poor technology used for housing, the poor socio-economic condition of the people the district is highly vulnerable from earthquake hazard. The elderly, women, PWD and children are more vulnerable.

Magnitude : As per zone IV and V the district may feel shaking above VIII. There is need of preparedness for the highest level of destruction in the district.

Responsible factors: Non complying the building construction bye laws and lack of knowledge of earthquake resistance building construction, lack of good construction practices among masons, poverty/low economic standards, apathy, location closure to slopes, belief, lack of infrastructural facilities, inaccessible places etc.

Likely damage : Very high damage can occur in the district due to its position near the tectonic fault line. The poor building construct may be another reason.
Life : Very high
Property : Very high
Others : Loss of occupation and tourism

Heavy Rainfall and Cloudburst:

There is always a probability of heavy rainfall in the mountainous regions due to cloud overlapping and orographic effect of the cloud. As whole of Chamba is facing the plains of the north India so the cloud get accumulated in the hill top and as a result rains heavily during monsoon season.

Past History : Yes, every year
Frequency : Very high during monsoon season
Impact : housing, landslide, agriculture, horticulture, flash flood, community.
Vulnerability : Whole district, according to the survey report all sub-divisions have ranked heavy rain as one of the major hazard for the villages.
Magnitude : High damage in monsoon period
Likely damage : Every year there are incidences.
Vulnerable Population : Community living in old enough and not constructed according to building bye laws, construction on the steep slope, mud and stone buildings, roof without slope are very vulnerable.

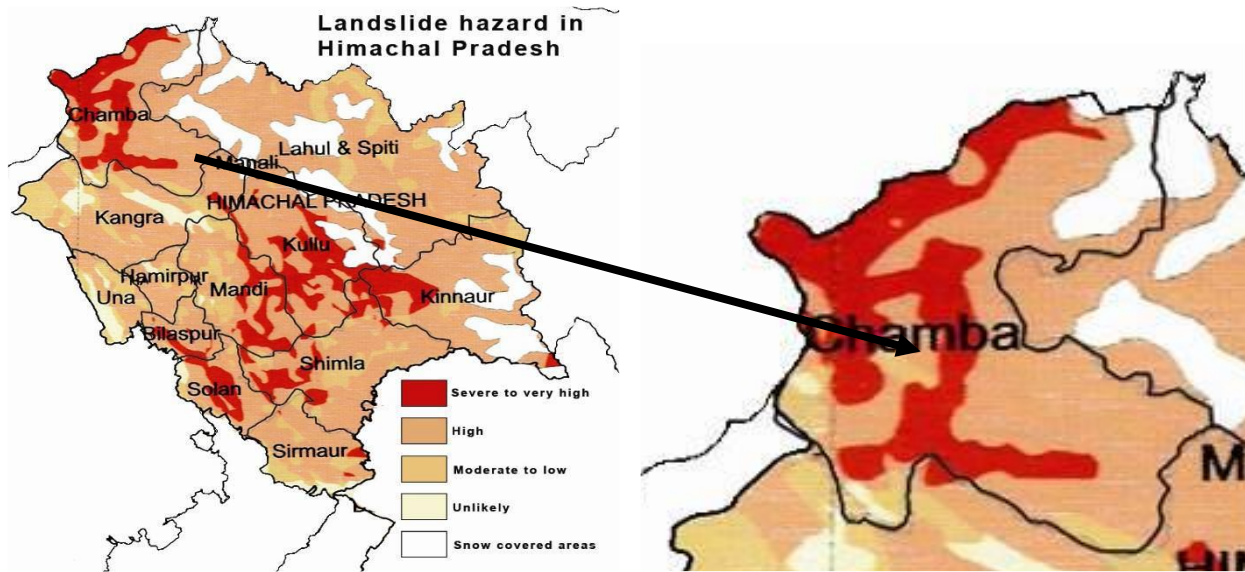
Responsible factors: The rainfall happens due to the monsoon clouds from the south-west, but due to the hilly region there is effect of orographic rainfall and also sometime two clouds gets overlap causing very heavy rain in a particular place for an hour or so, this type of rainfall is also known as cloudburst.

Landslides

Due to the mountainous terrain, several parts of the districts are prone to landslides. As per the landslide zoning map of North India (Vulnerability Atlas, BMTPC 2007), almost the entire district has a moderate to severe risk of landslides. There is also the possibility of landslides triggered by severe earthquakes with the possible loss of life and also blockage of important roads.

Past History : Yes (Monsoon season)
Frequency : very prominent
Impact : Roads, water and electricity supply system household, agricultural field and village.
Vulnerable population : Local community and tourist on road. All over the district
Likely damage: Very high in terms of financial loss
Life : minimal.

Responsible factors for: Heavy rainfall triggers more landslide, fragile soil condition, human encroachment, road construction, mining, toe removal, natural erosion, etc.



Landslide Prone Areas of Himachal Pradesh (Sq. Kms)

District	Sever to very High	High	Moderate to Low	Unlikely	Total Area
Bilaspur	216	842	83	1	1142
Chamba	2120	3829	351	70	6370
Hamirpur	0	851	204	45	1100
Kangra	123	3698	1233	557	5611
Kinnaur	868	4956	498	0	6322
Kullu	1820	3512	65	3	5401
Lahaul & Spiti	127	11637	1825	2	13591
Mandi	968	1978	826	98	3870
Shimla	893	3345	767	14	5019
Sirmaur	95	1805	614	228	2742
Solan	556	1118	157	79	1910
Una	2	678	517	311	1508
Total	7788	38249	7140	1408	54586
%age	14.27	70.07	13.08	2.58	

High Winds

The entire district of Chamba is prone to high winds as per the Vulnerability Atlas of India 2007. According to the data analysis from the Mohals and sub-divisions all parts of the district has suffered from heavy wind. Most of the population is rural and depend on agriculture which gets affected by hail and strong wind causing monetary losses.



Past History	:	Yes
Frequency	:	very prominent
Impact	:	Houses, agricultural field and village.
Vulnerable population	:	Local community
Likely damage	:	property, housing, electricity pole and agricultural fields.
Life	:	minimal.

On the basis of above analysis the overall vulnerability of the district is very high. The figure below which the HP State Council for Environment, Science and Technology has compiled for the State shows Chamba to be very high vulnerable district for hazard susceptibility.

Heavy snow fall:

Due to western disturbances heavy snowfall happens in the winter season. All though the entire district is vulnerable from heavy snowfall yet the villages in the high mountains in the Bharmour, Churah and Pangi sub-division are highly vulnerable from heavy snowfall. Snow fall is an annual winter phenomenon but in certain years the amount of snowfall increases beyond normal limit causing disruption of life and property.

Hazard Profile

Past history	:	In some winters like there was heavy snowfall in 2015
Frequency	:	Medium
Impact	:	Local poor housing, agriculture, horticulture, transportation and domestic animals
Vulnerable Population	:	Local community, travellers, tourist, farmers, administration, etc.

Responsible factors: Heavy snow fall happens due to western disturbances cloud coming from the north-western side and weather anomaly.

Drought hazard

Drought is a long period with no rain or with much less rainfall than normal for a given area. It can set in due to deficiency of rain or due to falling groundwater level over a long period of time. It is a slow process and can take few from days to few months during which it tend to affect the population in different ways by causing depletion of water and affecting the agriculture. In the Himalayan belt of India the occurrence of drought has increased over a period of time and a major reason for this is climate change. Another reason that is being observed is due to increase in human activities and over exploitation of natural resources such as groundwater and deforestation.

The district was affected by drought in the Bharmour sub-division affecting the horticulture.

Hazard Profile:

Past history : Yes 2014
Frequency : Likely.
Impact : Mainly on horticulture
Vulnerable Population : Community

Responsible factors for : Lack of rain water harvesting culture, lack of reservoirs/check dams for conserving water, poverty, poor economic standards, apathy, belief, dependence upon nature/rain, lack of infrastructural facilities/knowledge etc.

Floods

Although the Ravi, Chenab and Beas rivers have passed through the district, but Ravi is the main river considering its influence on the large population in the watershed. There are many other nallas fetching the big rivers.

Past History : Annual but not major
Frequency : Medium (During monsoon season)
Impact : Villages near the river bank (flood plain areas),
Vulnerability : Villages on the bank of the rivers

Responsible factors for damage : Over flowing of rivers, sudden gradient change of the rivers, and encroachment of the river flood plains. Heavy monsoon rainfall and subsequently releasing of water from dams.

Forest fires:

Forest fire is a major cause of degradation of forest. It is estimated that about 90 percent of the forest fires are caused due to human error. Every year there are incidents of forest fire which may go on for days as many times these tend to happen very deep inside the forest where fire tenders are unable to reach. The rural population of the district depends on forests for various reasons as it tend to provide fire wood, wood, fruits, herbs etc to the people which they collect and sell as well as use for their own sustenance. Many times these fires are caused by the locals due to their carelessness and sometimes due to vested interest of some people as forest fire will lead to clearing of land for various uses. These fires are common in the summer season as the heat and the wind condition help spreading the fire rapidly. However, such fires have not spread to human habitations so far.

Hazard Profile

Past History : Annual
Frequency : Low
Impact : Household and the forest resources
Vulnerable population : community living near forest areas.
Likely damage : Crops, forest resources, housing
Life : Minimal

Responsible factors: Lack of awareness about how the forest fire starts like- throwing cigarette buds, lighting fire inside forest for picnic purpose, lightening, etc.

Fire:

Fire can happen anytime anywhere without any warning. Due to the use of wood in the buildings the vulnerability from fire hazards of housing has increased many times.

Hazard Profile

Past history : Everyday hazard
 Frequency : Low
 Impact : Local community and administration
 Vulnerable Population : Local community, administration, hotels, restaurants, temples.
 Recently, there was a fire incident in the main Vishnu temple in Chamba.

Responsible factors: The winter is very cold and community use fire inside home to keep warm which may lead to big fire, electric short circuit, wooden buildings, use of diya, etc.

Fire and rescue incidences responded by Chamba Fire Station

Year	Fire	Rescue
2010	32	21
2011	50	32
2012	44	39
2013	45	23
2014	48	16

Rock fall:

Due to the mountainous region there is high to medium rock fall hazard risk in the district. The survey has found that the Bharmour sub-division is particularly vulnerable to rock fall.

Hazard Profile

Past history : Everyday hazard
 Frequency : Medium
 Impact : Local community, vehicle, transportation and domestic animals
 Vulnerable Population : Local community, travellers, tourist, people working on roads, houses near the mountain slope.

Responsible factors: Rock fall is triggered by wind, animal, road construction cutting, human, etc. Sometime it may be triggered by heavy rainfall also.

Road Accident:

The National Highway NH-154A has passed through the district from Pathankot to Bharmour and there are several State Highways making the district well connected to other parts of the state and also with neighbouring states. But in the meantime due to the sharp curves, cliffs, and less width of the roads the district has been affected by highest number of road accidents.

Hazard Profile

Past history : Everyday hazard
 Frequency : Medium
 Impact : Local community/travellers/tourist etc.
 Vulnerable Population : Local community, young generation

Responsible factors: High terrain and typical topography of the roads, narrow road, sharp curves, rash and drunken driving also plays a destructive role.

Falling from Cliff:

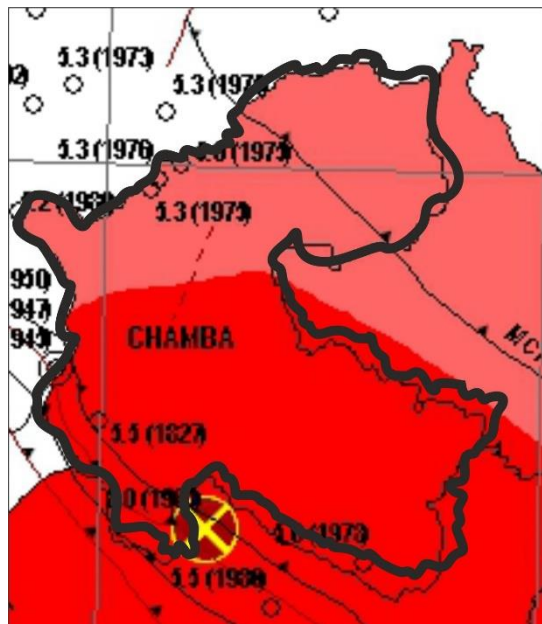
Past history : Yes
Frequency : Low, specially
Impact : Village community
Vulnerable Population : Women going for grass collection, children going with domestic animals

Epidemic:-

Past history : Yes, Rubella
Frequency : Very low
Impact : Community.
Vulnerable population : All
Likely damage : NIL
Life : Very few

Overall Vulnerability of the Chamba District:

Elements at Risk	Degree of Vulnerability to Various Hazard								
	Earth quake	Land slide	Heavy Rain	Rock fall	Flash flood	Forest Fires	House hold Fires	Dam Fail ure	Road Accide nts
Community	Very High	Moderate	Very High	Low	High	Medium	Very High	Very High	High
Infrastructure	Very High	Very High	Very High	Medium	High	Medium	Low	Very High	Low
Houses	Very High	Very High	Very High	Low	Medium	Medium	Very High	High	Nil
Social Sector	Very High	Low	Moderate	Low	Medium	Low	Very High	Low	High
Livelihood Sector	Very High	Low	High	Low	High	Medium	High	High	Medium
Environment	Low	High	Medium	Medium	Medium	Very High	Medium	Very High	Low



Earthquake Hazard Map of Chamba

Hazard Vulnerability Capacity and Risk Analysis of the District

A revenue village (mohal) wise hazard vulnerability and capacity assessment was done to find out the risk of the villages in the respective sub-divisions. Based on the data collected a sub-division wise profile has been created. This profile shows the risk of villages in each sub-division.

Churah Sub-division:

The villages in the sub-division have witnessed heavy rain, landslide, cloudburst, forest fire, rock fall, flood, etc. As a whole 90% of population lives in the villages and main occupation is cultivation with a few service personnel. There are also considerably a large number of unemployed youths in the villages. The houses are semi-pukka or kutcha made of bricks and stone. These all factors have increased the vulnerability of the community from earthquake and heavy rain types of hazards which can damage the housing. Moreover, other hazards will also crash the economic condition living the population in a situation from where bouncing back to normal life may be very difficult.

In some of the villages the number of children under 14 and elderly people above 60 are higher making the demographic pattern very vulnerable. The transportation system to the villages are on an average not good the proximity to the health facility higher and if it is near also the condition of the health centres are not good with no doctors and nurses.

Every villages has drinking water, electricity and toilet facility. They also have some minimum tools and equipment to do an initial search and rescue if some emergency happens. But, the poor road condition and the landslides may hamper the relief in many places. Overall the villages have medium to very high risk based on their proximity to the sub-divisional office, socio-economic condition, vulnerability of housing and type of hazards.

Department Hazard Risk Analysis

The departments are situated in the Churah sub-division which is 72 kms away from district headquarter Chamba and 422 kms away from Shimla. The sub-division has suffered from high hazards of heavy rain, landslide, cloudburst, many times in the past. Rock fall, earthquake and flood hazards are also considerable for the subdivision. The present surge capacity of the departments have been analysed as below.

Hazard Risk Analysis: During heavy rain fall 2 persons died at Bhanjraru, 1 person died at Tarella due to landslide, 27 persons died due to road accident in road accident and 10 persons died due to falling from cliff.

There are 4 bridges on the way to Chamba and the prominent landslide areas are Chanju, Pangola, Sarela, Shukrali, Dhangu, Junas, Gawari, Tapa, Bargota,

Police department

Head of the Department: SDPO Salooni

Contact number: 01896233288

Second in command: SI Addl Babu Ram

Contact number: 9459094316

The department has not enough staff as required to response to a disaster. Present staff 37 required 8.

District Disaster Management Authority, Chamba (HP)

Staff trained in Disaster Management	HC Hamid Mohammad C Ajay Kumar C Raj Kumar C Nishmal Singh C Pushpa Raj	9418876786 9805920122 9816496792 9418047015 9816616580	
Trainer within the department	HC Hamid Mohmmad HC Hakkam Singh	9418876786 8626811338	
Technical staff who are well versed with the department's work	ASI Pawan Kumar HHC Iswar Dutt	9418662621 9418219953	
Equipment, tools, vehicles, etc can be used in a disaster response situation			
Item	Quantity	In-charge	Contact number
Balero Camper	1	Driver Chaman Singh	8894413510
Wireless Radio	1	MHC Mahinder Singh	9418385430

Hazard risk analysis of Health department

Head of the Department: BMO

Contact number: 9418077755

Second in command: SMO

Contact number: 9418050779

The department has not enough staff as required to response to a disaster. Present staff 25 required 30.

They call staff through mobile and telephone to response to a disaster. No wireless system is present.

Staff trained in Disaster Management	Dr. Rishi Puri Bhugrimal Pawan Kumar Harinder Singh	9736590288 9418426600 9418330704 9805032030	
Trainer within the department	Dr. Rishi Puri	9736590288	
Technical staff who are well versed with the department's work	Harinder Singh	9805032030	
Equipment, tools, vehicles, etc can be used in a disaster response situation			
Item	Quantity	In-charge	Contact number
Wheel Chair	4	SMO	9418050779
Stretcher	3		
First Aid			
Emergency Kit			

District Disaster Management Authority, Chamba (HP)

HPSEB department

Head of the Department: AE

Contact number: 9418216620

Second in command: Junior Engineer

Contact number: 9418223696

The department has not enough staff as required to response to a disaster. Present staff 56 required 39.

They call staff through mobile and telephone to response to a disaster. No wireless system is present.

Staff trained in Disaster Management	Roop Singh Line Man Baljeet Singh Line Man Desh Raj Line Man Samesh Deen Line Man Guljar Mohab T/M	9459067066 8894655234 9459077162 9805798309 9805062974	
Trainer within the department	Er. BK Dogra Er. DC Gupta Er. Praveen Singh Er. Gopal Singh Er. Yog Raj	9418216620 9418223696 9736267575 9805385414 9418461136	
Technical staff who are well versed with the department's work	Roop Singh Line Man Samesh Deen Line Man Guljar MohabT/M	9459067066 9805798309 9805062974	
Equipment, tools, vehicles, etc can be used in a disaster response situation			
Item	Quantity	In-charge	Contact number
Chain Plug Block	2	Junior Engineer	418223696
Triffer	2		
Ropes	As per original		
Ladders	5		

PWD department

Head of the Department: AE

Contact number: 9816405194

Second in command: Senior Asst.

Contact number: 9805645593

The department has enough staff as required to response to a disaster. Present staff 414.

In the last ten year the department has done a massive work in terms of response to heavy rainfall in entire sub-division and 5% area work in response to landslide and 5% area work in terms of rock fall hazards. In winter entire subdivision suffers from heavy snowfall and the department has responded. In terms of manpower use during the snowfall and heavy raining.

Prominent Landslide areas: Near Chanju Bridge, near Pangola Nalla, at Sonella Nalla.

The department has enough good vehicles to respond to any disaster situation.

District Disaster Management Authority, Chamba (HP)

There are three motor able roads which connect to the sub-division.

- i) PBCT Road
- ii) TSJ Road
- iii) Tissa Setyas road

They call staff through mobile and telephone to response to a disaster. No wireless system is present.

Staff trained in Disaster Management	No staff trained		
Trainer within the department	No trainer		
Technical staff who are well versed with the department's work	Ajay Kumar Praveen Kumar Shailesh Kumar Massom Khan		
Equipment, tools, vehicles, etc can be used in a disaster response situation			
Item	Quantity	In-charge	Contact number
Tipper	1	Chiknoo	9816379066
Tipper	1	Zakir	9418814886
JCB	1	Ved Lal	9857407456
Utility	1	Jagdish Chand	9736194963

Forest department

Head of the Department: RO Tissa

Contact number: 9805705035

Second in command: BO Tissa

Contact number: 9805904523

The department has not enough staff as required to response to a disaster. Present staff 16 required 18

In the last 10 years the department has responded to 8 forest fires. They managed the fire with department people and community help. They also responded to heavy snowfall clearance.

They call staff through mobile and telephone to response to a disaster. No wireless system is present.

Staff trained in Disaster Management	No one ever trained	
Trainer within the department	No trainer	
Technical staff who are well versed with the department's work	Mahmadee Jasrotis, BO Tissa	9805904523

District Disaster Management Authority, Chamba (HP)

Equipment, tools, vehicles, etc can be used in a disaster response situation			
Item	Quantity	In-charge	Contact number
No equipment to fight forest fire.			

I&PH department

Head of the Department: Assistant Engineer

Contact number: 9459779817

Second in command: Junior Engineer

Contact number: 9459532172

The department has enough staff as required to response to a disaster but yet need more staff for better response. Present staff 175 required 10.

Equipment, tools, vehicles, etc can be used in a disaster response situation			
Item	Quantity	In-charge	Contact number
GI Pipes ½" to 3"	15 mmt	Junior Engineer	9459532172

Hazard risk analysis of Revenue department

Head of the Department: SDO (C)

Contact number: 9805592001, 9816387781

Second in command: Tehsildar

Contact number: 9418002986

The department has not enough staff as required to response to a disaster. Present staff 56 required 32.

They call staff through mobile and telephone to response to a disaster. No wireless system is present.

Staff trained in Disaster Management	Laxman Singh Ashwani Kumar Bhupend Singh	9418462451 9418222128 9805593331	
Trainer within the department	NA		
Technical staff who are well versed with the department's work	NA		
Equipment, tools, vehicles, etc can be used in a disaster response situation			
Item	Quantity	In-charge	Contact number
Tarpel	10	Laxman Singh	9418462451
Tent	5		
Blanket	10		
Rope Ladder	1		

District Disaster Management Authority, Chamba (HP)

Fire extinguisher	2		
Stretcher	5		
Modernised Cutter	1		
Waky talky	2		
First Aid Box	3		
Life Tube	3		
Life Jacket	3		
Search Light	3		
Rope	100 mts		

Behnota Revenue Village

Head of the Mohal: Balvinder Singh

Contact number: 9857114089

Total population: 543

Total population under age 14 years 110 above age 60 years: 50

Total female population: 276 physically handicapped population: NA

Total male population 105 total female population 95 between ages 18-50 years.

Hazard analysis: The village has suffered medium hazards of heavy rain, landslide, cloudburst, forest fire many times in the past. Rock fall, earthquake, and flood are also considerable for this village.

Vulnerability analysis: Most of the houses in the village are single storey with Semi-pukka, brick constructions making it very vulnerable during earthquake and heavy rain. Moreover as 80% of the households are engaged in marginal farming with very less income has turned the village more susceptible to disasters.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village are highly landslide prone area near RF Konhota and has 3 bridges which may be damaged during strike of a hazard like earthquake.

Health centre/police station/fire station far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time.

Capacity analysis:

The drinking water is situated within village and outside village potable quality water.

All the villagers have housing, electricity and access to toilet.

Open area to be used for relief camps and medical aid:

DDMP: Chamba

District Disaster Management Authority, Chamba (HP)

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1	800	Govt			
School	1			Yes	Yes	3

The space may not be enough for the whole village to accommodate.

Skilled human resources		
Persons trained/ experienced in Camp Management	Name: Kamal Dev Rumi Ram	Contact No. 9625170740
Carpenters	Name: Lobhi Ram Lobhi Ram S/O Khebi Ram	
Masons	Name: Prem Lal	
Ex-Indian Armed Forces	Name: Romi Ram	Contact No. 9625170740

Overall the village has very high risk to hazards considering its overall vulnerability and capacity.

Bharara Revenue Village

Head of the Mohal: Smt. Dhuponi, Smt Karan Devi

Contact number: 9418765925

Total population: 1296

Total population under age 14 years 333 above age 60 years: 198

Total female population: 640 physically handicapped population: NA

Total male population 337 total female population 320 between ages 18-50 years.

Vulnerability analysis: Most of the houses in the village are single/double storey with Kutcha/Semi-pukka constructions with bricks, stones making it very vulnerable during earthquake and heavy rain.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village are highly landslide prone in Pangla and Dodni and has 2 bridges which may be damaged during strike of a hazard like earthquake.

Health centre is in the village but police station/fire station far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time.

Capacity analysis:

The drinking water source is situated within village with enough potable quality water.

Upto 60% villagers have housing, 60% have electricity and access to toilet.

Health centre is in the village with a staff.

District Disaster Management Authority, Chamba (HP)

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1	8100				
School	3			Yes	No	No
Panchayat Ghar	1			No	No	No

The evacuation space may not be enough for the villagers.

Skilled human resources		
Carpenters	Name: Bhami Ram Chet Singh	Contact No. 9418765925
Masons	Name: Chatru	Contact No.

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Bhoads Revenue Village

Head of the Mohal: Karan Singh

Contact number: 9418447482

Total population: 460

Total population under age 14 years 103 above age 60 years: 20

Total female population: 228 physically handicapped population: nil

Total male population 108 total female population 97 between ages 18-50 years.

Hazard analysis: The village has suffered from heavy rain, heavy snowfall, rock fall, and landslide and road accident many times in the past. The mohal has experienced flash flood, flood and cloud burst also.

Capacity analysis:

The drinking water source of the village is from tap and spring which is situated within village with enough potable quality water.

All the villagers have housing, electricity and access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1		Govt			
School	1			Yes	Yes	Yes
Crop field	38		Pvt			

All villagers can be accommodated in the open spaces.

Houses can be used or converted as warehouse

House	Accessibility	Condition	Ownership
1	good	good	Govt school

Skilled human resources			
Persons trained/ experienced in Camp Management	Name: Karm Singh		Contact No. 9418447482
Carpenters	Name: Roop Lal		Contact No. 9805148974
Masons	Name: Jai Dayal		Contact No. 9805811710
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights		Hurricane Lamp	
Rope	Available	Ladder	Available
Saw	Available	Hammer	

Bhouga Revenue Village

Head of the Mohal: Suneela Devi

Contact number: NA

Total population: 428

Total population under age 14 years 37 above age 60 years: 21

Total female population: 218 physically handicapped population: 2

Total male population 170 total female population 176 between ages 18-50 years.

Hazard analysis: The village has suffered medium hazards of heavy rain, landslide, cloudburst, forest fire many times in the past. Rock fall, flash flood and flood are also considerable for this village.

Vulnerability analysis: Most of the houses in the village are single with semi-pukka brick constructions making it very vulnerable during earthquake and heavy rain. Moreover as 80% of the households are engaged in marginal farming with very less income has turned the village more susceptible to disasters.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village has 4 bridges which may be damaged during strike of a hazard like earthquake.

The transportation system of the village is good bus service.

Health centre/police station/fire station are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services are there. The village has no public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap/hand pump/spring which is situated within village/outside village/ far from the village.

All the villagers have housing, electricity and access to toilet.

The village has a school with 3 toilets, electricity and water where the evacuation can be done but may not be enough.

Overall the village has very high risk to hazards considering its overall vulnerability and capacity.

Chih Revenue Village

Head of the Mohal: Mrs. Piki Pradhan

Contact number: 9816535705

Total population: 528

Total population under age 14 years 125 above age 60 years: 63

Total female population: 268 physically handicapped population: 2

Total male population 179 total female population 161 between ages 18-50 years.

Hazard analysis: The village has suffered medium hazards of heavy rain, landslide, cloudburst, forest fire many times in the past. Rock fall, earthquake, road accident and flood are also considerable for this village.

Vulnerability analysis: Most of the houses in the village are single/double storey with Kutcha/Semi-pukka/Pukka constructions making it vulnerable considering the materials used during earthquake and heavy rain. Moreover as 80% of the households are engaged in marginal farming with very less income and only a few persons in service has turned the village more susceptible to disasters.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village has 6 bridges which may be damaged during strike of a hazard like earthquake.

Health centre/police station/fire station/veterinary are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap and spring which is situated within village with limited not good quality water.

All the villagers have housing and electricity less than 60% villagers have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	1	2600 sq. mt	Govt			
School	3		Govt	Yes	Yes	2
Crop Field	10	1.5 hector	Pvt			

The open space is enough for the villagers.

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Dhandodi Revenue Village

Head of the Mohal: Seeta Devi

Contact number: 9418909229

Total population: 200

Total population under age 14 years 38 above age 60 years: 18

Total female population: 79 physically handicapped population: 2

Total male population 78 total female population 79 between ages 18-50 years.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing, electricity and access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	1	1 Bigha				
Open ground	1	Bigha				
Crop Field	1	1 Bigha				

Open Space is enough for evacuation for the villagers.

Skilled human resources			
Carpenters	Name: Dogra		Contact No.
Masons	Name: Tek Chand Hari Singh		Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	2	Hurricane Lamp	5
Rope	2	Ladder	Nil
Helmets	Nil	Water tank	2
Saw	Nil	Hammer	4
Shovels	Nil	Pick Axe	18
Digging Bar	10	Food stock	Nil
First Aid Box	1		

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Dikriyund Revenue Village

Head of the Mohal: Rishkesh

Contact number: 9816221800

Total population: 583

Total population under age 14 years 70 above age 60 years: 42

Total female population: 301 physically handicapped population: 1

Total male population 230 total female population 210 between ages 18-50 years.

Hazard analysis: The village has suffered medium hazards of heavy rain and landslide many times in the past. Rock fall and flood are also considerable for this village.

Vulnerability analysis: Most of the houses in the village are single and double with semi-pukka constructions making it very vulnerable during earthquake and heavy rain. There are all types of occupants with average income has turned the village less susceptible to disasters.

Connectivity: The village is near to the sub-divisional from the sub-divisional head quarter making it less vulnerable to a disasters as they may be able to get the relief early.

The transportation system of the village is good with bus service.

Health centre, police station, and veterinary are near from the village which may create a help during relief after a disaster.

There is landline telephone service and mobile services are there. The village has public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with limited/very limited not good quality water.

All the villagers have housing, electricity and access to toilet. No mention of open space.

Overall the village has medium risk to hazards considering its overall vulnerability and capacity.

Galuwa Revenue Village

Head of the Mohal: Guddi Devi

Contact number: 9817840190

Total population: 212

Total population under age 14 years 55 above age 60 years: 30

Total female population: 110 physically handicapped population: 1

Total male population 88 total female population 79 between ages 18-50 years.

Vulnerability analysis: Most of the houses in the village are single/double/triple storey with Kutcha/Semi-pukka/Pukka constructions making it very vulnerable/less vulnerable during earthquake/flood/heavy rain. The village has all types of occupation making it average economic range village with medium coping capacity.

Connectivity: The village is near to the sub-divisional head quarter making it less vulnerable to a disasters as they may be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village has one bridges which may be damaged during strike of a hazard like earthquake.

The transportation system of the village is good bus service.

Health centre/police station /veterinary are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services are there. The village has public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with limited/very limited not good quality water.

All the villagers have housing, electricity and access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1	200	Govt			
School	2			Yes	No	4

The area is enough for the villagers.

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Jakhla Revenue Village

Head of the Mohal: Ram Dei

Contact number: NA

Total population: 749

Total population under age 14 years 202 above age 60 years: 120

Total female population: 364 physically handicapped population: 3

Total male population 160 total female population 140 between ages 18-50 years.

Hazard analysis: The village has suffered medium hazards of heavy rain, landslide, cloudburst, forest fire many times in the past. Rock fall and flood are also considerable for this village.

Vulnerability analysis: Most of the houses in the village are semi-pukka making it vulnerable during earthquake and heavy rain. Moreover as 80% of the households are engaged in marginal farming with very less income has turned the village more susceptible to disasters.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village are highly landslide prone near village Khalil and has 2 bridges which may be damaged during strike of a hazard like earthquake.

Health centre/police station/fire station far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services are there. The village has public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated far from the village with potable quality water.

All the villagers have housing, electricity and access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1	800	Panchayat			
School	1			Yes	Yes	2

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Kahlua Revenue Village

Head of the Mohal: Latif Mohmmad

Contact number: 9816579290

Total population: 497

Total population under age 14 years 222 above age 60 years: 25

Total female population: 240 physically handicapped population: Nil

Total male population 135 total female population 115 between ages 18-50 years.

Hazard analysis: The village has suffered medium hazards of Earthquake, heavy rain, landslide, cloudburst, forest fire many times in the past. Rock fall and flood are also considerable for this village.

Vulnerability analysis: Most of the houses in the village are double storey with Semi-pukka constructions making it very vulnerable during earthquake and heavy rain.

Connectivity: The village is near to the sub-divisional head quarter making it less vulnerable to a disasters/more vulnerable to a disasters as they may not be able to get the relief early. The village is connected with foot road and there is absence of good transportation linkage.

Capacity analysis:

The drinking water source of the village is from tap and spring which is situated within village with enough potable quality water.

All the villagers have housing, electricity and access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
School	1		Govt	Yes	Yes	2
Crop field	100	200 bigha	Pvt			

Open spaces are enough for the villagers to evacuate.

Houses can be used or converted as warehouse

House	Accessibility	Condition	Ownership
1	good	good	Govt school

Skilled human resources			
Persons trained/ experienced in Camp Management	Name: Mahboob	Contact No. 9816349010	
Carpenters	Name: Khair Mohammad	Contact No.	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights		Hurricane Lamp	
Rope	Available	Ladder	Available
Helmets		Water tank	Available
Saw	Available	Hammer	Available
Shovels	Available	Pick Axe	Nil
Digging Bar	Available	Water tank	Nil
First Aid Box	Available	Tent	Nil
Food stock	Available	Electric Generator	Nil

Overall the village has medium risk to hazards considering its overall vulnerability and capacity.

Kalyash Revenue Village

Head of the Mohal: Gajindra Singh

Contact number: 9816282234

Total population: 304

Total population under age 14 years 92 above age 60 years: 47

Total female population: 149 physically handicapped population: nil

Total male population 84 total female population 81 between ages 18-50 years.

Hazard analysis: The village has suffered medium hazards of Earthquake, heavy rain, landslide, cloudburst, forest fire many times in the past. Rock fall and flood are also considerable for this village.

Vulnerability analysis: Most of the houses in the village are single and double with Kutcha and Pukka constructions making it very vulnerable during earthquake and heavy rain depending on construction. Moreover as 60% of the households are engaged in marginal farming with very less income and a very few service personnel has turned the village more susceptible to disasters.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disasters as they may not be able to get the relief early. The relief distribution of

the village may get hampered as the roads leading to the village are highly landslide prone areas near Lunsar village and dam site baria and has 6 bridges which may be damaged during strike of a hazard like earthquake.

Health centre/police station/fire station/veterinary are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village, limited and not good quality water.

All the villagers have housing, electricity but less than 60% villagers have access to toilet.

Open area to be used for relief camps and medical aid is the Panchayat ground and the school in the village.

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Kiluala Revenue Village

Head of the Mohal: Hen Raj

Contact number: 8894649266

Total population: 342 Total population under age 14 years 102 above age 60 years: 50

Total female population: 162 physically handicapped population: Nil

Total male population 92 total female population 81 between ages 18-50 years.

Hazard analysis: Hazard analysis: The village has suffered medium hazards of Earthquake, heavy rain, landslide, cloudburst, forest fire many times in the past. Rock fall and flood are also considerable for this village.

Vulnerability analysis: Most of the houses in the village are single with Kutcha constructions making it very vulnerable during earthquake and heavy rain. Moreover as 80% of the households are engaged in marginal farming with very less income has turned the village more susceptible to disasters.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village is in bad condition and have to walk 3 kms. Sanla Nalla is the prominent landslide area making the road very vulnerable.

There is no bus service to the village.

Health centre, police station, fire station and veterinary are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with limited potable quality water.

Less than 80% villagers have housing, electricity and access to toilet.

The villagers need to go 2 Km to reach the nearest hospital through a kutchha road. The hospital has connected to water and electricity.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	1			Yes	Yes	3

The open area may not be enough for the village.

Skilled human resources			
Carpenters	Name: Tej Singh		Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Food stock	Available	Water tank	

Overall the village has very high risk to hazards considering its overall vulnerability and capacity.

Kunda Revenue Village

Head of the Mohal: Sain Lal

Contact number: NA

Total population: 548

Total population under age 14 years 108 above age 60 years: 68

Total female population: 293 physically handicapped population: 2

Total male population 211 total female population 146 between ages 18-50 years.

Hazard analysis: The village has suffered medium hazards of Earthquake, heavy rain, landslide, cloudburst, forest fire many times in the past. Rock fall and flood are also considerable for this village.

Vulnerability analysis: The village is far away from the sub-divisional head quarter making it more vulnerable to a disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village has three bridges which may be damaged during strike of a hazard like earthquake.

Health centre is 3 Kms away but other services are like police station/fire station/veterinary are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village enough/limited/very limited potable quality water. All the villagers have housing, electricity and access to toilet.

The villagers need to go 3 Km to reach the nearest health centre through a kutcha road.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1	400	Govt			
School	2			Yes	Yes	9
Community Hall	1					
Crop field		0.5 hector	Pvt			

The open space will be available for the evacuation of the villagers.

Skilled human resources		
Carpenters	Name: Tashi Ram Sanjiv Kumar	Contact No.
Masons	Name: Vashu Dev Bhabesh	Contact No.

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Ladhan Revenue Village

Head of the Mohal: Som Dial

Contact number: NA

Total population: 640

Total population under age 14 years 30 above age 60 years: 31

Total female population: 316 physically handicapped population: 6

Total male population 125 total female population 143 between ages 18-50 years.

Vulnerability analysis: Most of the houses in the village are single/double/triple storey with Kutcha/Semi-pukka/Pukka constructions making it vulnerable during earthquake and heavy rain. The village has all types of occupants making it less vulnerable.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village has 6 bridges which may be damaged during strike of a hazard like earthquake.

The transportation system of the village is good bus service.

Health centre and police station are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services are there. The village has public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing, electricity and access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	2	200 sq mts	Govt			
School	2			Yes	Yes	Yes
Crop Field	4	0.5 hector	Pvt			

The open space is enough for the villagers to evacuate.

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Narla Revenue Village

Head of the Mohal: Bhogi Lal

Contact number: 9625834026

Total population: 330

Total population under age 14 years 70 above age 60 years: 25

Total female population: 171 physically handicapped population: 3

Total male population 85 total female population 80 between ages 18-50 years.

Hazard analysis: The village has suffered medium hazards of heavy rain, landslide, cloudburst, forest fire many times in the past. Rock fall and flood are also considerable for this village.

Vulnerability analysis: Most of the houses in the village are single storey with semi-pukka constructions making it very vulnerable during earthquake /heavy rain. Moreover as 80% of the households are engaged in marginal farming with very less income has turned the village more susceptible to disasters.

Connectivity: The village is away from the sub-divisional head quarter making it vulnerable to a disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village are highly landslide prone areas like Dodni and has three bridges which may be damaged during strike of a hazard like earthquake.

Health centre/police station/fire station/veterinary are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from hand pump which is situated within village.

All the villagers have housing, electricity access to toilet.

The nearest hospital has one nurses and one other staff with connected to water and electricity.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	2	3200 1200	Govt			
School	2		Govt	Yes	Yes	6
Community Hall	1		Community	Yes	Yes	No

The evacuation places may be enough for the villagers.

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Madan Salancha Revenue Village

Head of the Mohal: Lal Chand

Contact number: 9816364608

Total population: 992

Total population under age 14 years 202 and above age 60 years: 100

Total female population: 502 physically handicapped population: 10

Total male population 350 total female population 330 between ages 18-50 years.

Hazard analysis: The village has suffered medium hazards of heavy rain, landslide, cloudburst, forest fire many times in the past. Rock fall, earthquake and flood are also considerable for this village.

Vulnerability analysis: Most of the houses in the village are single storey with Kutcha/Semi-pukka constructions making it very vulnerable during earthquake and heavy rain. The village has all types of occupants with average income making it medium coping capacity enabled.

Connectivity: The village is near to the sub-divisional head quarter making it less vulnerable to disasters as they may not be able to get the relief early.

The transportation system of the village is good bus service.

Health centre/police station /veterinary are near from the village which may create help during relief after a disaster.

There is landline telephone service and mobile services are there. The village has no public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough not good quality water.

All the villagers have housing, electricity and access to toilet.

The village has to go 2km to reach the nearest health centre.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1		Govt			
School	1		Govt	Yes	Yes	Yes

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Makkan Revenue Village

Head of the Mohal: Baldev

Contact number: NA

Total population: 609

Total population under age 14 years 190, above age 60 years: 81

Total female population: 295 physically handicapped population: 5

Total male population 224 total female population 220 between ages 18-50 years.

Hazard analysis: The village has suffered from cloudburst and flash flood in the recent past. There is low probability of earthquake.

Vulnerability analysis: Most of the villagers have semi-pukka vulnerable housing and households are engaged in marginal farming with very less income has turned the village more susceptible to disasters.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to disasters as they may not be able to get the relief early. The road Bhanjara to Sanwal is the lifeline for the village. The SDO is far away making it more vulnerable for after disaster relief.

Health centre, police station and fire station far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing, electricity and access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1	400	Govt			
School	2			Yes	Yes	Yes
Crop field	10	2000	Pvt			

All villagers can be accommodated in the open spaces.

The village doesn't have any equipment for SAR.

Overall the village has very high risk to hazards considering its overall vulnerability and capacity.

Malwas Revenue Village

Head of the Mohal: Beli Ram

Contact number: 9459454076

Total population: 218

Total population under age 14 years 25 above age 60 years: 08

Total female population: 103 physically handicapped population: nil

Total male population 70 total female population 58 between ages 18-50 years.

Hazard analysis: The village has suffered from heavy rain, rock fall and heavy snowfall many times in the past. It also has experienced forest fire in the past.

Capacity analysis:

The drinking water source of the village is from tap and spring which is situated within village enough potable quality water.

All the villagers have housing, electricity and access to toilet.

No health centre in the village.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq ft	Ownership	Water	Electricity	Toilet
Play ground	1	5000 sq ft	Govt			
School	1			yes	yes	yes

All villagers can accommodate in the open spaces.

Houses can be used or converted as warehouse

House	Accessibility	Condition	Ownership
1	good	good	school

Skilled human resources			
Persons trained/ experienced in Camp Management	Name: Paraj Ram		Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights		Hurricane Lamp	
Rope	Available	Ladder	Available
Helmets		Water tank	Available
Saw	Available	Hammer	Available

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Sarowa Revenue Village

Head of the Mohal: Surinder Kumar

Contact number: 8263902599

Total population: 563

Total population under age 14 years 150 above age 60 years: 55

Total female population: 273 physically handicapped population: NA

Total male population 190 total female population 170 between ages 18-50 years.

Hazard analysis: The village has suffered medium hazards of heavy rain, landslide, cloudburst, many times in the past. Rock fall, earthquake and flood are also considerable for this village.

Vulnerability analysis: Most of the houses in the village are single storey with Semi-pukka brick constructions making it very vulnerable during earthquake and heavy rain. Moreover as 80% of the households are engaged in marginal farming with very less income has turned the village more susceptible to disasters.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village are highly landslide prone in Sarwa Mala and has three bridges which may be damaged during strike of a hazard like earthquake.

Health centre/police station/fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village and far from the village with potable quality water.

All the villagers have housing, electricity and access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1	500	Govt			
School	1			Yes	No	3

Evacuation space may not be enough for the villagers.

Skilled human resources		
Carpenters	Name: Khubinand	Contact No.
Ex-Indian Armed Forces	Name: Jai Singh	Contact No.

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Thalli Revenue Village

Head of the Mohal: Dil Ram

Contact number: 9816196660

Total population: 752

Total population under age 14 years 240 above age 60 years: 133

Total female population: 371 physically handicapped population:

Total male population 196 total female population 189 between ages 18-50 years.

Hazard analysis: The village has suffered from heavy rain, landslide, heavy snow and high wind many times in the past. It is also affected sometime by rock fall, fire and road accident.

Vulnerability analysis: Most of the houses in the village are single storey with Semi-pukka constructions making it very vulnerable during earthquake and heavy rain. Moreover as 80% of the households are engaged in marginal farming with very less income has turned the village more susceptible to disasters.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village are highly landslide prone and has a bridge which may be damaged during strike of a hazard like earthquake.

Health centre, police station, and fire station are far away creating late response but the veterinary is near from the village which may create a help.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap and spring which is situated within village with limited potable quality water.

All the villagers have housing, electricity and access to toilet.

In the village health centre is there with a para medical staff with electricity and water supply to the building.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	2	6000 and 2400 sq feet	Govt			
School	2			yes	yes	10
Panchayat Ghar	1			yes	yes	1

The open space is enough for the village.

Overall the village has very high risk to hazards considering its overall vulnerability and capacity.

Salooni Sub-division

The villages in the sub-division have witnessed heavy rain, landslide, flood, wind, heavy snowfall, etc. As a whole 90% of population lives in the villages and main occupation is cultivation with a few service personnel. There are considerably a large number of unemployed youths also in the villages. The houses are semi-pukka or kutcha made of bricks and stone. These all factors have increased the vulnerability of the community from earthquake and heavy rain types of hazards which can damage the housing. Moreover, other hazards will also crash the economic condition living the population in a situation from where bouncing back to normal life may be very difficult.

In some of the villages the number of children under 14 and elderly people above 60 are higher making the demographic pattern very vulnerable. The transportation system to the villages are on an average not good the proximity to the health facility higher and if it is near also the condition of the health centres are not good with no doctors and nurses.

Every villages has drinking water, electricity and toilet facility. They also have some minimum tools and equipment to do an initial search and rescue if some emergency happens. But, the poor road condition and the landslides may hamper the relief in many places. Overall the villages have medium to very high risk based on their proximity to the sub-divisional office, socio-economic condition, vulnerability of housing and type of hazards.

Ahani Revenue Village

Head of the Mohal: Raj Kumar

Contact Number: NA

Total population: 687

Total population under age 14 years 190 above age 60 years: 220

Total female population: 320, Physically handicapped population: 3

Total male population 215 total female population 230 between ages 18-50 years.

Village map available/not available and a copy attached herewith.

Hazard analysis: The village has suffered from medium landslide, flood, flash flood, and heavy rain many times in the past.

Vulnerability analysis: Most of the houses in the village are single and double with Kutcha and Semi-pukka constructions making it very vulnerable during earthquake and heavy rain. All types of occupation holders are present in the village making the coping capacity higher.

Connectivity: The village is very near to the sub-divisional head quarter making it less vulnerable to disasters as they may be able to get the relief early.

The transportation system of the village is good with HRTC bus service.

Health centre, police station & veterinary are near which may create a help during relief after a disaster.

There is landline telephone service and mobile services are there. The village has public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from spring which is situated within the village.

Maximum of the villagers have housing, electricity and access to toilet.

The villagers need to go 1 Km to reach the nearest hospital through a pukka road. The hospital has 10 beds, 2 doctors and 1 nurse and 5 staff and connected to water and electricity.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	3	NA	Govt			
School	2		Govt	Yes	Yes	5
Community Hall	2		Community	Yes	Yes	3
Clubs	2		Community	Yes	Yes	3
Other	2		Private	Yes	Yes	3

The open space can be used as helipad and all villagers can be accommodated in the open spaces.

Skilled human resources			
Persons trained /experienced in Search & Rescue	Name: Sahab Singh	Contact No.	NA
Masons	Name: Chand Ram	Contact No.	NA
Electricians	Name: Hari Lal	Contact No.	NA
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	20	Hurricane Lamp	NA
Rope	70	Ladder	NA
Helmets	130	Water tank	5
Saw	NA	Hammer	30
Shovels	NA	Pick Axe	10
Digging Bar	2	Tent	
First Aid Box	15	Electric Generator	1
Food stock	100%		

Overall the village has medium risk to hazards considering its overall vulnerability and capacity.

Bhadol Revenue Village

Head of the Mohal: Kamlesh Kumar

Contact number: Nil

Total population: 608

Total population under age 14 years: 69 above age 60 years: 33

Total female population: 219 physically handicapped population: Nil

Total male population 287 total female population 219 between ages 18-50 years.

Hazard analysis: The village has suffered from high heavy rain, landslide, snowfall and wind many times in the past and medium flood hazards.

Connectivity: The Health centre is 12 Km away whereas the police station is just 1.2 Kms away. Veterinary is also 12 Kms away. The critical facilities are far from the village which may create a problem during relief after a disaster.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village the village with enough potable quality water.

All the villagers have housing, all of them have electricity but less than 60% villagers have access to toilet. The only school can be used as shelter place which has electricity, water and toilet facilities.

Bhelo Ram is the carpenter and Jagdish Chand is the mason in the village.

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Rope	20	Ladder	
Helmets	1		
Saw	18	Hammer	10
Shovels	24	Pick Axe	
Digging Bar	10	Water tank	4
First Aid Box		Tent	15
Food stock		Electric Generator	

Overall the village has medium risk to hazards considering its overall vulnerability and capacity.

Billa Revenue Village

Head of the Mohal: Leila Devi

Contact number: NA

Total population: 350

Total population under the age of 14 years is 49 above the age of 60 years is 31.

Total female population: NA, Physically handicapped population: NA,

Total male population is 170 and total female population is 180 between the ages of 18-50 years.

Hazard analysis: The village have identified heavy rain, heavy snowfall and high speed winds as the hazards prominent in the region.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and pukka constructions using brick and mud which are very vulnerable during earthquake, floods and heavy rains.

Connectivity: The village is situated 30 km away from the SDO and have 2 bridges on the way. The nearest health centre is 10 km away, the police station is 30 km and fire station is 90 km away.

The transportation system of the village is poor with no HRTC bus service.

Capacity analysis:

The village gets its drinking water from tap and spring which are situated within the village and are sufficient for the people.

There are more than 80% houses which are electrified but only 60% to 805 houses have toilet facilities.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1					
School	1			Y	Y	Y
Community Hall						
Clubs						
Other						

The playground can be used as a Helipad.

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	20	Hurricane Lamp	20
Rope	10	Ladder	30
Helmets	NA	Water tank	NA
Saw	30	Hammer	50
Shovels	40	Pick Axe	80
Digging Bar	30	Water tank	NA
First Aid Box	NA	Tent	5
Food stock	NA	Electric Generator	NA

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Chakhotar Revenue Village

Head of the Mohal: Prem Singh

Contact number: 9817181681

Total population: 402

Total population under age 14 years 50 above age 60 years: 53

Total female population: 100, Physically handicapped population: Nil

Total male population 199 total female population 100 between ages 18-50 years.

Hazard analysis: The village has suffered from heavy rain, landslide, snowfall, high wind, medium category flood many times in the past.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village are highly landslide prone.

Health centre, police station, fire station, veterinary are near far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has also public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is situated within village with enough potable quality water.

More than 60% have housing and they have electricity and accessibility to toilet.

Open area to be used for relief camps and medical aid: The only open area is with the school and the school has electricity and toilet facilities.

The only carpenter is Jeetu Ram Mustak and Bhagat Singh, Kullu Ram, Mohal Lal are masons. Dharam y Singh is the only electrician.

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	0	Hurricane Lamp	0
Rope	20	Ladder	0
Helmets	0	Water tank	4
Saw	18	Hammer	0
Shovels	14	Pick Axe	0
Digging Bar	51	Water tank	
First Aid Box	0	Tent	30
Food stock	0	Electric Generator	

Overall the village has very high risk to hazards considering its overall vulnerability and capacity.

Dhalla Revenue Village

Head of the Mohal: N/A

Contact number: N/A

Total population: 238

Total population under age 14 years: 63 above age 60 years: 23

Total female population: 124, Physically handicapped population: 1 Differently-abled population: 3

Total male population 65 total female population 87 between ages 18 to 50 years.

Hazard analysis: The village has suffered from high heavy rain, landslide, rock fall, snowfall and medium flood and low cloudburst many times in the past.

Vulnerability analysis: Most of the houses in the village are single and double storey with Semi-pukka and kutchra constructions making it very vulnerable during earthquake and heavy rain.

Moreover as 60% of the households are engaged in marginal farming and daily labour with very less income has turned the village more susceptible to disasters.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village are highly landslide prone at Kilalan near village Jangala and also far away from the nearest police station has 3 bridges which may be damaged during strike of a hazard like earthquake.

The transportation system of the village is bad with no bus service.

Health centre and veterinary are near also 5 km away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap & spring which is situated within village and far from the village with limited not good quality water.

All the villagers have housing; all the villagers have electricity and also have access to toilet.

No health centre in the village.

Skilled human resources			
Persons trained/ experienced in Camp Management	Name: Hoshiyar Singh, Sham Lal, Bodh Ram, Isvi Ram, Suni Ram, Pawan Kumar		Contact No.NA
Carpenters	Name: Pawan Kumar		Contact No.NA
Masons	Name: Narendra Kumar, Pawan Kumar, Karam Chand		Contact No.NA
Electricians	Name: Bodh Ram, Gurdhyan Singh		Contact No. NA
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	1	Ladder	4
Helmets		Water tank	7
Saw	5	Hammer	15
Shovels	29	Pick Axe	32
Digging Bar	28	Water tank	NA
First Aid Box	NA	Tent	NA
Food stock	NA	Electric Generator	NA

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Ghundra Revenue Village

Head of the Mohal: Ratto Devi

Contact number: N/A

Total population: 516

Total population under age 14 years: 130 above age 60 years: 145

Total female population: 252, Physically handicapped population: 2

Total male population 210 total female population 180 between ages 18-50 years.

Hazard analysis: The village probability of all hazards like earthquake, flood, landslide, rock fall, flash flood, etc.

Vulnerability analysis: Most of the houses in the village are single and double storey with Semi-pukka constructions making it very vulnerable during earthquake, flood, and heavy rain. The village has all types of occupation holders making increasing the coping capacity.

Connectivity: The village is near to the sub-divisional head quarter making it less vulnerable to a disasters as they may able to get the relief early. Although the village is connected with 3 motor able roads but due to the presence of the prominent landslide prone area Chabad the relief distribution of the village may get hampered due to road block.

Health centre and police station are near from the village which may create a help during relief after a disaster. Fire station is far away from the village.

Only mobile telephone service is present.

Capacity analysis:

The drinking water source of the village is from spring. All the villagers have housing, electricity and access to toilet.

The villagers need to go 3 Km to reach the nearest hospital through a kutcha road. The hospital has 10 beds, 2 doctors and 1 nurse and 5 para-medical staff and connected to water and electricity. There is enough medicine in the hospital.

The village have enough open space to evacuate or for the relief camps as the school ground, community hall, school building, club buildings can be used. All of the buildings have good electricity and water facility.

The open space can be use/can't be used as helipad and all villagers can be/can't be accommodated in the open spaces.

Skilled human resources		
Persons trained /experienced in Search & Rescue	Name: Lal Chand	Contact No.
Masons	Name: Chaltro	Contact No.
Electricians	Name: Man Singh	Contact No.

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	15	Hurricane Lamp	
Rope	60	Ladder	
Helmets	20	Water tank	5
Saw		Hammer	40
Shovels		Pick Axe	10
Digging Bar	2		
First Aid Box		Tent	
Food stock	100%	Electric Generator	1

Overall the village has medium risk to hazards considering its overall vulnerability and capacity.

Hadla Revenue Village

Head of the Mohal: Mahindra Singh

Contact number: 9459222242

Total population: 314

Total population under age 14 years: 64 above age 60 years: 42

Physically handicapped population: 3

Total male population 172 total female population 142 between ages 18-50 years.

Hazard analysis: The village has suffered from high damage and forest fire many times in the past. **Vulnerability analysis:** Most of the villagers are poor and mainly engaged in marginal farming, daily labourer, small business and many are yet unemployed.

Connectivity: The village is far away from any of the critical facilities like health centre, police station and fire station. It is situated 10 kms from the motor able road.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough water.

All the villagers have housing, electricity but less than 60% have access to toilet.

The village has an open space and a school which can be used for evacuation and relief camps.

Skilled human resources		
Carpenters	Name: Karnail Singh Praksho Rajinder Kumar, Vipin Raj	Contact No. 9418216017
Masons	Name: Mahinder Singh Des Raj Uathmo	Contact No. 9459222242 9488866439

Electricians	Name: Bablu Ram	Contact No. 9418764001	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	1	Hurricane Lamp	30
Rope	212	Ladder	
Helmets	6	Water tank	3
Saw	90	Hammer	50
Shovels	110	Pick Axe	80
Digging Bar	80	Water tank	
First Aid Box	3	Tent	
Food stock		Electric Generator	

Overall the village has very high risk to hazards considering its overall vulnerability and existing capacity.

Jaltota Revenue Village

Head of the Mohal: Dai

Contact number: Nil

Total population: 316

Total population under age 14 years: 100 above age 60 years: 65

Total male population 110 total female population 120 between age 18-50 years.

Hazard analysis: The village has presence of hazards like earthquake, heavy rain, land slide, rock fall and flood with medium frequency.

Vulnerability analysis: Most of the houses in the village are Semi-pukka making it very vulnerable during earthquake and heavy rain. There are service persons, farmers, daily labourers making it a sustainable society.

Connectivity: The village is not very far from the sub-divisional head quarter making it less vulnerable to disasters as they may be able to get the relief early. Moreover the village is connected by 3 motor able roads.

Health centre and police station and veterinary are far away which may create a problem during relief after a disaster.

Capacity analysis:

The drinking water source of the village is from spring. All the villagers have housing and electricity.

The villagers need to go 5 Km to reach the nearest hospital.

The school field is the only open space in the village.

Skilled human resources			
Persons trained /experienced in Search & Rescue	Name:	Contact No.	
	Jaddish Chand		
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	10	Hurricane Lamp	NA
Rope	10	Ladder	NA
Helmets	NA	Water tank	3
Saw	NA	Hammer	10
Shovels	NA	Pick Axe	NA
Digging Bar	NA		
First Aid Box	NA		
Food stock	100%		

Overall the village has medium risk to hazards considering its overall vulnerability and capacity.

Janelrera Revenue Village

Head of the Mohal: Bishno Devi

Contact number: 9625666556

Total population: 231

Total population under age 14 years is 45 and above age 60 years is 19

Total female population: 69 physically handicapped population: 1 Differently-abled population: 0

Total male population 73, total female population 63 between ages 18-50 years.

Hazard analysis: N/A

Vulnerability analysis: N/A

Connectivity: The village is connected by HRTC services and is situated 6 km away from the nearest police station and 6 km away from the nearest veterinary.

The villagers use mobile communication to connect with each other in case of an emergency.

Capacity analysis:

The drinking water source of the village is from tap and hand pump which is situated within village.

More than 80% villagers have housing with electric connection and 60%-80% villagers have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet

District Disaster Management Authority, Chamba (HP)

Play ground	1		School			
School	1			Y	N	2

Skilled human resources			
Ex-Indian Forces	Armed	Name: Sh. Kunj Lal	Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	1	Hurricane Lamp	NA
Rope	150	Ladder	10
Helmets	17	Water tank	2
Saw	10	Hammer	32
Shovels	35	Pick Axe	30
Digging Bar	NA	Water tank	2
First Aid Box	NA	Tent	NA
Food stock	NA	Electric Generator	NA

Overall the village has medium risk to hazards considering its overall vulnerability and capacity.

Khadi Revenue Village

Head of the Mohal: Md. Hussain

Contact number: 9817220023

Total population: 300

Total population under the age of 14 years is 34 and above the age of 60 years is 50

Total female population is: 106

Total male population is 110 and total female population is 106 in between ages of 18-50 years.

Hazard analysis: The village identified Heavy Rain, Heavy Snowfall and High Wind as a major hazard in the region.

Vulnerability analysis: Most of the houses are made up of brick and mud and are either single or double story with kuchha and pukka construction.

Connectivity: The village is situated 30 km away from SDO and have 2 bridges in between. The nearest health centre is 10 km away, the nearest police station is 30 km and the fire station is 90 km away.

The transportation system of the village is poor with no HRTC bus service.

There is no landline telephone service but mobile services are there. The village uses mobile as public communication during a disaster time.

Capacity analysis:

The village depends upon tap and spring water which is present away from the village and is available all the time.

The village has more than 80% houses and all of them are provided with electric connection but only 60% to 80% have toilet facility.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1					
School	1			Y	Y	
Equipment & tools can be used during SAR and Camp Management						
Item	Quantity		Item	Quantity		
Big flash lights	10		Hurricane Lamp	10		
Rope	5		Ladder	30		
Helmets	NA		Water tank	NA		
Saw	10		Hammer	40		
Shovels	20		Pick Axe	60		
Digging Bar	10		Water tank	NA		
First Aid Box	NA		Tent	5		
Food stock	NA		Electric Generator	NA		

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Lahra Revenue Village

Head of the Mohal: Ratti

Contact number: NA

Total population: 275

Total population under age of 14 years is 66 and above the age of 60 years are 16.

Total female population is 129 and 1 person is physically handicapped.

Total male population is 118 and total female population is 129 between ages 18-50 years.

Hazard analysis: The villagers have identified medium risk from earthquake, heavy rain, landslide and rock fall. The village also consider high speed winds and heavy snowfall as a threat.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and pukka constructions making it vulnerable during earthquake and heavy rains.

Connectivity: The village is situated 42 km away from the SDO and have 6 bridges on the way. The village has a community health centre and a veterinary. It is 34 km away from the nearest police station and 80 km from fire station.

The transportation system of the village is poor with no HRTC bus service.

District Disaster Management Authority, Chamba (HP)

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time.

Capacity analysis:

The village gets its water from tap which is situated within the village and is potable and available all the time.

More than 80% houses are available in the village and all of them have electric connection and toilets.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1					
School	2			Y	Y	Y

The playground can be used as a helipad in case of an emergency.

Skilled human resources			
Carpenters	Name: Balk Ram	Contact No. 9817920345	
Masons	Name: Musaddi Ram	Contact No. 98179933586	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	47	Ladder	NA
Helmets	NA	Water tank	NA
Saw	15	Hammer	23
Shovels	10	Pick Axe	40
Digging Bar	25	Water tank	NA
First Aid Box	NA	Tent	NA
Food stock	Yes	Electric Generator	NA

Overall the village high risk to hazards considering its overall vulnerability and capacity.

Lader Revenue Village

Head of the Mohal: Chet Singh

Contact number: NA

Total population: 258

Total population under age 14 years is 72 and above age 60 years is 17.

Total female population is 140 and 1 differently-abled person

Total male population is 76 and total female population is 93 in between age group of 18-50 years.

Hazard analysis: The village consider earthquake less lethal than heavy rain, landslide and rock fall. They are also highly vulnerable to fire, forest fire and heavy snowfall.

Vulnerability analysis: the village has 3 pukka houses, 15 semi pukka and 57 kuccha houses which are mostly single storey and are made of mud except 20 which are made of concrete and bricks. Majority of the population that is 45 are daily wage labourer, 32 are farmers, 25 are in government services and the rest are involved in private sector, have their own business and unemployed.

Connectivity: the village is 30 km away from the sub division office and doesn't have good road connectivity. The road to SDO has 3 bridges and the road is prone to landslides.

The transportation system of the village is not in a good shape with no HRTC bus service.

The nearest health centre is 5 km away so is the veterinary. Police station is 25 km away and fire station is 80 km from the site.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time.

Capacity analysis:

The village gets its limited supply of water from tap and spring which are located inside and outside the village. The quality of the water is also not good.

The village has more than 80% houses and they all have electricity connection and toilet facilities.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1					
School	2			Y	Y	Y

Skilled human resources			
Carpenters	Name: Sobhia Ram Suneet Singh		Contact No.
Masons	Name: Sobha Ram Narad Narain Dissi Ram		Contact No.
Electricians	Name: Jagdish Kumar		Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	0	Hurricane Lamp	0
Rope	1	Ladder	2
Helmets	0	Water tank	5
Saw	5	Hammer	20
Shovels	40	Pick Axe	40
Digging Bar	16	Water tank	5
First Aid Box	0	Tent	0

Food stock	0	Electric Generator	0
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Overall the village very high risk to hazards considering its overall vulnerability and capacity.

Lamhota Revenue Village

Head of the Mohal: Deena

Contact number: NA

Total population: 177

Total population under the age of 14 years is 17 and above the age of 60 years are 15.

Total female population is 94 and 1 person is physically handicapped.

Total male population is 75 and total female population is 85 between ages of 18-50 years.

Hazard analysis: The village considers earthquakes, floods, landslide, rain, rock fall as hazards they are vulnerable to but on a medium scale. They also consider themselves vulnerable to heavy snowfall and high speed winds.

Vulnerability analysis: most of the houses in the village are kuchha and pukka which have single and double storey structures built by bricks and concrete.

Connectivity: the village is 38 km away from the SDO and have pukka roads. There are 6 bridges on the way to SDO from the village. The village is prone to landslides and road blocks due to rock fall. It is 3 km away from the nearest health centre, 35 km away from the police station and 81 km away from fire station.

The village has the provision of landline and mobile networks for communication.

Capacity analysis:

The village depends on tap and spring water which is available within the village.

More than 80% of the houses are present in the village with electricity and toilet facilities.

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	40	Ladder	NA
Helmets	NA	Water tank	NA
Saw	15	Hammer	20
Shovels	NA	Pick Axe	35
Digging Bar	17	Water tank	NA
First Aid Box	NA	Tent	NA
Food stock	NA	Electric Generator	NA

Overall the village has very high risk to hazards considering its overall vulnerability and capacity.

Pol Revenue Village

Head of the Mohal: Rajender Singh

Contact number: 9816461053

Total population: 267

Total population under age 14 years 119 above age 60 years: 14

Total female population: 127 physically handicapped population: nil

Total male population 55 total female population 51 between ages 18-50 years.

Hazard analysis: The village has suffered from medium landslide, fire, forest fire and low flood, flash flood and cloudburst in the past.

Vulnerability analysis: Most of the houses in the village are double storey with pukka constructions making it less vulnerable during flood and heavy rain. Moreover as 40% of the households are engaged in service and 40% in farming with middle income has turned the village less susceptible to disasters.

Connectivity: The village is near to the sub-divisional head quarter with good road condition making it less vulnerable to a disasters vulnerable to a disasters as they will be able to get the relief early. Although there is one bridge in the way from the SDO.

The transportation system of the village is bad with no bus service.

Health centre and police station is about 4 kms but the veterinary is just near the village. There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is situated within village with enough/limited/very limited potable water.

All the villagers have housing, electricity and have access to toilet.

The villagers need to go 100 mts to reach the nearest health centre. The hospital has 1 doctor and connected to water and electricity. There is enough medicine in the hospital for 15 days.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Crop field	1	2000	Pvt			
School	2			yes	yes	4
Community Hall	2			yes	yes	

The village have enough space for evacuation. The open space can be used as helipad and all villagers can be accommodated in the open spaces.

Houses can be used or converted as warehouse

The house of Mahilal Mandal can be used as warehouse.

Skilled human resources		
Persons trained /experienced in Search & Rescue	Name: Brijlal	Contact No. 9816550549
Persons trained/experienced in Camp Management	Name: Kuldeep Singh	Contact No. 9817448601
Carpenters	Name: Thakra	Contact No.

The village has equipment and tools also but quantity is not mentioned.

Overall the village has low risk to hazards considering its overall vulnerability and capacity.

Sindla Revenue Village

Head of the Mohal: Naro Devi

Contact number: 9627922270

Total population: 305

Total population under age 14 years is 30 and above age 60 years is 10

Total female population is 120 with no physically handicapped person.

Total male population is 145 and total female population is 120 between age group of 18-50 years.

Hazard analysis: the village is highly vulnerable to heavy rain and landslide. The winters are marked with heavy snowfall. The villagers consider floods as a hazard but it is not as severe as heavy rain and landslide.

Connectivity: The village is 13 km away from the sub division office. It is 8 km away from the nearest police station, fire station and health centre. The mohal is 15 km away from the nearest veterinary. There are 7 bridges in between the mohal and the district headquarter.

Transportation system of the village is not available.

Communication: There is no landline telephone service but mobile services are there. The village use mobile services to communicate during a miss happening.

Capacity analysis:

The village gets it portable water supply from a tap which is situated inside the village itself

The village has more than 80 % houses available which are fully electrified but only 60% to 80% have toilet facilities.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet

District Disaster Management Authority, Chamba (HP)

Play ground	0					
School	2			Y	Y	Y

Skilled human resources			
Carpenters	Name: Aman Singh Tilak Rai	Contact No.	
Masons	Name: Chatter Singh Pan Chand	Contact No.	
Electricians	Name: Jagdish	Contact No.	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	20	Ladder	NA
Helmets	NA	Water tank	1
Saw	8	Hammer	10
Shovels	NA	Pick Axe	NA
Digging Bar	60	Water tank	NA
First Aid Box	NA	Tent	10
Food stock	NA	Electric Generator	NA

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Siyula Revenue Village

Head of the Mohal: Ambika Parsad

Contact number: 9625589352

Total population: 305

Total population under age 14 years 48 above age 60 years: 68

Total female population: 175 physically handicapped population: 2

Total male population 47 total female population 58 between ages 18-50 years.

Village map available/not available and a copy attached herewith.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disasters as they may not be able to get the relief early. No bus service to the village.

Health centre and police station are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services are also there. The village has no public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village the village with limited potable quality water.

The village has an open space and 2 schools with electricity, water, and toilet facilities.

Skilled human resources			
Carpenters	Name: Dhyan Singh		Contact No. 9816799091
Masons	Name: Sanjay Kumar Chaman Singh		Contact No. 9418681696
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights		Hurricane Lamp	Yes
Rope	130	Ladder	Yes
Helmets	3	Water tank	5
Saw	60	Hammer	60
Shovels	70	Pick Axe	
Digging Bar	60	Water tank	5
First Aid Box	5	Tent	20
Food stock	100 Kg	Electric Generator	

Overall the village has very high risk to hazards considering its overall vulnerability and capacity.

Talori Revenue Village

Head of the Mohal: Jitender Kumar

Contact number:

Total population: 634

Total male population is 200 and total female population is 434 between the ages of 18-50 years.

Hazard analysis: The village is vulnerable to earthquake, heavy rain, Landslide and Rock fall.

Vulnerability analysis: Most of the population is living in semi pukka houses and are working as farmers and daily wage labourers while the rest are in private sector or operating small businesses.

Connectivity: The village is situated 22 km away from SDO and the road is prone to landslides. The village is 1 km away from the health centre, 12 km away from police station and 27 km away from fire station.

The transportation system of the village is good with availability of HRTC bus service.

Capacity analysis:

The village depends upon tap water and has hand pump and spring also but majority population depend on tap. It is situated within the village and the quality of water is not too good.

District Disaster Management Authority, Chamba (HP)

The village has more than 80% housing available and everyone is having electricity connection as well as toilet facility.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	3					
School	2			Y	Y	Y
Community Hall	2			Y	Y	
Clubs	1			Y	Y	Y
Other	1			Y	Y	

Skilled human resources			
Masons	Name: Kishan Chand		Contact No.
Electricians	Name: Kishan Singh Budha Singh		Contact No.
Ex-Indian Armed Forces	Name: Tilak Raj		Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	15	Hurricane Lamp	NA
Rope	70	Ladder	NA
Helmets	120	Water tank	4
Saw	NA	Hammer	NA
Shovels	NA	Pick Axe	NA
Digging Bar	NA	Water tank	NA
First Aid Box	15	Tent	NA
Food stock	Yes	Electric Generator	NA

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Wangal Revenue Village

Head of the Mohal: Praveen

Contact number: 9816524537

Total population: 382

Total population under age 14 years 99 above age 60 years: 40

Total female population: 178 No physically handicapped population

Total male population 107 total female population 90 between ages 18-50 years.

Hazard analysis: The village has suffered from high heavy rain and wind, medium road accident and snowfall and low landslide, flood, cloudburst etc. many times in the past.

Vulnerability analysis: Most of the houses in the village are single and double storey with Semi-pukka and Pukka constructions making it less vulnerable during flood and heavy rain. Moreover as 30% of the households are engaged in service 20% in marginal farming and many are yet unemployed with very less income has turned the village more susceptible to disasters.

Connectivity: The village is not very far from the sub-divisional head quarter and connected with a pukka road making it less vulnerable to a disasters as they may able to get the relief early. The roads leading to the village has two bridges which may be damaged during strike of a hazard like earthquake.

The transportation system of the village is good with HRTC bus service.

Health centre and veterinary are near from the village which may create a help during relief after a disaster but police station and fire stations are far away.

There is landline telephone service and mobile services are also there. The village has public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap & hand pump which is situated within village with enough potable quality water.

All the villagers have housing, electricity and access to toilet.

The villagers need to go 50 mts to reach the nearest health centre through a kuccha road. The hospital has 2 beds, 2 doctors and 1 nurse and 1 other staff with connected to water and electricity.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	2	441	school			
School	2		Chandan lal	yes	yes	6
Crop field	1		Chandan lal			

Skilled human resources			
Masons	Name: Ramesh and Keshar		Contact No.
Electricians	Name: Sushil		Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	3	Hurricane Lamp	
Rope	200	Ladder	
Helmets	10	Water tank	
Saw		Hammer	20
Shovels		Pick Axe	100
Digging Bar		Water tank	3

First Aid Box	2	Tent	40
Food stock		Electric Generator	

Overall the village has medium to low risk to hazards considering its overall vulnerability and capacity.

Bharmour Sub-division:

The villages in the sub-division have witnessed heavy rain, flash flood, heavy snowfall, rock fall, flood, etc. As a whole 90% of population lives in the villages and main occupation is cultivation with a few service personnel. There are considerably a large number of unemployed people also in the villages. The houses are semi-pukka or kutcha made of bricks and stone. These all factors have increased the vulnerability of the community from earthquake and heavy rain types of hazards which can damage the housing. Moreover, other hazards will also crash the economic condition living the population in a situation from where bouncing back to normal life may be very difficult.

In some of the villages the number of children under 14 and elderly people above 60 are higher making the demographic pattern very vulnerable. The transportation system to the villages are on an average not good and far away from Chamba and moreover the proximity to the health facility higher and if it is near also the condition of the health centres are not good with no doctors and nurses.

Every villages has drinking water, electricity and toilet facility. They also have some minimum tools and equipment to do an initial search and rescue if some emergency happens. But, the poor road condition and the landslides may hamper the relief in many places. Overall the villages have medium to very high risk based on their proximity to the sub-divisional office, socio-economic condition, vulnerability of housing and type of hazards.

Department wise Hazard Risk Analysis

The departments are situated in the Bharmour sub-division which is 63 kms away from district headquarter Chamba and 413 kms away from Shimla. The sub-division has suffered from heavy rain, landslide, heavy snowfall, flash flood, flood, forest fire, fire, road accident and earthquake. In the years 1995, 2007, 2008, 2015 the sub-division was affected by heavy rainfall and in the years 2002, 2007 and 2015 with heavy snowfall. The present surge capacity of the departments have been analysed as below.

Women & Child Development Department

Head of the Department: Jai Kumar Gupta

Contact number: 01895-225074

The department has not enough staff as required to response to a disaster. There is a vehicle for the department. No disaster management training. Present permanent staff 9 required 6.

Department HPSEB

Nobody in the department has any kind of DM training.

HFW Department

Head of the Department: Dr. Vinod Bhardwn

Contact number: 7832810039

Second in command: Dr. Aditya Thakur

Contact number: 9816797916

No personnel has ever received any DM training but they have technical staff 5 who are doctors.

There are 70 staff who are enough to response during a disaster.

CHC Bharmour: 30 beds, CHC Holi: 30 beds, PHC Garola: 6 beds, PHC Mandha: nil

Staff trained in Disaster Management	No training		
Trainer within the department	No trainer		
Technical staff who are well versed with the department's work	Dr. Aditya Dr. Vipul Dr. Tanya Dr. Abhijeet Dr. Rohit	9816797916 9816125673 8894899498 9816797541 8894860626	
Equipment, tools, vehicles, etc can be used in a disaster response situation			
Item	Quantity	In-charge	Contact number
First Aid Box	3	I/C	9816797916
Stretcher	10		
Oxygen Cylinder	10		
Ambulance	2		

Department of Animal Husbandry

Head of the Department: Asst Director

Contact number: 9418121380

Second in command: Sr. Veterinary Officer

Contact number: 9418045719

The department has enough staff as required to response to a disaster. Present staff 45.

The department had responded to many landslide disasters in the recent years. Their main assignment during response was to provide veterinary aid and assessment of loss which took them in each time about 2 days and more. Nobody from the department has ever received any training. The department has 6 technical staff, 38 other staff and a vehicle.

The main landslide areas where the department responded are Baggi Lehs Chobia, Gharedu Dhar near Dhancho and Telang Jot.

Staff trained in Disaster Management	No training	
Trainer within the department	No trainer	
Technical staff who are well versed with the	Dr. Gaurav Mahajan Dr. Sanjeev Katoch Dr. Abhishek Thakur Dr. Vivek Thakur	9418045719 9418460300 9418679967 9805403844

The department has 23 staff which is not enough to respond to a disaster. They need further 5 staff. They have never received any training on DM.

Badgram Patowari Circle with Badar, Bargara, Kother and Palan Revenue Villages

Head of the Patowari Circle: Dilip Singh

Contact number: 9805124051

Total population: 1512

Total population under age 14 years 520 above age 60 years: 245

Total female population: 672 physically handicapped population: 01

Total male population 335 total female population 333 between ages 18-50 years.

Hazard analysis: All the villages have experienced high heavy rain, heavy snowfall and flood in the recent years.

Vulnerability analysis: Most of the houses in the village are either single or storey with Kutcha constructions making it very vulnerable depending on the construction materials used. During earthquake and heavy rain these houses can cause serious damage. Moreover as 80% of the households are engaged in marginal farming, 5 % service and huge percentage is unemployed. This represents low and unstable income source turning the Patowari Circle more susceptible to disasters.

Connectivity: The villages are very interior and far away from the sub-divisional head quarter making it more vulnerable to disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village has bridges which may be damaged during strike of a hazard like earthquake.

There is no government transport service to the area.

Health centre and the veterinary are not very far away but the police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services. The village has no public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap and spring which is situated within village with enough potable quality water.

Maximum villagers have housing, but very less (less than 60%) have electricity and access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	05			Yes	Yes	02

The open space and buildings can't accommodate all the villagers.

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	03	Hurricane Lamp	02
Rope	03	Ladder	02
Helmets	05	Water tank	Nil
Saw	02	Hammer	05
Shovels	02	Pick Axe	02
Digging Bar	02	Tent	05
First Aid Box	02	Electric Generator	04
Food stock	01		

Overall the villages within the Patowari circle have high risk to hazards considering its overall vulnerability and low capacity.

Bharmour Patowari Circle with Kasva Bharmour, Bharmour and Sanchuin Revenue Villages

Head of the Patowari Circle: Mohan Lal Negi

Contact number: 9805570041

Total population: 3657

Total population under age 14 years 946 above age 60 years: 285

Total female population: 1805 physically handicapped population: 08

Total male population 1128 total female population 1047 between ages 18-50 years.

Hazard analysis: All the villages have experienced high heavy rain in 1995, 2007, 2008, 2015 and heavy snowfall 2003, 2005, and 2015.

Vulnerability analysis: Most of the houses in the village are either single, double or triple storey with Kutcha/Semi-pukka/Pukka constructions making it less to very vulnerable depending on the construction materials used for heavy rain and earthquake hazards. Moreover as 30% of the households are engaged in marginal farming, 20 % service and huge percentage is unemployed. This represents average income source turning the Patowari more susceptible to disasters.

Connectivity: The villages are just near to the sub-divisional head quarter making it less vulnerable to disasters as they may be able to get the relief early. There is government transport service to the area.

Health centre, veterinary, police station and fire station are just near the villages which may create a help during relief after a disaster.

There is landline telephone service and mobile services are there. The village has public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with not good quality water.

Maximum villagers have housing, electricity and access to toilet.

District Disaster Management Authority, Chamba (HP)

There is a pukka road leading to the health centre which has 30 beds with 4 doctors, 3 nurses, and 31 other staff with good electricity, water and full medicine.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	05			Yes	Yes	10
Other	03	PWD banglow		Yes	Yes	15

The open space and buildings can't accommodate all the villagers.

Skilled human resources			
Persons trained /experienced in Search & Rescue	Name:	Gorev Singh, Jarneil Singh	Contact No. 9805316885
Carpenters	Name:	Dharam Singh	Contact No. 9805890712
Masons	Name:	Pritho	Contact No.
Electricians	Name:	Pawan S/o Saikhar Madan Lal	Contact No.
Ex-Indian Armed Forces	Name:	Sarvan Kumar Dault Ram	Contact No. Chajjo Ram
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	06	Hurricane Lamp	05
Rope	04	Ladder	05
Helmets	09	Water tank	nil
Saw	05	Hammer	06
Shovels	05	Pick Axe	06
Digging Bar	07	Tent	11
First Aid Box	06	Electric Generator	04
Food stock	25 pkt		

Overall the villages within the Patowari circle have medium risk to hazards considering its overall vulnerability and capacity.

Malkota Patowari Circle with Malkota, Goshan and Rajour Revenue Villages

Head of the Patowari Circle: Arjun Singh

Contact number: 9816471718

Total population: 2742

Total population under age 14 years 887 above age 60 years: 230

Total female population: 1341 physically handicapped population: 02

Total male population 630 total female population 363 between ages 18-50 years.

Hazard analysis: All the villages have experienced high heavy rain and landslide in the recent past. In 1995, 2001, 2008 and 2015 there were incidences of heavy rain. Fire and heavy snowfall are another two major hazards in this area.

Vulnerability analysis: Most of the houses in the village are either single, double or triple storey with Kutcha/Semi-pukka/Pukka constructions making it less to very vulnerable depending on the construction materials used for earthquake and heavy rain. Moreover as 40% of the households are engaged in marginal farming, 30 % service and less daily labourers and unemployed. This represents medium stability income source turning the Patowari with more coping capacity.

Connectivity: The villages are very near to the SDM office at Bharmour with all communication facilities and transportation. So, after any disaster the villages will get immediate relief.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough not good quality water.

Maximum villagers have housing, but very less (less than 60%) have electricity and access to toilet.

There is not health centre in the villages.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	03			Yes	Yes	3
Community hall	01			Yes	nil	01

The open space and buildings can't accommodated all the villagers.

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	7	Hurricane Lamp	10
Rope	15	Ladder	8
Helmets	10	Food stock	1
Saw	7	Hammer	10

Shovels	5	Pick Axe	
Digging Bar	4	First Aid Box	2

Overall the villages within the Patowari circle have high risk to hazards considering its overall vulnerability and low capacity.

Patowari Circle with - Tunda, Oraphati, Ranah Kothi, Kuthed, Greema, Khani, and Panjsai Revenue Village

Total population: 18231

Total population under age 14 years 4067 above age 60 years: 1822

Total female population: 9072 physically handicapped population: 75 Differently-abled population: 5

Total male population 5347 total female population 4998 between ages 18-50 years.

Hazard analysis: The villages had suffered from and high probability of heavy rain, forest fire, heavy snowfall, flood and landslide. The same villages have also suffered medium rock fall and low road accident and earthquake hazard. Yet the losses from heavy rain are prominent.

Vulnerability analysis: The houses in the villages are single, double and triple storey with Kutcha, Semi-pukka, Pukka constructions making it very vulnerable to less vulnerable considering the building type. Moreover as 25% of the households are engaged in marginal farming, 5% in government service, 5% in private service and there are a large number of daily labourer and unemployed population in the villages. So, the coping capacity of the many of the villagers many not be good considering their low economic status.

Connectivity: The villages are connected with land telephone line, mobile connection and they also have public announcement system.

Capacity analysis:

The drinking water source of the village is from tap and spring which is situated within village with enough potable quality water.

Maximum of the villagers have housing, and electricity but there is still some villagers who don't have access to toilet.

The hospital has 3 doctors, 2 nurses and 8 staff and well connected to water and electricity. There is hardly full time medicine in the hospital.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	51	NA	Govt	Yes	Yes	63
Other	9	NA		Yes	Yes	07

District Disaster Management Authority, Chamba (HP)

Skilled human resources			
Persons trained /experienced in Search & Rescue	Name: Hem Singh Tilak Raj	Contact No.	
Carpenters	Name: Joginder Kumar Chamara, Kour, Kisso, Kehar Singh, Sher Singh, Arjun Singh, Pritam Singh Sultel, Kishan Kumar	Contact No. 9805697277 9805270281, 9805395564 9816838799, 9805494047, 9805742340	
Masons	24 persons	Contact No. NA	
Electricians	21 persons	Contact No. NA	
Ex-Indian Armed Forces	30 persons	NA	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	94	Hurricane Lamp	103
Rope	216	Ladder	84
Helmets	172	Water tank	
Saw	87	Hammer	126
Shovels	217	Pick Axe	86
Digging Bar	147	Water tank	
First Aid Box	136	Tent	143
Food stock	846	Electric Generator	46

Overall the village has light/high/very high risk to hazards considering its overall vulnerability and capacity.

Tunda Patowari Circle with Thalla, Tunda, DPF Tunda, Silpdi and Sarotta Revenue Village

Head of the Patowari Circle: Ghindro Ram

Contact number: 9816487396

Total population: 2550

Total population under age 14 years 611 above age 60 years: 186

Total female population: 1296 physically handicapped population: 07

Total male population 630 total female population 594 between ages 18-50 years.

Hazard analysis: All the villages have experienced high heavy rain and heavy snowfall and Sarotta has experienced flood due to the Nalla. Silpdi and Tunda have experienced forest fire in the recent past.

Vulnerability analysis: Most of the houses in the village are either single, double or triple storey with Kutcha/Semi-pukka/Pukka constructions making it less to very vulnerable depending on the construction materials used. Earthquake and flood can be a problem if the housing is kutcha type. Moreover as 70% of the households are engaged in marginal farming, 10 % service and huge percentage is unemployed. This represents low and unstable income source turning the Patowari more susceptible to disasters.

Connectivity: The villages are very interior and far away from the sub-divisional head quarter making it more vulnerable to a disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village are highly landslide prone at Ghar Silpdi and has bridges which may be damaged during strike of a hazard like earthquake.

There is no government transport service to the area.

Health centre and the veterinary is not very far away but the police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service and mobile services are there. The village has no public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap and spring which is situated within village with enough potable quality water.

Maximum villagers have housing, but very less (less than 60%) have electricity and access to toilet.

The one health centre out of 5 villages has a pharmacist only making the health facility vulnerable.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	09			Yes	Yes	14
Other	02			Yes	Yes	01

The open space and buildings can't accommodated all the villagers.

Skilled human resources			
Carpenters	Name: Joginder Kumar S/O Karma Chamaru S/O Chatro Kour and Kisso S/o Nanku		Contact No. 9805697255 9805270281 9805395564 9816838799
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	14	Hurricane Lamp	10
Rope	14	Ladder	10
Helmets	21	Water tank	Nil

District Disaster Management Authority, Chamba (HP)

Saw	10	Hammer	17
Shovels	10	Pick Axe	11
Digging Bar	18	Water tank	
First Aid Box	09	Tent	20
Food stock	40 Pkt	Electric Generator	04

Overall the villages within the Patowari circle have high risk to hazards considering its overall vulnerability and low capacity.

Morota Revenue Village

Head of the Mohal: Vachitra Singh

Contact number: 9816110615

Total population: 625

Total population under age 14 years 109 above age 60 years: 120

Total female population: 309 physically handicapped population: nil

Total male population 190 total female population 161 between ages 18-50 years.

Hazard analysis: The village has suffered high hazards of heavy rain and heavy snowfall and medium landslide, rock fall, earthquake and flash flood are also considerable for this village.

Vulnerability analysis: Most of the houses in the village are double storey with Kutcha constructions making it very vulnerable during earthquake and heavy rain. Moreover as 60% of the households are engaged in marginal farming with very less income has turned the village more susceptible to disasters.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village has two bridges and landslide prone area Lushun Ghar which may be damaged during strike of a hazard like earthquake.

Health centre and veterinary are near from the village which may create a help during relief after a disaster.

There is landline telephone service and mobile services are there. The village has public communication system to use during a disaster time.

Capacity analysis:

The drinking water s is outside village with enough potable quality water.

Upto 70% villagers have housing, electricity and access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	1			Yes	Yes	Yes

The place may not be enough for the village to evacuate. Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	1	Hurricane Lamp	1
Rope	1	Ladder	1
Helmets	6	Water tank	1
Saw	1	Hammer	1
Shovels	4	Pick Axe	4
Digging Bar	2	Tent	6
First Aid Box	3	Electric Generator	1
Food stock	100 Kg		

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Garola Revenue Village

Head of the Mohal: Angat Ram

Contact number: 9816944357

Total population: 1251

Total population under age 14 years 206 above age 60 years: 185

Total female population: 596 physically handicapped population: 2

Total male population 392 total female population 382 between ages 18-50 years.

Hazard analysis: The village has suffered from high landslide, heavy rain and heavy snowfall and medium rock fall, earthquake, road accident and low flood, flash flood and cloud burst.

Vulnerability analysis: Most of the houses in the village are single, double and triple storey with Kutcha, Semi-pukka and Pukka constructions making it variation of vulnerability within the village. Moreover as 60% of the households are engaged in marginal farming and 20% are in service sector so the economic situation of the village is susceptible to disasters.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village are highly landslide prone at Jarola Ghaar, Kharamukh Ghar, and Garola Ghar areas. One bridge on the road may be damaged during strike of a hazard like earthquake.

The transportation system of the village is good HRTC bus service.

Health centre and veterinary is in the mohal only but the police station and fire station are far away from the village which may create a problem relief after a disaster.

There is landline telephone service and mobile services are also there. The village has public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap although they have hand pump and spring which is situated within village with enough good quality water.

District Disaster Management Authority, Chamba (HP)

More than 60% villagers have housing, electricity and access to toilet which is lower than many other villages.

The villagers need to go 100mts to reach the nearest hospital through a pukka road. The hospital has 4 beds, 2 doctors and 1 nurses and connected to water and electricity. There is enough medicine in the hospital.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq feet	Ownership	Water	Electricity	Toilet
Play ground	1	6000	SS School			
School	1		SS School	yes	yes	
Other	1	Forest rest house		yes	yes	2

The open area and evacuation places may be enough for evacuation.

Skilled human resources			
Carpenters	Name:	Jagdish Chand	Contact No. 8894414625
Masons	Name:	Jagdish Chand	Contact No. 8894414625
Electricians	Name:	Omkar Singh	Contact No. 9805718175
Ex-Indian Armed Forces	Name:	Ranjeet Singh	Contact No. 9805232827
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	2	Hurricane Lamp	6
Rope	10	Ladder	2
Helmets		Water tank	100
Saw		Hammer	
Shovels	20	Pick Axe	4
Digging Bar		Water tank	
First Aid Box	3	Tent	7
Food stock	Enough	Electric Generator	1

Overall the village has medium risk to hazards considering its overall vulnerability and level of capacity.

Malkouta Revenue Village

Head of the Mohal: NA

Contact number: A

Total population: 1792

Total population under age 14 years 435 above age 60 years: 168

Total female population: 880 physically handicapped population: 2

Total male population 220 total female population 202 between ages 18-50 years.

Hazard analysis: The village has suffered many times from heavy rain, fire and heavy snowfall in the past.

Vulnerability analysis: Most of the houses in the village are triple storey with Kutcha, Semi-pukka, Pukka constructions making it very vulnerable during earthquake and heavy rain. Moreover as 60% of the households are engaged in marginal farming with another 20% in government service with mid income range.

Connectivity: The motor able road is just 2 kms away and the village is connected with telephone landline and mobile connections.

Capacity analysis:

The drinking water source of the village is from tap situated within village.

The village school can be used as a place for evacuation.

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	7	Hurricane Lamp	10
Rope	15	Ladder	8
Helmets	10	Water tank	
Saw	7	Hammer	10
Shovels	5	Pick Axe	
Digging Bar	4	Water tank	
First Aid Box	2	Tent	
Food stock	1	Electric Generator	

Overall the village has medium risk to hazards considering its overall vulnerability and capacity.

Ulansa Revenue Village

Head of the Mohal: Vijay Kumar

Contact number: 9805902396

Total population: 1136

Total population under age 14 years 190 above age 60 years: 185

Total female population: 579 physically handicapped population: 2

Total male population 330 total female population 342 between ages 18-50 years.

Hazard analysis: The village has high occurrence of heavy rain and heavy wind and medium occurrence of earthquake, landslide and rock fall and low flash flood, flood, fire, etc.

Vulnerability analysis: Most of the houses in the village are double storey with Kutcha constructions of mud making it very vulnerable during earthquake and heavy rain. Moreover as 55% of the households are engaged in marginal farming, 20% in small business and 15% are

service personnel with very less average income has turned the village more susceptible to disasters.

Connectivity: The village is far away from the sub-divisional head quarter, connected with one road with no good condition making it more vulnerable to a disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village are highly landslide prone and one bridge may be damaged during strike of a hazard like earthquake.

Health centre and veterinary is in the village but police station and fire station far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services are there. The village has public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap and spring which is situated outside village with enough potable quality water.

More than 60% villagers have housing and electricity but less than 60% villagers have access to toilet.

The village health centre is inside the village with one and a pharmacist and well connected to water and electricity. There is month medicine in the hospital.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq ft	Ownership	Water	Electricity	Toilet
Play ground	2	1200 875	School			
School	1			yes	yes	3

Bhujnali or Dhagooni can be used as helipad (5400 sq ft) and all villagers can be accommodated in the open spaces.

Skilled human resources			
Carpenters	Name: Gagan Singh		Contact No. 9805033588
Masons	Name: Karnail Singh		Contact No. 9816846830
Electricians	Name: Omkar Singh		Contact No. 9805718175
Ex-Indian Armed Forces	Name: Haria Ram		Contact No. 8628069911
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	6	Hurricane Lamp	15
Rope	20	Ladder	1
Helmets	10	Water tank	1
Saw	4	Hammer	1

Shovels	60	Pick Axe	1
Digging Bar	1	Tent	5
First Aid Box	20	Electric Generator	1
Food stock			

Overall the village has medium risk to hazards considering its overall vulnerability and capacity.

Bhattiyat Sub-division

The villages in the sub-division have witnessed heavy rain, flash flood, landslide, cloudburst, forest fire, etc. As a whole 90% of population lives in the villages and main occupation is agriculture with a few service personnel. There are considerably a large number of unemployed people also in the villages. The houses are pukka, semi-pukka or kutchra made of bricks, concrete and stone. These all factors have increased the vulnerability of the community from earthquake and heavy rain types of hazards which can damage the housing. Although the villagers have not considered earthquake as a major hazard but due to its less proximity to Kangra there is a major risk of earthquake hazard also. Moreover, other hazards will also crash the economic condition living the population in a situation from where bouncing back to normal life may be very difficult. This sub-division has witnessed flash flood incident in the recent past.

In some of the villages the number of children under 14 and elderly people above 60 are higher making the demographic pattern very vulnerable. In the Bhattiyat tehsil many villages have more women in 18-50 age group. The transportation system to the villages are comparatively good and nearer to the urban centres like Chamba and Pathankot, moreover the proximity to the health facility higher and if it is near also the condition of the health centres are not good with no doctors and nurses in all the tehsils.

Every villages has drinking water and electricity but many villages have less than 80% toilet facility. They also have some minimum tools and equipment to do an initial search and rescue if some emergency happens. But, the poor road condition and the landslides may hamper the relief in many places. Overall the villages have medium to high risk based on their proximity to the sub-divisional office, socio-economic condition, vulnerability of housing and type of hazards.

Bhount Revenue Village

Head of the Mohal: Kuldeep Chand

Contact number: 9882089289

Total population: 411

Total population under age 14 years 50 above age 60 years: 17

Total female population: 194

Total male population 136 total female population 164 between ages 18-50 years.

Vulnerability analysis: Most of the houses in the village are Kutchra and made of mud making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming and as daily wage labourers.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transportation system of the village is bad with no HRTC bus service.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time except mobiles.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity but more than 60% villagers have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1					
School	2			Y	Y	Y

Skilled human resources			
Carpenters	Name: Madan Lal		Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	3	Hurricane Lamp	5
Rope	3	Ladder	3
Helmets	11	Water tank	2
Saw	2	Hammer	6
Shovels	2	Pick Axe	4
Digging Bar	3	Water tank	NA
First Aid Box	3	Tent	7
Food stock	7	Electric Generator	1

Chaladni Revenue Village

Head of the Mohal: Rania Ram

Contact number: NA

Total population: 132

Total population under age 14 years 34 above age 60 years: 19

Total female population: 59 Differently-abled population: 12

Total male population 35 total female population 32 between ages 18-50 years.

Vulnerability analysis: Most of the houses in the village are double storey with Kutcha constructions making it very vulnerable during earthquake, flood and heavy rain.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transportation system of the village is poor with no HRTC bus service.

Health centre, police station, fire station and veterinary are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village depends on mobile system for public communication during a disaster time.

Overall the village has very high risk to hazards considering its overall vulnerability and capacity.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing, all the villagers have electricity and more than 60% villagers have access to toilet.

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	2	Hurricane Lamp	8
Rope	4	Ladder	3
Helmets	10	Water tank	2
Saw	2	Hammer	4
Shovels	4	Pick Axe	3
Digging Bar	5	Water tank	NA
First Aid Box	3	Tent	4
Food stock	4 Quintal	Electric Generator	2

Chhalara Revenue Village

Head of the Mohal: Sandeep Kumar

Contact number: NA

Total population: 1770

Total population under age 14 years 360 above age 60 years: 141

Total female population: 865 physically handicapped population: 10 Differently-abled population: 2

Total male population 373 total female population 353 between ages 18-50 years.

Vulnerability analysis: Most of the houses in the village are single and double storey with Semi-pukka and Pukka constructions made using concrete and bricks making it less vulnerable during earthquake and heavy rain. 400 people are engaged in farming and 300 are unemployed the rest are working in private and government sector or as a daily wage labourer.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transportation system of the village is good with HRTC bus service and good pukka roads.

Health centre, police station and veterinary are near to the village which may help during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system and rely on mobiles during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap, hand pump and spring which are situated within village with enough potable quality water.

All the villagers have housing, all the villagers have electricity and all the villagers have access to toilet.

The village has 1 health centre which has 1 nurse and has water and electricity supply.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1					
School	3			Y	Y	
Other	1		Anganwari	Y	Y	Y

The school ground can be used as a helipad in case of an emergency.

Skilled human resources			
Carpenters	Name: Karam Singh Jiwan Kumar	Contact No. 9805690097 9816528243	
Masons	Name: Surrender Kumar Chaman Singh	Contact No. 9625646493	
Electricians	Name: Shamsher Singh	Contact No. 8894584426	
Ex-Indian Armed Forces	Name: Tarlok Singh Tan Singh Chaman Singh	Contact No. 9817933187 9805924172 9459408842	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	5	Hurricane Lamp	20
Rope	4	Ladder	4
Helmets	22	Water tank	10
Saw	3	Hammer	10
Shovels	12	Pick Axe	8
Digging Bar	10	Water tank	NA
First Aid Box	5	Tent	20
Food stock	5 Quintal	Electric Generator	3

Daron Revenue Village

Head of the Mohal: NA

Contact number: NA

Total population: 226

Total population under age 14 years 48 above age 60 years: 20

Total female population: 117, Physically handicapped population: 1

Total male population 64 total female population 72 between ages 18-50 years.

Hazard analysis: The village is vulnerable to earthquake, Landslide, Cloud Burst and Heavy Snowfall.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity but more than 60% villagers have access to toilet.

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	2	Hurricane Lamp	5
Rope	3	Ladder	2
Helmets	10	Water tank	2
Saw	2	Hammer	2
Shovels	3	Pick Axe	2
Digging Bar	2	Water tank	NA
First Aid Box	2	Tent	7
Food stock	5 Quintal	Electric Generator	1

Dramnala Revenue Village

Head of the Mohal: Dilawer Singh

Contact number: 8894019738

Total population: 982

Total population under age 14 years 182 above age 60 years: 140

Total female population: 254

Total male population 211 total female population 174 between ages 18-50 years.

Hazard analysis: The village is vulnerable to earthquake, landslide flash flood, fire and forest fire, road accident and heavy snowfall.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming and as daily wage labourers.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early. The road to SDO has 7 bridges as well which makes them more vulnerable.

The transportation system of the village is good HRTC bus service is available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time except mobiles.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity but more than 60% villagers have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1					
School	1			Y	Y	Y

Skilled human resources			
Carpenters	Name: Vijay Singh Prem Pal Mohinder Singh	Contact No. 9805182699	
Masons	Name: Ishwar Dass	Contact No.	
Electricians	Name: Sanjay Kumar	Contact No.	
Ex-Indian Armed Forces	Name: Hoshiyar Singh Punnu Ram Pratap Chand	Contact No.	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	4	Hurricane Lamp	8
Rope	35	Ladder	52
Helmets	15	Water tank	4
Saw	5	Hammer	6
Shovels	8	Pick Axe	6
Digging Bar	5	Water tank	NA
First Aid Box	8	Tent	15
Food stock	15 Quintal	Electric Generator	3

Bangotu Revenue Village

Head of the Mohal: Onkar Singh

Contact number: 8679259064

Total population: 255

Total population under age 14 years 52 above age 60 years: 21

Total female population: 119

Total male population 75 total female population 73 between ages 18-50 years.

Vulnerability analysis: Most of the houses in the village are double storey with Kutcha constructions made of mud making it very vulnerable during earthquake, flood and heavy rain. Moreover a majority of the population is employed in farming and few of them are daily wage labourers.

Connectivity: The village is far from the sub-divisional head quarter making it more vulnerable to a disaster as they may be able to get the relief early.

The transportation system of the village is good with availability of HRTC bus service.

Health centre, police station, fire station and veterinary are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has to depend upon mobile public communication system during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing, all the villagers have electricity and more than 60% villagers have access to toilet.

Skilled human resources			
Carpenters	Name: Onkar Singh	Contact No. 8679258064	
Masons	Name: Kuldeep Singh	Contact No. 9625512424	
Electricians	Name: Bhagan Singh	Contact No. 8988161280	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	2	Hurricane Lamp	7
Rope	8	Ladder	2
Helmets	12	Water tank	3
Saw	2	Hammer	2
Shovels	4	Pick Axe	3
Digging Bar	2	Water tank	NA
First Aid Box	4	Tent	4
Food stock	5 Quintal	Electric Generator	1

Jalna Khas Revenue Village

Head of the Mohal: Ravinder Singh

Contact number: 9816931976

Total population: 448

Total population under age 14 years 80 above age 60 years: 20

Total female population: 200

Total male population 136 total female population 124 between ages 18-50 years.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka and semi pukka constructions making it vulnerable during earthquake and heavy rain.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early. The road to SDO has 5 bridges as well which makes them more vulnerable.

The transportation system of the village is poor with no HRTC bus service available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap.

All the villagers have housing with electricity but more than 60% villagers have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1					
School	2			Y	Y	Y

Jareri Revenue Village

Head of the Mohal: Narain Singh

Contact number: 9805180640

Total population: 1280

Total population under age 14 years 240 above age 60 years: 145

Total female population: 630 physically handicapped population: 12 Differently-abled population: 2

Total male population 360 total female population 313 between ages 18-50 years.

Vulnerability analysis: Most of the houses in the village are single and double storey with Semi-pukka and Pukka constructions done using bricks and concrete making it less vulnerable during earthquake, flood and heavy rain. 250 people in the village are employed as farmers 200 are unemployed, the rest are employed as daily wage labourers and working with government or private sector.

Connectivity: The village is near to the far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early. The vulnerability also increases due to presence of 7 small and big bridges in between the village and SDO.

The transportation system of the village is good with availability of HRTC bus service.

Health centre, police station, fire station and veterinary are near from the village which may help during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time except mobiles.

Capacity analysis:

The drinking water source of the village is from tap, hand pump and spring which are situated within village with enough potable quality water.

All the villagers have housing, with electricity and toilet facilities.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1					
School	1			Y	Y	Y
Community Hall	1					
Other	1		B.R.C Office	Y	Y	Y

Skilled human resources			
Carpenters	Name: Sardar Singh Uttam Singh		Contact No. 9816284878 9805074559
Masons	Name: Krishan Chand		Contact No. 9816945304
Electricians	Name: Ravinder Kumar		Contact No. 9816049451
Ex-Indian Armed Forces	Name: Jai Singh Jaimal Singh Ramesh Chand		Contact No. 9418710818 8894569285 8894786992
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	3	Hurricane Lamp	17
Rope	4	Ladder	5
Helmets	25	Water tank	4
Saw	4	Hammer	10
Shovels	7	Pick Axe	5
Digging Bar	4	Water tank	NA
First Aid Box	5	Tent	12
Food stock	12 Quintal	Electric Generator	2

Kakroti Revenue Village

Head of the Mohal: Chain Singh

Contact number: 9625146395

Total population: 291

Total population under age 14 years 80 above age 60 years: 27

Total female population: 150 physically handicapped population: 1 Differently-abled population: 26

Total male population 78 total female population 79 between ages 18-50 years.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions using concrete, mud and brick making it vulnerable during earthquake, flood and heavy rain.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early. The road to SDO has 4 bridges which further increases the vulnerability of the village.

The transportation system of the village is good as HRTC bus service is present.

Health centre, police station, fire station and veterinary are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village depends upon mobile for public communication system during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing, all the villagers have electricity and more than 60% villagers have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	2			Y	Y	Y

Skilled human resources			
Carpenters	Name: Kartar Singh		Contact No.
Ex-Indian Armed Forces	Name: Chain Singh		Contact No. 9625146395
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	2	Hurricane Lamp	5
Rope	9	Ladder	2

District Disaster Management Authority, Chamba (HP)

Helmets	15	Water tank	3
Saw	2	Hammer	3
Shovels	4	Pick Axe	4
Digging Bar	3	Water tank	NA
First Aid Box	5	Tent	5
Food stock	7 Quintal	Electric Generator	1

Kamla Revenue Village

Head of the Mohal: Surender Kumar

Contact number: 9418936661

Total population: 1402

Total population under age 14 years 350 above age 60 years: 70

Total female population: 694 physically handicapped population: 10 Differently-abled population: 1

Total male population 262 total female population 244 between ages 18-50 years.

Vulnerability analysis: Most of the houses in the village are single and double storey with Semi-pukka and Pukka constructions done using bricks and concrete making it less vulnerable during earthquake and heavy rain. A major section of population is working as daily wage labourer followed by farmers. Atleast 100 people in the village are unemployed.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early. The vulnerability due to distance increases as there are 6 bridges as well in between the village and SDO.

The transportation system of the village is good with availability of HRTC bus service.

Health centre, police station, fire station are near from the village which may help during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time except mobiles.

Capacity analysis:

The drinking water source of the village is from tap, hand pump and spring which are situated within village with enough potable quality water.

All the villagers have housing, all the villagers have electricity and more than 60% villagers have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1			Y	Y	Y
School	1			Y	Y	Y
Community Hall	1					

The school Grounds can be used as a helipad in case of disaster.

Skilled human resources			
Carpenters	Name: Raj Kumar Madan Kumar	Contact No. 9625029952 9805906284	
Masons	Name: Ranjit Singh	Contact No. 9418967669	
Electricians	Name: Surender Kumar	Contact No. 9418936661	
Ex-Indian Armed Forces	Name: Niku Ratan Chand	Contact No. 9817331161 9418969894	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	3	Hurricane Lamp	20
Rope	2	Ladder	4
Helmets	20	Water tank	10
Saw	2	Hammer	12
Shovels	10	Pick Axe	8
Digging Bar	8	Water tank	NA
First Aid Box	5	Tent	20
Food stock	6 Quintal	Electric Generator	2

Kasba - Sihunta Revenue Village

Head of the Mohal: Rinku Mehra

Contact number: 9805444452

Total population: 1152

Total population under age 14 years 260 above age 60 years: 60

Total female population: 558, Physically handicapped population: 15 Differently-abled population: 2

Total male population 160 total female population 153 between ages 18-50 years.

Vulnerability analysis: Most of the houses in the village are single storey with pukka constructions using concrete making it less vulnerable during earthquake and heavy rain. A major chunk of the population is unemployed and some are working in private sector followed by people involved in farming.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disasters as they may not be able to get the relief early. There are several bridges in between which may be damaged in case of a major incident.

The transportation system of the village is good with HRTC bus service available.

Health centre, police station and veterinary are situated in the village which may help during relief after a disaster.

District Disaster Management Authority, Chamba (HP)

There is no landline telephone service but mobile services are there. The village has to depend on mobile for public communication system during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap and hand pump which is situated within village with enough potable quality water.

All the villagers have housing, all the villagers have electricity and all the villagers have access to toilet.

The villagers have a health centre which is easily approachable with facility of two beds and two doctors assisted by one nurse and one attendant. The health centre has electricity and water available.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	2		Government			
School	2		Government	Y	Y	Y

Skilled human resources			
Electricians	Name: Vivek	Contact No. 8894466392	
Ex-Indian Armed Forces	Name: Vadhu Gughar singh	Contact No. 9805347178 9882959135	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	2	Hurricane Lamp	16
Rope	4	Ladder	5
Helmets	16	Water tank	2
Saw	3	Hammer	10
Shovels	7	Pick Axe	5
Digging Bar	4	Water tank	NA
First Aid Box	5	Tent	10
Food stock	11 Quintal	Electric Generator	2

Kathla Revenue Village

Head of the Mohal: NA

Contact number: NA

Total population: 315

Total population under age 14 years 115 above age 60 years: 28

Total female population: 154 physically handicapped population: 1 Differently-abled population: 21

District Disaster Management Authority, Chamba (HP)

Total male population 80 total female population 71 between ages 18-50 years.

Vulnerability analysis: Most of the houses in the village are single storey with Kutcha and Pukka constructions making it vulnerable during earthquake, flood and heavy rain. 40 % population is employed in farming and the rest work as daily wage labourer or in private/government sector.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transportation system of the village is poor with no HRTC bus service.

Health centre, police station and fire station far away from the village which may create a problem/ during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time accept mobiles.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing, with electricity but only more than 60% villagers have access to toilet.

The village has a 2 bedded health centre with 1 nurse and 1 attendant. The health centre has electricity and water available and medicines are also available throughout the year.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1					
School	1			Y	Y	Y

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	2	Hurricane Lamp	8
Rope	3	Ladder	4
Helmets	10	Water tank	2
Saw	2	Hammer	5
Shovels	6	Pick Axe	5
Digging Bar	3	Water tank	NA
First Aid Box	5	Tent	10
Food stock	10 Quintal	Electric Generator	2

Lodha Garh Revenue Village

Head of the Mohal: Shreshta Devi

Contact number: 9459408828

Total population: 193

Total population under age 14 years 20 above age 60 years: 15

Total female population: 105

Total male population 35 total female population 52 between ages 18-50 years.

Hazard analysis: the village has considered landslide and heavy rainfall as the two hazards which they are vulnerable to.

Vulnerability analysis: the houses in the village are made up of concrete, brick and mud and are either pukka or kuccha having single and double storey.

Connectivity: the village is situated 42 km away from SDO and have 4 bridges in between. The nearest community health centre is 2 km away, the nearest police station is 12 km and nearest fire station is 70 km away. The village has a veterinary 12 km away.

The transportation system of the village is good as it is connected by HRTC bus service.

There is no landline telephone service but mobile services are there. The village depend on mobile service in case of emergency communication.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the more than 80% villagers have housing, all the villagers have electricity and all the villagers have access to toilet.

The village has 1 Bigha Land owned by the government that can be used as a helipad.

Skilled human resources			
Electricians	Name: Ashok Kumar	Contact No. 9805389219	
Ex-Indian Armed Forces	Name: Attams Ram Joginder Singh	Contact No. 9625195500 9418781971	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	2	Hurricane Lamp	10
Rope	8	Ladder	2
Helmets	15	Water tank	3
Saw	2	Hammer	3
Shovels	5	Pick Axe	4
Digging Bar	4	Water tank	NA
First Aid Box	5	Tent	5
Food stock	5 Quintal	Electric Generator	2

Mazhoe Revenue Village

Head of the Mohal: Roshan Lal

Contact number: 8263977062

Total population: 253

Total female population: 116

Total male population 102 total female population 95 between ages 18-50 years.

Vulnerability analysis: Most of the houses in the village are single storey with Semi Pukka constructions making it highly vulnerable during earthquake and heavy rain.

Connectivity: The transportation system of the village is good HRTC bus service is available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service as well as mobile services in the village.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1					
School	1			Y	Y	Y

Skilled human resources

Masons	Name: Kanjeet Singh	Contact No. 8679108518
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Equipment & tools can be used during SAR and Camp Management

Item	Quantity	Item	Quantity
Big flash lights	4	Hurricane Lamp	2
Rope	8	Ladder	2
Helmets	8	Water tank	1
Saw	7	Hammer	8
Shovels	2	Pick Axe	2
Digging Bar	3	Water tank	5
First Aid Box	2	Tent	1
Food stock	NA	Electric Generator	NA

Motla Revenue Village

Head of the Mohal: Dhani Ram

Contact number: 9816533939

Total population: 1347

Total population under age 14 years 296 above age 60 years: 148

Total female population: 676 physically handicapped population: 4

Total male population 340 total female population 325 between ages 18-50 years.

Hazard analysis: the village is vulnerable to earthquake, landslide, flood, cloud burst and road accident.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. A majority of population of the village work as farmer and daily wage labourer.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disasters as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village are highly landslide prone and have 7 bridges which may be damaged during hazard like earthquake.

The transportation system of the village is good with HRTC bus service.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time except mobiles.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable water.

All the villagers have housing with electricity but only 60% and above have toilet facilities.

The village health centre has 5 beds, 1 doctor and nurse and 3 attendants and the centre has electricity and water supply.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1					
School	1			Y	Y	Y
Community Hall	1			Y	NO	NO

The village has 1 open space owned by government for use of a helipad.

Skilled human resources		
Carpenters	Name: Mahal Chand Kuldip Chand	Contact No.
Masons	Name:	Contact No.

District Disaster Management Authority, Chamba (HP)

	Dhani Ram Karnail Singh	9816533939 8263081512	
Electricians	Name: Sanjeev Singh Ramesh singh	Contact No. 9016831139	
Ex-Indian Armed Forces	Name: Pritam Chand Surender Kumar	Contact No. 9817130943	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	3	Hurricane Lamp	15
Rope	5	Ladder	4
Helmets	20	Water tank	4
Saw	4	Hammer	5
Shovels	10	Pick Axe	3
Digging Bar	8	Water tank	NA
First Aid Box	8	Tent	20
Food stock	15 Quintal	Electric Generator	4

Nahana Revenue Village

Head of the Mohal: NA

Contact number: NA

Total population: 296

Total population under age 14 years 62 above age 60 years: 22

Total female population: 142 physically handicapped population: 2

Total male population 98 total female population 84 between ages 18-50 years.

Hazard analysis: the village consider Earthquake, Landslide, Rockfall, Cloudburst, heavy snowfall and high winds as major hazards they are vulnerable to.

Vulnerability analysis: Most of the houses in the village are single storey with pukka constructions making it less vulnerable during earthquake and heavy rain. Most of the people are employed as farmers and daily wage labourers.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early. Their vulnerability also increases due to presence of 7 bridges in between the village and SDO which may delay rescue and relief in case of a disaster.

The transportation system of the village is poor with no HRTC bus service.

Health centre, police station, fire station, veterinary are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time except mobiles.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity but only more than 60% villagers have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	1			Y	Y	Y

Skilled human resources			
Carpenters	Name: Madan Singh		Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	2	Hurricane Lamp	6
Rope	3	Ladder	3
Helmets	10	Water tank	2
Saw	2	Hammer	3
Shovels	5	Pick Axe	3
Digging Bar	2	Water tank	NA
First Aid Box	3	Tent	10
Food stock	6 Quintal	Electric Generator	2

Pukhra Revenue Village

Head of the Mohal: NA

Contact number: NA

Total population: 162

Total male population 32 total female population 36 between ages 18-50 years.

Vulnerability analysis: Most of the houses in the village are single storey with Kutcha constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming and as daily wage labourers.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early. The road to SDO has 7 bridges as well which makes them more vulnerable.

The transportation system of the village is poor as no HRTC bus service is available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time except mobiles.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity but more than 60% villagers have access to toilet.

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	2	Hurricane Lamp	10
Rope	3	Ladder	3
Helmets	10	Water tank	2
Saw	2	Hammer	5
Shovels	5	Pick Axe	2
Digging Bar	3	Water tank	NA
First Aid Box	4	Tent	5
Food stock	6 Quintal	Electric Generator	1

Sarog Revenue Village

Head of the Mohal: Anil Kumar

Contact number: 9816207718

Total population: 980

Total population under age 14 years 220 above age 60 years: 92

Total female population: 498

Total male population 303 total female population 325 between ages 18-50 years.

Hazard analysis: The village is vulnerable to earthquake, landslide flash flood, Cloud Burst and forest fire, road accident and heavy snowfall.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming and as daily wage labourers.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early. The road to SDO has 7 bridges and prone to landslides as well which makes them more vulnerable.

The transportation system of the village is good HRTC bus service is available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time except mobiles.

Capacity analysis:

The drinking water source of the village is from tap and hand pump which are situated within village with enough potable quality water.

All the villagers have housing with electricity and access to toilet.

District Disaster Management Authority, Chamba (HP)

The village has a 2 bedded health centre with 1 nurse and attendant and has electric and water supply.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	1			Y	Y	Y
Community Hall	2			Y	Y	Y

Skilled human resources			
Persons trained/ experienced in Camp Management	Name: Naveen Kumar	Contact No. 9816619647	
Carpenters	Name: Babu Ram Allam Chand	Contact No. 9805681440 9816764833	
Masons	Name: Dimple Bheem Singh	Contact No. 9816365366 8894896939	
Electricians	Name: Sanjeev Kumar	Contact No. 9816970118	
Ex-Indian Armed Forces	Name: Mahal Chand Gian Chand	Contact No. 9418783409 9816318197	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	8	Hurricane Lamp	20
Rope	5	Ladder	5
Helmets	20	Water tank	5
Saw	4	Hammer	5
Shovels	12	Pick Axe	5
Digging Bar	5	Water tank	NA
First Aid Box	8	Tent	20
Food stock	15 Quintal	Electric Generator	4

Sukhyad Revenue Village

Head of the Mohal: Durga Devi

Contact number:

Total population: 503

Total population under age 14 years 112 above age 60 years: 30

Total female population: 258, Physically handicapped population: 2 Differently-abled population: 24

Total male population 165 total female population 172 between ages 18-50 years.

Hazard analysis: The village is vulnerable to earthquake, Landslide, Heavy Rain, Fire, Cloud Burst, Accidents and Heavy Snowfall.

Vulnerability analysis: Most of the houses in the village are single storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. A major chunk off population works as farmer.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village have 7 bridges which may be damaged during hazard like earthquake.

The transportation system of the village is poor with no bus connectivity.

Health centre, police station, fire station and veterinary are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are there. The village has no public communication system to use during a disaster time except mobiles.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity but more than 60% villagers have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	2			Y	Y	Y

Skilled human resources			
Ex-Indian Armed Forces	Name:	Prahlad Ram	Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	2	Hurricane Lamp	5
Rope	3	Ladder	2
Helmets	10	Water tank	2
Saw	2	Hammer	5
Shovels	5	Pick Axe	5
Digging Bar	3	Water tank	0
First Aid Box	4	Tent	NA
Food stock	10 Quintal	Electric Generator	2

Thakoli Revenue Village

Head of the Mohal: Chuhar Singh

Contact number: 9816608601

Total population: 404

Total population under age 14 years 62 above age 60 years: 25

Total female population: 226

Total male population 121 total female population 118 between ages of 18-50 years.

Hazard analysis:

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake, flood and heavy rain. More over a major chunk of the population is employed as daily wage labourers and as farmers.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disasters as they may not be able to get the relief early. The village has good road network and have to cross 4 bridges to reach the SDO.

The transportation system of the village is good with availability of HRTC bus service.

Health centre, police station and veterinary are near from the village which may help during relief after a disaster but the fire station is 70 km away which may hamper rescue efforts in case of an emergency.

There is no landline telephone service but mobile services are there. The village uses mobile as public communication system during a disaster.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable water.

All the villagers have housing, all the villagers have electricity and more than 60% villagers have access to toilet.

Skilled human resources		
Carpenters	Name: Kuldeep Singh	Contact No. 8894545418
Masons	Name: Kewal Singh	Contact No. 9816259836
Ex-Indian Armed Forces	Name: Murli Ram Jagram Singh	Contact No. 8626870150 9817561098

Bhattiyat Tehsil

Kalaphat Revenue Village

Head of the Mohal: Rattan Singh

Contact number: 8626809662

Total population: 123 persons

Total population under age 14 years 12 above age 60 years: 6

Total female population: 64, Physically handicapped population: 2

Total male population between ages 18-50 is 27 and total female population between ages 18-50 years is 32 persons.

Hazard analysis: The village can suffer from heavy rain, rock fall and landslide and there is also chance of earthquake, forest fire, fire, road accident, etc.

Vulnerability analysis: Most of the houses in the village are semi-pukka and pukka concrete constructions and brick construction making it vulnerable during earthquake and heavy rain. Moreover main occupation is farming, daily labour, unemployed and a few are in the private sector denoting medium economic vulnerability.

The nearest road is 3 kms away and in good condition although there is no bus connectivity to the village. The village is far away from the sub-divisional head quarter making it more vulnerable to disasters as they may not be able to get the relief early. The two bridges in between the SDO and the village may be a problem after any earthquake. There is landline telephone and mobile phone is also available. All the critical facilities like police station, fire station and health centre are not very far away.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing, electricity and more than 60% villagers have access to toilet.

The health centre is in the middle of the village with electricity, water and a nurse. It has medicine for 2 months.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1	NA				
Crop field	21	4 hector	Pvt			
School	1	NA	HP Govt	Y	Y	2

Overall the village has medium risk to hazards considering its overall vulnerability and capacity.

Ghatasnipul Revenue Village

Head of the Mohal: Raj Kumar

Contact number: 9418080677

Total population: 290 persons

District Disaster Management Authority, Chamba (HP)

Total population under age 14 years 45 above age 60 years: 51

Total female population: 142, Physically handicapped population: 1

Total male population between ages 18-50 is 97 and total female population between ages 18-50 years is 102 persons.

Hazard analysis: The village can heavily suffer from heavy rain & landslide and there is also chance of earthquake, rock fall, forest fire, fire, flood, cloudburst, high wind, road accident, etc.

Vulnerability analysis: Most of the houses in the village are double storey semi-pukka mud constructions making it very vulnerable during earthquake and heavy rain. Moreover main occupation is farming, daily labour and a few are in the private sector denoting low economic and high vulnerability.

The good condition road is 1 kms with bus connectivity to the village. The village is not far away from the sub-divisional head quarter making it less vulnerable to disasters as they may be able to get the relief early. The two rope bridges in between the SDO and the village may be a problem after any earthquake. On the way to the SDO there are prominent landslide areas like Narola-Shar near Kainchi Mod and Narola Ghar near Patwar Khana towards Chamba side. So, these landslide may trigger after an earthquake causing major problem. There is landline telephone, mobile phone and public announcement system. All the critical facilities like police station, and health centre are not very far away.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough not good quality water.

All the villagers have housing, electricity and more than 60% have access to toilet.

The health centre is 3kms of the village with electricity, water and a nurse. It has medicine for 30 days.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Crop field	380	35 hector	Pvt			
School	1	NA	HP Govt	Y	Y	2
Other Building	1			Y	Y	1

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Panjala Revenue Village

Head of the Mohal: Mr. Amar Chand

Contact number: 9857562284

Total population: 351

Total population under age 14 years 49 above age 60 years: 37

Total female population: 170, Physically handicapped population: Nil

Total male population between ages 18-50 is 57 and total female population between ages 18-50 years is 61.

Hazard analysis: The village can be affected with medium chance of earthquake and fire, and low chance of heavy rain, landslide, rock fall, flood and cloudburst.

Vulnerability analysis: Most of the houses in the village are double storey with semi-pukka concrete constructions making it average vulnerable during earthquake and heavy rain. Moreover main occupation is farming, daily labour and a few are in the private sector.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disasters as they may not be able to get the relief early.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with limited potable quality water.

All the villagers have housing, and electricity.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground						
School	1	NA	HP Govt	Y	Y	1
Community Hall	1	NA		Y	Y	1

The village has comparatively high risk due to non-availability of proper capacity.

Rouni Revenue Village

Head of the Mohal: Fauja Singh

Contact number: 9857355228

Total population: 615

Total population under age 14 years 192, above age 60 years: 57

Total male population between ages 18-50 is 326 and total female population between ages 18-50 years is 289.

Hazard analysis: The village can be affected with medium chance of earthquake and heavy rain.

Capacity analysis:

The drinking water source of the village is from tap, hand pump and spring which are situated within village and outside village also with enough potable quality water.

More than 60% have electricity and less than 60% villagers have access to toilet.

The village hospital has 1 nurse and 2 other staff and connected to water and electricity.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1	NA				
School	2	NA	HP Govt	Y	Y	2
Community Hall	1			Y	Y	Y

The open area may not be enough to accommodate all the villagers.

Houses can be used or converted as warehouse: There are places in the village which can be used as warehouse but not specified.

Overall the village has light/high/very high risk to hazards considering its overall vulnerability and capacity.

Kelan Revenue Village

Head of the Mohal: Kuldeep Kumar Contact number: 9816917259

Total population: 408 persons

Total population under age 14 years 50 above age 60 years: 100

Total female population: 197

Total male population between ages 18-50 is 150 and total female population between ages 18-50 years is 100.

Hazard analysis: The village has high probability of from heavy rain, landslide and rock fall, medium probability from earthquake and cloudburst and low probability from fire, forest fire, snowfall, etc.

Vulnerability analysis: Most of the houses in the village are double storey with semi-pukka concrete constructions making it vulnerable during earthquake and heavy rain. Moreover main occupation is farming, daily labour and a few are in the private sector denoting high economic vulnerability.

Connectivity: The village is near to the sub-divisional head quarter making it less vulnerable to a disasters as they may be able to get the relief early.

The transportation system of the village is good HRTC bus service.

Capacity analysis:

The drinking water source of the village is from tap within village with potable quality water.

All the villagers have housing, electricity and more than 60% villagers have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1	NA	Govt			
School	1		HP Govt	Y	Y	Y
Community Hall						
Clubs						
Other	1	NA				

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Dadriyaru Revenue Village

Head of the Mohal: Pradhan

Contact number: 9418080677

Total population: 300

Total population under age 14 years 83 above age 60 years: 51

Total female population: 153, Physically handicapped population: 2

Total male population between ages 18-50 is 98 and total female population between ages 18-50 years is 102.

Hazard analysis: The village can suffer from heavy rain, earthquake and landslide and there is also chance of rock fall, flood, snowfall, high wind.

Vulnerability analysis: There are landline telephone service and mobile services as well.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with limited potable quality water.

All the villagers have housing, electricity and less than 60% villagers have access to toilet.

The hospital which is 4 Kms away has 1 nurse and connected to water and electricity. There is medicine for 30 days in the hospital.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground						
School	1	NA	HP Govt	Y	Y	3
Community Hall	1			Y	Y	1
Clubs						
Crop field	501	51 Hector	Pvt			

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Saloh Revenue Village

Head of the Mohal: Saroj Kumari

Contact number: 9816718735

Total population: 283

Total population under age 14 years 65 above age 60 years: 80

Total female population: 160, Physically handicapped population: nil

Total male population between ages 18-50 is 75 and total female population between ages 18-50 years is 90.

Hazard analysis: The village can suffer from heavy rain, earthquake and landslide and there is also chance of rock fall, fire, flood, snowfall, high wind.

Vulnerability analysis: Most of the houses in the village are double storey with semi-pukka concrete constructions making it vulnerable during earthquake and heavy rain. Moreover main occupation is farming, daily labour and a few are in the private sector denoting high economic vulnerability.

The nearest road is 2 kms away and in good condition although there is no bus connectivity to the village.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with limited potable quality water.

All the villagers have housing, electricity and less than 60% villagers have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1	NA	HP Govt			
School	1	NA	HP Govt	Y	Y	Y

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Priyungal Revenue Village

Head of the Mohal: Anil Kumar

Contact number: 9805728840

Total population: 183 persons

Total population under age 14 years 40 above age 60 years: 55

Total female population: 86, Physically handicapped population: nil

Total male population between ages 18-50 is 30 and total female population between ages 18-50 years is 45 persons.

Hazard analysis: The village can suffer from heavy rain, earthquake, rock fall and landslide and there is also chance of fire, flood, cloudburst, snowfall, high wind and heavy snowfall.

Vulnerability analysis: Most of the houses in the village are double storey with semi-pukka concrete constructions making it vulnerable during earthquake and heavy rain. Moreover main occupation is farming, daily labour and a few are in the private sector denoting high economic vulnerability.

The nearest road is 4 kms away and in good condition although there is no bus connectivity to the village. In case of emergency the Bonet Priyungal local path can be used. The village is far away from the sub-divisional head quarter making it more vulnerable to a disasters as they may not be able to get the relief early. There is no landline telephone only mobile phone is available. All the critical facilities like police station, fire station and health centre are far away.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with limited potable quality water.

All the villagers have housing, electricity and less than 60% villagers have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Crop field	300	NA	Pvt			
School	1	NA	HP Govt	Y	Y	Y

The space in the school may not be enough to evacuate the villagers for relief. Temporary camps can be set up in the crop fields.

Overall the village has very high risk to hazards considering its overall vulnerability and capacity.

Kahlan Revenue Village

Head of the Mohal: Jogindar

Contact number: 8679318194

Total population: 258 persons

Total population under age 14 years 25 above age 60 years: 16

Total female population: 131, Physically handicapped population: nil

Total male population between ages 18-50 is 52 and total female population between ages 18-50 years is 50 persons.

Hazard analysis: The village can suffer from heavy rain, rock fall and landslide and there is also chance of earthquake, forest fire, fire, flood, cloudburst, road accident, etc.

Vulnerability analysis: Most of the houses in the village are semi-pukka and pukka concrete constructions making it vulnerable during earthquake and heavy rain. Moreover main occupation is farming, govt service, daily labour and a few are in the private sector denoting medium economic vulnerability.

The nearest road is 0.5 kms away and in good condition although there is no bus connectivity to the village. The village is far away from the sub-divisional head quarter making it more vulnerable to disasters as they may not be able to get the relief early. The two bridges in between the SDO and the village may be a problem after any earthquake. There is landline telephone and mobile phone is also available. All the critical facilities like police station, fire station and health centre are not very far away.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing, electricity and less than 60% villagers have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1	NA	Govt			

District Disaster Management Authority, Chamba (HP)

Crop field	5	37 hector	Pvt			
School	1	NA	HP Govt	Y	Y	2
Other building	1			Y	Y	1

Skilled human resources

Carpenters	Name: Som Raj	Contact No. 9882838502
Ex-Indian Armed Forces	Name: Desh Raj Kamal	Contact No. 9882717305 9730776834

The space in the school may not be enough to evacuate the villagers for relief. Temporary camps can be set up in the crop fields.

Overall the village has very medium risk to hazards considering its overall vulnerability and capacity.

Badai Revenue Village

Head of the Mohal: Daljeet Singh

Contact number: 9816716731

Total population: 262

Total population under age 14 years 50 above age 60 years: 30

Total female population: 132, physically handicapped: Nil

Total male population between ages 18-50 is 90 and total female population between ages 18-50 years is 80.

Hazard analysis: The village can suffer from heavy rain, earthquake and landslide and there is also chance of road accident, etc.

Vulnerability analysis: Most of the houses in the village are double storey with semi-pukka brick constructions making it very vulnerable during earthquake and heavy rain. Moreover as 50% of the households are engaged in marginal farming with very less income, a lot of unemployed and daily labourers has turned the village more susceptible to disasters.

The nearest road is 2 kms away, not in good condition and there is no bus connectivity to the village. The village is far away from the sub-divisional head quarter making it more vulnerable to disasters as they may not be able to get the relief early. There is no landline telephone but mobile phone is also available. All the critical facilities like police station, fire station and health centre are far away to provide immediate help.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing, electricity and access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet

District Disaster Management Authority, Chamba (HP)

Community Hall	1	NA	NA	Y	Y	Y
Clubs						
Other						
Skilled human resources						
Persons trained/ experienced in Camp Management	Name: Sunder Singh			Contact No.		
Carpenters	Name: Sobhia Ram			Contact No.		
Masons	Name: Desh Raj			Contact No.		
Electricians	Name: Vinod Kumar			Contact No.		
Equipment & tools can be used during SAR and Camp Management						
Item	Quantity	Item	Quantity			
Big flash lights		Hurricane Lamp				
Rope	20 mts	Ladder				
Helmets		Water tank				
Saw	30	Hammer	20			
Shovels	30	Pick Axe	30			
Digging Bar	20	Water tank				
First Aid Box		Tent				
Food stock		Electric Generator				

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Matihar Revenue Village

Head of the Mohal: Prithi Chand

Contact number: 9816777938

Total population: 200 persons

Total population under age 14 years 22 above age 60 years: 18

Total female population: 100, Physically handicapped population: 2

Total male population between ages 18-50 is 74 and total female population between ages 18-50 years is 72 persons.

Hazard analysis: The village can suffer from heavy rain, rock fall and landslide and there is also chance of earthquake, forest fire, fire, flood, cloudburst, road accident, etc.

Vulnerability analysis: Most of the houses in the village are single storey semi-pukka and pukka constructions making it vulnerable during earthquake and heavy rain. Moreover main occupation is farming, govt service, daily labour and a few are in the private sector denoting medium economic vulnerability.

The good condition road is going through the village with bus connectivity to the village. The village is not far away from the sub-divisional head quarter making it less vulnerable to disasters

as they may be able to get the relief early. The bridge in between the SDO and the village may be a problem after any earthquake. There is no landline telephone but mobile phone is available. All the critical facilities like police station, fire station and health centre are not very far away.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with limited potable quality water.

All the villagers have housing, electricity and have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Crop field	17	3 hector	Pvt			
School	1	NA	HP Govt	Y	Y	1

Overall the village has low risk to hazards considering its overall vulnerability and capacity.

Chamba Sub-division

The villages in the sub-division have witnessed heavy rain, rock fall, earthquake, landslide, cloudburst, heavy snowfall, etc. As a whole 80% of population lives in the villages and main occupation is agriculture with considerably low service personnel which means they have low coping capacity to a disaster. The houses are pukka, semi-pukka or kutcha made of bricks and stone. RCC buildings can be seen in the Chamba urban area. Chamba town is in the Chamba sub-division so the vulnerability may be higher due to density of population and poor building construction. But in the same time it has its own resources to cope with the disastrous events. All the emergency services are present inside the urban area making it less vulnerable. Moreover, a sudden earthquake may crash the financial establishments leading to unemployment and poor coping capacity to bounce back better.

In some of the villages the number of children under 14 and elderly people above 60 are higher making the demographic pattern very vulnerable. The transportation system to the villages are comparatively good and nearer to the urban centres like Chamba and the proximity to the health facility better than many of the other sub-divisions.

Every village has drinking water, electricity and toilet facility. They also have some minimum tools and equipment to do an initial search and rescue if some emergency happens. But, the poor road condition and the landslides may hamper the relief in many places. Overall the villages have medium to high risk based on their proximity to the sub-divisional office, socio-economic condition, vulnerability of housing and type of hazards.

Aura Revenue Village

Head of the Mohal: Darshan Kumar

Contact number: 9816067273

Total population: 673

Total male population between ages 18-50 is 308 and total female population between ages 18-50 years is 270.

Vulnerability analysis: Most of the houses are pukka and semi pukka and double story.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village is prone to landslides and have two bridges which may be damaged during a flash flood or earthquake.

Health centre, police station, fire station, veterinary are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services available in the village. The village has a public communication system to use during a disaster.

Capacity analysis:

The drinking water source of the village is from tap, hand pump and spring which are situated within village far from the village with enough potable quality water.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
School	1			Y	Y	Y
Skilled human resources						
Masons	Name: Dharam Singh			Contact No. 9418605701		
Equipment & tools can be used during SAR and Camp Management						
Item	Quantity	Item	Quantity			
Big flash lights	15	Hurricane Lamp	15			
Rope	10	Ladder	16			
Helmets	25	Water tank	4			
Saw	15	Hammer	20			
Shovels	20	Pick Axe	20			
Digging Bar	10	Water tank	NA			
First Aid Box	3	Tent	15			
Food stock	NA	Electric Generator	3			

Bakhatpur Revenue Village

Head of the Mohal: Sabhiya Ram

Contact number: 9816156624

Total population: 996

Total population under age 14 years 110 above age 60 years: 79

Total female population: 502, Physically handicapped population: 13

Total male population 402 total female population 405 between ages 18-50 years.

Hazard analysis: The village is vulnerable to earthquake, heavy rain, landslides, rock fall, flood, flash flood, heavy snowfall and cloudburst and feels less vulnerable to road accidents and fires.

Vulnerability analysis: Most of the houses are kutcha and double story made of mud.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village is prone to landslides and have 3 bridges which may be damaged during a flash flood or earthquake.

The transportation system of the village is good as HRTC bus service is available.

Health centre, police station, fire station, veterinary are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services available in the village. The village has a public communication system to use during a disaster.

Capacity analysis:

The drinking water source of the village is from tap, hand pump and spring which are situated within village far from the village with enough potable quality water.

All the villagers have housing with electricity and toilet facilities.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	4			Y	Y	Y
Other	2			Y	Y	Y

Skilled human resources			
Carpenters	Name:	Contact No.	
	Santosh Kumar	981756674	
Masons	Name: Brij Lal	Contact No. 8894232744	
Electricians	Name: Pankaj Kumar	Contact No. 9318168251	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	10	Hurricane Lamp	10
Rope	10	Ladder	10
Helmets	10	Water tank	10
Saw	10	Hammer	10
Shovels	10	Pick Axe	10
Digging Bar	10	Water tank	5
First Aid Box	2	Tent	15
Food stock	10 Quintal	Electric Generator	2

Bharoh Revenue Village

Head of the Mohal: Urmila Devi

Contact number: 8894391475

Total population: 1029

Total population under age 14 years 283 above age 60 years: 200

Total female population: 523, Physically handicapped population: 3

Total male population 406 total female population 340 between ages 18-50 years.

Hazard analysis: The village is less vulnerable to heavy rain, earthquake, landslides, flood and flash flood, Road accidents and fires.

Vulnerability analysis: Most of the houses are pukka and kutcha, single and double story construction done using brick, mud and concrete.

Connectivity: The village is situated far from SDO and the road is prone to landslides and has 2 bridges which make it more vulnerable and might delay relief in case of an incident.

The transportation system of the village is poor as no HRTC bus service is available.

Health centre, police station, fire station, veterinary are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services available in the village.

Capacity analysis:

The drinking water source of the village is from tap and hand pump which are situated within village with limited good quality water.

All the villagers have housing with electricity and toilet facilities.

The village has a health centre which has 1 nurse and 1 attendant and is supplied with water and electricity. It has a stock of medicine to last for 2 months.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricit y	Toilet
School	2			Y	Y	Y

Skilled human resources		
Carpenters	Name: Dharm Singh Yog Singh Virender Kumar	Contact No. 9805697137 8261075838 889459544
Masons	Name: Om Prakash Rajinder Singh Karam Chand	Contact No. 8894110917 9805122324 9459402763
Electricians	Name: Rakesh	Contact No. 9459402763

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	15	Ladder	NA
Helmets	NA	Water tank	1
Saw	20	Hammer	15
Shovels	1	Pick Axe	1
Digging Bar	12	Water tank	NA
First Aid Box	1	Tent	NA
Food stock	NA	Electric Generator	NA

Jhulara Revenue Village

Head of the Mohal: Bhagat Singh

Contact number: 9418835922

Total population: 466

Total population above age 60 years: 26

Total female population: 250, Physically handicapped population: 4

Total male population between ages 18-50 is 121 and total female population between ages 18-50 years is 124.

Vulnerability analysis: Most of the houses are Semi Pukka and double story made of brick and concrete.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village is prone to landslides and have two bridges which may be damaged during a flash flood or earthquake.

The transportation system of the village is poor as no HRTC bus service is available.

Health centre, police station, fire station, veterinary are far away from the village which may create a problem during relief after a disaster.

Capacity analysis:

The drinking water source of the village is from tap, hand pump and spring which are situated within village far from the village with enough potable quality water.

All the villagers have housing with electricity and toilet facilities.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Community Hall	1			N	N	N

Skilled human resources		
Carpenters	Name:Uttam Chand	Contact No.9817348937
Masons	Name:Pyaar Singh	Contact No.9817872580

Chulihara Revenue Village

Head of the Mohal: Sanjay Kumar

Contact number: 9816232171

Total population: 682

Total population under age 14 years 100 above age 60 years: 67

Total female population: 329, Physically handicapped population: 9

Total male population 273 total female population 242 between ages 18-50 years.

Hazard analysis: The village is vulnerable to earthquake, heavy rain, landslides, rock fall, flood and flash flood and feels less vulnerable to road accidents and fires.

Vulnerability analysis: Most of the houses are kutcha and double story made of mud.

Connectivity: The village is situated away from the SDO this may hamper relief in the time of need, the road to SDO has 3 bridges and is also prone to landslides hence the village is more at risk.

The transportation system of the village is good as HRTC bus service is available.

Health centre, police station, fire station, veterinary are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services available in the village. The village has a public communication system to use during a disaster.

Capacity analysis:

The drinking water source of the village is from tap, hand pump and spring which are situated within village far from the village with enough potable quality water.

All the villagers have housing with electricity and toilet facilities.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	2			Y	Y	Y

Skilled human resources			
Carpenters	Name: On Kar Singh Subhash Kumar	Contact No. 8628833883	
Masons	Name: Darshan Kumar	Contact No. 8894249853	
Electricians	Name: Vishnu Kumar	Contact No. 9816902608	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	10	Hurricane Lamp	10
Rope	10	Ladder	10

District Disaster Management Authority, Chamba (HP)

Helmets	10	Water tank	5
Saw	10	Hammer	10
Shovels	10	Pick Axe	10
Digging Bar	10	Water tank	5
First Aid Box	2	Tent	15
Food stock	15 Quintal	Electric Generator	2

Churi Revenue Village

Head of the Mohal: Dharam Chand

Contact number: 9805768114

Total population: 507

Total population under age 14 years 86 above age 60 years: 81

Total female population: 207

Total male population 206 total female population 201 between ages 18-50 years.

Hazard analysis: The village is vulnerable to heavy rain, landslides, rock fall.

Vulnerability analysis: Most of the houses are pukka and kutcha and double story made of concrete and brick.

Connectivity: The village is far from SDO and this may cause difficulty during relief as approaching the village will take time.

The transportation system of the village is poor as no HRTC bus service is available.

Health centre, police station, fire station, veterinary are far away from the village which may create a problem during relief after a disaster.

Capacity analysis:

The drinking water source of the village is from tap, hand pump and spring which are situated within village far from the village with enough potable quality water.

All the villagers have housing with electricity and toilet facilities.

The village has a 30 bedded health centre with 4 doctors, 3 nurses and 7 attendants. The health centre is provided with electricity and water.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	3			Y	Y	Y

Skilled human resources

Carpenters	Name: Prakash Chand	Contact No. 9805755601
Masons	Name:	Contact No.

	Machlu	9816888096	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	10	Hurricane Lamp	4
Rope	12	Ladder	2
Helmets	NA	Water tank	3
Saw	2	Hammer	NA
Shovels	10	Pick Axe	15
Digging Bar	4	Water tank	3
First Aid Box	2	Tent	2
Food stock	NA	Electric Generator	2

Dulahar Revenue Village

Head of the Mohal: NA

Contact number: NA

Total population: 1227

Total population under age 14 years 250 above age 60 years: 20

Physically handicapped population: 4

Total male population 375 total female population 366 between ages 18-50 years.

Hazard analysis: The village is vulnerable to heavy rain and feels less vulnerable to landslides, rock fall, flood, flash flood and cloud burst, road accidents and fires.

Vulnerability analysis: Most of the population of the village works as a farmer.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village is prone to landslides and have 3 bridges which may be damaged during a flash flood or earthquake.

The transportation system of the village is good as HRTC bus service is available.

Health centre, police station, fire station, veterinary are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are available in the village. The village depends on mobiles for public communication during a disaster.

Capacity analysis:

The drinking water source of the village is from tap, hand pump and spring which are situated within village far from the village with enough potable quality water.

All the villagers have housing with electricity and toilet facilities.

The village has a health centre in the village with 1 nurse and 1 attendant and is provided with water and electricity.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1					
School	2			Y	Y	Y

Skilled human resources			
Carpenters	Name:	Hem Raj	
	Contact No.	9625674656	
Masons	Name:	Chaman Singh	
	Contact No.	9418707918	
Electricians	Name:	Ravi Kumar	
	Contact No.	9817548295	
Ex-Indian Armed Forces	Name:	Navyo Ram	
	Contact No.	9418787910	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	20	Ladder	NA
Helmets	NA	Water tank	NA
Saw	5	Hammer	20
Shovels	NA	Pick Axe	25
Digging Bar	20	Water tank	NA
First Aid Box	1	Tent	NA
Food stock	NA	Electric Generator	NA

Gajnoi Revenue Village

Head of the Mohal: Dharam Chand

Contact number: 9816875750

Total population: 717

Total population under age 14 years 117 above age 60 years: 77

Total female population: 349, Physically handicapped population: 12

Total male population 261 total female population 249 between ages 18-50 years.

Hazard analysis: The village is vulnerable to heavy rain, landslides, rock fall, flood and flash flood and feels less vulnerable to road accidents and fires.

Vulnerability analysis: Most of the houses are kutcha and double story made of mud.

Connectivity:

The transportation system of the village is good as HRTC bus service is available.

Health centre, police station, fire station, veterinary are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services available in the village. The village has a public communication system to use during a disaster.

Capacity analysis:

The drinking water source of the village is from tap, hand pump and spring which are situated within village far from the village with enough potable quality water.

All the villagers have housing with electricity and toilet facilities.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	3			Y	Y	Y
Other	1			Y	Y	Y

Skilled human resources			
Carpenters	Name: Manoj	Contact No. 9816845899	
Masons	Name: Sanjay Kumar	Contact No. 8628884777	
Electricians	Name: Amit Kumar	Contact No. 9816055819	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	10	Hurricane Lamp	10
Rope	10	Ladder	10
Helmets	10	Water tank	10
Saw	10	Hammer	10
Shovels	10	Pick Axe	10
Digging Bar	10	Water tank	10
First Aid Box	3	Tent	10
Food stock	10 Quintal	Electric Generator	2

Dhanada Revenue Village

Head of the Mohal: Tilak Raj

Contact number: 9816078460

Total population: 784

Total population under age 14 years 165 above age 60 years: 120

Total female population: 390,

District Disaster Management Authority, Chamba (HP)

Total male population between ages 18-50 is 175 and total female population between ages 18-50 years is 165.

Hazard analysis: The village is vulnerable to heavy rain.

Capacity analysis:

The drinking water source of the village is from tap which are situated within village with enough potable quality water.

All the villagers have housing with electricity and toilet facilities.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	2			Y	Y	Y
Other	1					

Skilled human resources			
Carpenters	Name:	Amro	
	Contact No.	9816526553	
Masons	Name:	Baldev	
	Contact No.	9805808216	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	10	Ladder	NA
Helmets	2	Water tank	NA
Saw	20	Hammer	5
Shovels	NA	Pick Axe	10
Digging Bar	20	Water tank	NA
First Aid Box	NA	Tent	NA
Food stock	NA	Electric Generator	NA

Ghatta Revenue Village

Head of the Mohal: Ganesh

Contact number: 9625776709

Total population: 258

Total population under age 14 years 75 above age 60 years: 43

Total female population: 99

Total male population 84 total female population 88 between ages 18-50 years.

Hazard analysis: The village is vulnerable to heavy rain, landslides, rock fall, flood and flash flood, road accidents and fires.

Vulnerability analysis: Most of the houses are kutcha and double story made of mud.

Connectivity:

The village is far from SDO and the road connecting SDO and village is vulnerable to landslides and has 3 bridges which might hamper relief during a disaster as connectivity may be lost.

The transportation system of the village is poor as no HRTC bus service is available.

Health centre, police station, fire station, veterinary are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services available in the village.

Capacity analysis:

The drinking water source of the village is from tap, hand pump and spring which are situated within village far from the village with enough potable quality water.

All the villagers have housing with electricity and toilet facilities.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	1			Y	Y	Y
Other	1			Y	Y	Y

Equipment & tools can be used during SAR and Camp Management

Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	14	Ladder	NA
Helmets	NA	Water tank	NA
Saw	10	Hammer	NA
Shovels	10	Pick Axe	NA
Digging Bar	NA	Water tank	NA
First Aid Box	NA	Tent	NA
Food stock	NA	Electric Generator	NA

Hamal Revenue Village

Head of the Mohal: Parvesh Kumar

Contact number: 9817320060

Total population: 355

Total population under age 14 years 98 above age 60 years: 25

Total female population: 190, Physically handicapped population: 3

Total male population 102 total female population 120 between ages 18-50 years.

Hazard analysis: The village is less vulnerable to heavy rain, landslides, flood and flash flood, Road accidents and fires.

Vulnerability analysis: Most of the houses are pukka, single and double story.

District Disaster Management Authority, Chamba (HP)

Connectivity: The village is situated far from SDO and the road is prone to landslides and has 3 bridges which make it more vulnerable and might delay relief in case of an incident.

The transportation system of the village is good as HRTC bus service is available.

Health centre, police station, fire station, veterinary are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are available in the village. The village use mobiles for public communication during a disaster.

Capacity analysis:

The drinking water source of the village is from tap, hand pump and spring which are situated within village far from the village with enough potable quality water.

All the villagers have housing with electricity and toilet facilities.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	2			Y	Y	Y

Skilled human resources			
Carpenters	Name:	Om Prakash	Contact No. 9418912377
Masons	Name:	Om Prakash	Contact No. 9418912377
Electricians	Name:	Vikas Singh	Contact No. 9625679098
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	30	Ladder	NA
Helmets	NA	Water tank	NA
Saw	5	Hammer	25
Shovels	NA	Pick Axe	30
Digging Bar	20	Water tank	NA
First Aid Box	2	Tent	NA
Food stock	NA	Electric Generator	NA

Kiyani Revenue Village

Head of the Mohal: Gupta (Pradhan)
9418839717

Contact number:

Total population: 2118

Total population under age 14 years 375 above age 60 years: 250

Total female population: 1206, Physically handicapped population: 6

Hazard analysis: The village is less vulnerable to heavy rain, earthquake, landslides, flood and flash flood, Road accidents and fires.

Vulnerability analysis: Most of the houses are pukka and kutcha, single and double story construction done using brick, mud and concrete.

Connectivity: The village is situated far from SDO and the road is prone to landslides and has 3 bridges which make it more vulnerable and might delay relief in case of an incident.

The transportation system of the village is good as HRTC bus service is available.

Health centre, police station, fire station, veterinary are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services available in the village.

Capacity analysis:

The drinking water source of the village is from tap and hand pump which are situated within village with limited good quality water.

All the villagers have housing with electricity and toilet facilities.

The village has a 1 bedded health centre which has 1 nurse and 1 attendant and is supplied with water and electricity. It has a stock of medicine to last for 2-3 months.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	3					
School	5			Y	Y	Y

Skilled human resources			
Carpenters	Name: Jai Singh Amar Singh	Contact No. 9418793479 8988030408	
Masons	Name: Jagdish Chand	Contact No. 9816908863	
Electricians	Name: Anil Kumar Sanjiv Kumar	Contact No. 981711967 9459533211	
Ex-Indian Armed Forces	Name: Prahlad Singh Bhagat Singh Desh Raj	Contact No. 941878951 9816471609 9418131959	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	10	Ladder	6
Helmets	NA	5	1
Saw	15	Hammer	15

District Disaster Management Authority, Chamba (HP)

Shovels	NA	Pick Axe	1
Digging Bar	10	Water tank	2
First Aid Box	5	Tent	2
Food stock	12	Electric Generator	NA

Kuthed Revenue Village

Head of the Mohal: Smt. Arti

Contact number: 9459936417

Total population: 996

Total population under age 14 years 311 above age 60 years: 53

Physically handicapped population: 1

Total male population 267 total female population 270 between ages 18-50 years.

Hazard analysis: The village is vulnerable to earthquake, heavy rain, landslides, rock fall, flood, flash flood, road accidents and fires.

Vulnerability analysis: Most of the houses are pukka and kutcha, single and double story made of mud brick and concrete.

Connectivity: The village is situated away from the SDO this may hamper relief in the time of need, the road to SDO is also prone to landslides hence the village is more at risk.

The transportation system of the village is poor as no HRTC bus service is available.

Health centre, police station, fire station, veterinary are far away from the village which may create a problem during relief after a disaster.

Capacity analysis:

The drinking water source of the village is from tap, hand pump and spring which are situated within village far from the village with enough potable quality water.

All the villagers have housing with electricity and toilet facilities.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	2			Y	Y	Y
Community Hall	1					

Skilled human resources		
Carpenters	Name: Maan Singh	Contact No. 9625392150
Masons	Name: Khet Singh	Contact No. 9817353881
Electricians	Name: Chaman Singh	Contact No. 9418792183

Lech Revenue Village

Head of the Mohal: Smt. Saroj Kumari

Contact number: 8894358665

Total population: 1300

Total population under age 14 years 39 above age 60 years: 15

Physically handicapped population: 5 and 6 differently-abled people.

Total male population 832 total female population 468 between ages 18-50 years.

Hazard analysis: The village is vulnerable to earthquake, heavy rain, landslides, rock fall, flood and flash flood.

Vulnerability analysis: Most of the houses are kutcha and double story made of mud.

Connectivity: The village is situated away from the SDO this may hamper relief in the time of need, the road to SDO is also prone to landslides hence the village is more at risk.

The transportation system of the village is poor as no HRTC bus service is available.

Health centre, police station, fire station, veterinary are close to the village which may assist during relief after a disaster.

There is no landline telephone service but mobile services are available in the village.

Capacity analysis:

The drinking water source of the village is from tap which are situated within village with enough potable quality water.

All the villagers have housing with electricity and toilet facilities.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	1			Y	Y	Y

Equipment & tools can be used during SAR and Camp Management

Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	NA	Ladder	NA
Helmets	NA	Water tank	NA
Saw	NA	Hammer	NA
Shovels	NA	Pick Axe	2
Digging Bar	NA	Water tank	7
First Aid Box	NA	Tent	NA
Food stock	NA	Electric Generator	NA

Mangla Revenue Village

Head of the Mohal: Gian Chand

Contact number: 9805313999

Total population: 2081

Total population under age 14 years 393 above age 60 years: 165

Total female population: 1066, Physically handicapped population: 7

Total male population 792 total female population 826 between ages 18-50 years.

Hazard analysis: The village is vulnerable to earthquake, heavy rain, landslides, rock fall, flood, flash flood and cloud burst and feel less vulnerable to road accidents and fires.

Vulnerability analysis: Most of the houses are Semi Pukka and double story made of brick and concrete.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village is prone to landslides and have two bridges which may be damaged during a flash flood or earthquake.

The transportation system of the village is good as HRTC bus service is available.

Health centre, police station, fire station, veterinary are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services available in the village. The village has a public communication system to use during a disaster.

Capacity analysis:

The drinking water source of the village is from tap, hand pump and spring which are situated within village far from the village with enough potable quality water.

All the villagers have housing with electricity and toilet facilities.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	2			Y	Y	Y
Other	2			Y	Y	Y

Skilled human resources		
Carpenters	Name: Daleep Kumar	Contact No. 9805428267
Masons	Name: Rakesh Kumar	Contact No. 9625588934
Electricians	Name: Mahinder Kumar	Contact No. 9625119819
Ex-Indian Armed Forces	Name: Munshi Ram	Contact No. 9459948280

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	10	Hurricane Lamp	10
Rope	10	Ladder	10
Helmets	10	Water tank	10
Saw	10	Hammer	10
Shovels	10	Pick Axe	10
Digging Bar	10	Water tank	10
First Aid Box	4	Tent	10
Food stock	10 Quintal	Electric Generator	2

Raj Nagar Revenue Village

Head of the Mohal: Radha
9805697132

Contact number:

Total population: 1069

Total population under age 14 years 280 above age 60 years: 120

Total female population: 550, Physically handicapped population: 2

Total male population 440 total female population 429 between ages 18-50 years.

Hazard analysis: The village is vulnerable to heavy rain and less vulnerable to landslides, flood and flash flood, Road accidents and fires.

Connectivity: The village is situated far from SDO and the road is prone to landslides and has 3 bridges which make it more vulnerable and might delay relief in case of an incident.

The transportation system of the village is good as HRTC bus service is available.

Health centre, police station, fire station, veterinary are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are available in the village.

Capacity analysis:

The drinking water source of the village is from tap, hand pump and spring which are situated within village far from the village with enough potable quality water.

All the villagers have housing with electricity and toilet facilities.

The village has a health care centre with 6 beds 1 doctor and 1 nurse. The centre has electric and water supply and stock meds which can sustain it for 6 months.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	2			Y	Y	Y
Community Hall	1			Y	Y	Y

Skilled human resources		
Persons trained /experienced in Search & Rescue	Name: Avnesh Kumar	Contact No. 9459084686
Carpenters	Name: Pawan Kumar Dharam Chand	Contact No. 8627823301 8894914479
Electricians	Name: Rakesh Kumar	Contact No. 8662038989
Ex-Indian Armed Forces	Name: Prem Singh	Contact No. 9882654405

Rubni Revenue Village

Head of the Mohal: Smt. Vijay Kumari

Contact number: 8894416734

Total population: 1627

Total population under age 14 years 320 above age 60 years: 235

Total female population: 710, Physically handicapped population: 3

Total male population 510 total female population 417 between ages 18-50 years.

Hazard analysis: The village is vulnerable to earthquake, heavy rain, landslides, rock fall, flood, flash flood and cloud burst.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village is prone to landslides and have 3 bridges which may be damaged during a flash flood or earthquake.

The transportation system of the village is poor as no HRTC bus service is available.

Health centre, police station, fire station, veterinary are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are available in the village.

Capacity analysis:

The drinking water source of the village is from tap, hand pump and spring which are situated within village far from the village with enough potable quality water.

All the villagers have housing with electricity and toilet facilities.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	2			Y	Y	Y
Other	2			Y	Y	Y

District Disaster Management Authority, Chamba (HP)

Skilled human resources		
Persons trained /experienced in Search & Rescue	Name: Surender Kumar	Contact No. 8194420372
Carpenters	Name: Mahinder Singh	Contact No. 9459186534
Electricians	Name: Happy Kumar	Contact No. 9817650295
Ex-Indian Armed Forces	Name: Kirpal Singh	Contact No. 8626972947

Thakrota Revenue Village

Head of the Mohal: Shri Bhagat Singh Contact number: 9418835922

Total population: 557

Total population under age 14 years 138 above age 60 years: 30

Physically handicapped population: 1

Total male population 103 total female population 100 between ages 18-50 years.

Vulnerability analysis: the houses in the village are pukka and kutcha having single and double floor structures made of brick and mud. Most of the population of the village works as a farmer.

Capacity analysis:

The drinking water source of the village is from tap, hand pump and spring which are situated within village far from the village with enough potable quality water.

All the villagers have housing with electricity and toilet facilities.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	2			Y	Y	Y
Community Hall	1			Y	Y	Y

Skilled human resources		
Carpenters	Name: Duni Chand	Contact No. 9817798874
Masons	Name: Subhash Kumar	Contact No. 9817791328
Electricians	Name: Tilak Raj	Contact No. 9459445799

Tikri Revenue Village

Head of the Mohal: (Pradhan) Om Prakash

Contact number: 9418731325

Total population: 1027

Total males: 302, Total females: 285 in between the age group of 18-50 years.

Capacity analysis:

The drinking water source of the village is from tap and hand pump which are situated within village with limited good quality water.

All the villagers have housing with electricity and toilet facilities.

The village has a health centre which has 1 nurse and 1 attendant and is supplied with water and electricity.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	3			Y	Y	Y

Skilled human resources

Carpenters	Name: Nar Singh	Contact No. 9817566703
Masons	Name: Kishan Singh	Contact No. 9894997802
Electricians	Name: Kamal Kumar	Contact No. 9418516866

Equipment & tools can be used during SAR and Camp Management

Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	20	Ladder	NA
Helmets	NA	5	1
Saw	5	Hammer	25
Shovels	NA	Pick Axe	50
Digging Bar	20	Water tank	1
First Aid Box	1	Tent	NA
Food stock	NA	Electric Generator	NA

West Chavaru Revenue Village

Head of the Mohal: Teju

Contact number: 9805529010

Total population: 310

Total population under age 14 years 85 above age 60 years: 64

Total female population: 154, Physically handicapped population: 4

Total male population 100 total female population 87 between ages 18-50 years.

Hazard analysis: The village is vulnerable to earthquake, heavy rain, landslides and rock fall.

Vulnerability analysis: Most of the houses are kutcha and single story made of mud.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early. The relief distribution of the village may get hampered as the roads leading to the village have two bridges which may be damaged during a flash flood or earthquake.

The transportation system of the village is good as HRTC bus service is available.

Health centre, police station, fire station, veterinary are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services available in the village. The village has a public communication system to use during a disaster.

Capacity analysis:

The drinking water source of the village is from tap and spring which is situated within village far from the village with enough potable quality water.

All the villagers have housing with electricity and toilet facilities.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	1			Y	Y	Y
Other	1		Anganwadi	Y	Y	Y

Skilled human resources			
Carpenters	Name:	Contact No.	
	Chaman Singh	9882893420	
Masons	Name:	Contact No.	
	Jaiso	8894110882	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	10	Hurricane Lamp	10
Rope	10	Ladder	10
Helmets	10	Water tank	10
Saw	10	Hammer	10
Shovels	10	Pick Axe	10
Digging Bar	10	Water tank	10
First Aid Box	1	Tent	10
Food stock	10 Quintal	Electric Generator	1

Dalhousie Sub-division

The villages in the sub-division have witnessed heavy rain, landslide, earthquake, heavy snowfall, etc. As a whole 70% of population lives in the villages and main occupation is agriculture with a few service personnel. A large number of community is engaged in tourism industry. The houses are pukka, semi-pukka or kutchra made of bricks and stone. These all factors have increased the vulnerability of the community from earthquake and heavy rain types of hazards which can damage the housing. This is a tourist spot and any disaster happening will destroy the livelihood of the community. Moreover, other hazards will also crash the economic condition living the population in a situation from where bouncing back to normal life may be very difficult. This sub-division has witnessed flash flood incident in the recent past.

In some of the villages the number of children under 14 and elderly people above 60 are higher making the demographic pattern very vulnerable. The transportation system to the villages are comparatively good and nearer to the urban centres like Chamba and Pathankot, moreover the proximity to the health facility higher and if it is near also the condition of the health centres are not good with no doctors and nurses.

Every villages has drinking water, electricity and toilet facility. They also have some minimum tools and equipment to do an initial search and rescue if some emergency happens. But, the poor road condition and the landslides may hamper the relief in many places. Overall the villages have medium to high risk based on their proximity to the sub-divisional office, socio-economic condition, vulnerability of housing and type of hazards.

Bathri Jarai 82 Revenue Village

Head of the Mohal: Deepak Makar

Contact number: 9882355727

Total population: 388

Total population under age 14 years 30 above age 60 years: 103

Total female population: 188

Total male population between ages 18-50 is 119 and total female population between ages 18-50 years is 101.

Vulnerability analysis: Most of the houses in the village are single and double storey with kutchra and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services in the village. The villagers don't have any public communication system.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity and have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	2	NA	HP Govt	Y	Y	Y

Skilled human resources			
Persons trained/ experienced in Camp Management	Name: Nand Lal	Contact No. 9816503292	
Masons	Name: Gian Chand	Contact No.	
Electricians	Name: Asaim Kumar	Contact No. 9882581844	
Ex-Indian Armed Forces	Name: Madho Ram	Contact No.	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	NA	Ladder	5
Helmets	NA	Water tank	NA
Saw	2	Hammer	15
Shovels	15	Pick Axe	20
Digging Bar	15	Water tank	NA
First Aid Box	NA	Tent	5
Food stock	NA	Electric Generator	1

Bharera Revenue Village

Head of the Mohal: Ranjit Singh Thakur

Contact number: 8091479892

Total population: 200

Total population under age 14 years 40 above age 60 years: 55

Total male population between ages 18-50 is 51 and total female population between ages 18-50 years is 33.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transportation system of the village is poor as no HRTC bus service is available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are available in the village. The village has a public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity and have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	1	NA	HP Govt	Y	Y	Y

Skilled human resources			
Persons trained /experienced in Search & Rescue	Name: Ami Chand	Contact No. 9816250242	
Persons trained/experienced in Camp Management	Name: Dipak Kumar	Contact No. 9816170102	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	15
Rope	30	Ladder	32
Helmets	15	Water tank	6
Saw	25	Hammer	26
Shovels	30	Pick Axe	25
Digging Bar	30	Water tank	6
First Aid Box	NA	Tent	10
Food stock	NA	Electric Generator	NA

Chatryara Revenue Village

Head of the Mohal: Dipak

Contact number: 9857769030

Total population: 122

Total population under age 14 years 35, above age 60 years: 25

District Disaster Management Authority, Chamba (HP)

Total male population between ages 18-50 is 34 and total female population between ages 18-50 years is 22; Handicapped -1.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming...

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transportation system of the village is good as HRTC bus service is available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is a landline telephone service and mobile service in the village. The village has a public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity but only 60% and more have access to toilet.

Skilled human resources			
Persons trained /experienced in Search & Rescue	Name: Dipak	Contact No. 9857769030	
Persons trained/experienced in Camp Management	Name: Banarsi	Contact No. 9418220257	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	28	Ladder	20
Helmets	10	Water tank	12
Saw	30	Hammer	30
Shovels	25	Pick Axe	25
Digging Bar	25	Water tank	12
First Aid Box	NA	Tent	10
Food stock	NA	Electric Generator	NA

Dal Revenue Village

Head of the Mohal: Gandhi Ram

Contact number: 9816152621

Total population: 163

Total population under age 14 years 22, above age 60 years: 3

Total female population: 70

Total male population between ages 18-50 is 80 and total female population between ages 18-50 years is 66.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming...

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transportation system of the village is good, HRTC bus service is available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are available in the village. The village doesn't have a public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity and have access to toilet.

Skilled human resources			
Persons trained /experienced in Search & Rescue	Name: Gandhi Ram	Contact No. 9816782621	
Persons trained/experienced in Camp Management	Name: Girdhari Lal	Contact No.	
Carpenters	Name: Chinjo Ram	Contact No.	
Masons	Name: Chinjo Ram	Contact No.	
Electricians	Name: Gandhi Ram	Contact No.	
Ex-Indian Armed Forces	Name: Mahindr Singh	Contact No.	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	3	Ladder	2
Helmets	2	Water tank	1
Saw	2	Hammer	1
Shovels	3	Pick Axe	2
Digging Bar	1	Water tank	NA
First Aid Box	NA	Tent	NA
Food stock	150 quintal	Electric Generator	NA

Dalagar Revenue Village

Head of the Mohal: Tilak Raj

Contact number: 9459577945

Total population: 11

Total population under age 14 years 3 above age 60 years: 1

Total female population: 3

Total male population between ages 18-50 is 7 and total female population between ages 18-50 years is 3.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Semi Pukka constructions making it vulnerable during earthquake and heavy rain.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transportation system of the village is poor as no HRTC bus service is available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are available in the village.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity and have access to toilet.

Skilled human resources			
Persons trained /experienced in Search & Rescue	Name: Tilak	Contact No. 9459577945	
Carpenters	Name: Hukum Chand	Contact No.	
Masons	Name: Desraj	Contact No.	
Electricians	Name: Desraj	Contact No.	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	1	Ladder	1
Helmets	1	Water tank	1
Saw	2	Hammer	NA
Shovels	2	Pick Axe	1
Digging Bar	NA	Water tank	NA
First Aid Box	NA	Tent	1
Food stock	3 Quintal	Electric Generator	NA

Dharun Revenue Village

Head of the Mohal: Shear Singh
9817824159

Contact number:

Total population: 70

Total population under age 14 years 14 above age 60 years: 10

Total female population: 29

Total male population 18 total female population 19 between ages 18-50 years.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming...

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transportation system of the village is good as HRTC bus service is available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services are also available in the village. The village have a public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity and have access to toilet.

Skilled human resources			
Persons trained /experienced in Search & Rescue	Name: Sunil Kumar	Contact No. 9418790190	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	8	Ladder	1
Helmets	4	Water tank	NA
Saw	2	Hammer	2
Shovels	5	Pick Axe	8
Digging Bar	5	Water tank	NA
First Aid Box	NA	Tent	NA
Food stock	10 Quintal	Electric Generator	NA

Drabar Revenue Village

Head of the Mohal: Kasturi Lal
9817491955

Contact number:

Total population: 357

Total population under age 14 years 40 above age 60 years: 34

Total female population: 180

Total male population between ages 18-50 is 116 and total female population between ages 18-50 years is 118.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming...

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services are also available in the village.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity but only more than 60% have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	1	NA	HP Govt	Y	Y	Y

Skilled human resources			
Persons trained/experienced in Camp Management	Name: Kishan Chand S/O Chote Ram	Contact No. 9418001989	
Electricians	Name: Sanjay Kumar	Contact No.	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	2	Ladder	5
Helmets	NA	Water tank	1
Saw	5	Hammer	10
Shovels	18	Pick Axe	30
Digging Bar	10	Water tank	NA

District Disaster Management Authority, Chamba (HP)

First Aid Box	NA	Tent	NA
Food stock	NA	Electric Generator	NA

Draman Revenue Village

Head of the Mohal: Gandharav Singh

Contact number: 9816394041

Total population: 316

Total population under age 14 years 35 above age 60 years: 40

Total female population: 154

Total male population between ages 18-50 is 107 and total female population between ages 18-50 years is 98.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transportation system of the village is good HRTC bus service is available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services are also available in the village. The village has a public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity and have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	1	NA	HP Govt	Y	Y	Y

Skilled human resources			
Persons trained /experienced in Search & Rescue	Name:	Karam Chand	Contact No. 9697725361
Masons	Name:	Babu Ram	Contact No. 9882081609
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA

District Disaster Management Authority, Chamba (HP)

Rope	17	Ladder	3
Helmets	8	Water tank	NA
Saw	4	Hammer	3
Shovels	10	Pick Axe	17
Digging Bar	10	Water tank	NA
First Aid Box	NA	Tent	NA
Food stock	15 Qt	Electric Generator	NA

Dhundhiyara Revenue Village

Head of the Mohal: Anju Devi

Contact number: 9882458911

Total population: 449

Total population under age 14 years 53 above age 60 years: 40

Total female population: 237

Total male population between ages 18-50 is 185 and total female population between ages 18-50 years is 198.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is working in government sector.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are available in the village. The villagers have public communication system.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity and have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	1	NA	HP Govt	Y	Y	Y

Skilled human resources	
Persons trained /experienced in Search & Rescue	Name: Joginder Contact No. 9882704122

Persons trained/ experienced in Camp Management	Name: Ramlal	Contact No. 9816116626	
Masons	Name: Hansraj	Contact No. 9459639698	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	12
Rope	15	Ladder	3
Helmets	8	Water tank	15
Saw	NA	Hammer	27
Shovels	12	Pick Axe	45
Digging Bar	14	Water tank	NA
First Aid Box	NA	Tent	NA
Food stock	5 Tonne	Electric Generator	NA

Farotka Revenue Village

Head of the Mohal: Vinod Kumar

Contact number: 9418609056

Total population: 328

Total population under age 14 years 29 above age 60 years: 10

Total female population: 169

Total male population between ages 18-50 is 129 and total female population between ages 18-50 years is 138.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transportation system of the village is poor as no HRTC bus service is available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are available in the village. The village doesn't have a public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity and have access to toilet.

Open area to be used for relief camps and medical aid:

District Disaster Management Authority, Chamba (HP)

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1	NA	HP Govt	N	N	N
School	2	NA	HP Govt	Y	Y	Y
Community Hall						
Clubs						
Other	1					

Houses can be used or converted as warehouse

House	Accessibility	Condition	Ownership
1		Good	Government

Skilled human resources

Persons trained /experienced in Search & Rescue	Name: Vinod Kumar Ravi Kumar	Contact No. 9418609056 9882612651
Persons trained/experienced in Camp Management	Name: Dharam Chand Prithi Chand	Contact No. 9459293300 9418193962
Carpenters	Name: Ratan Chand	Contact No. 9425601333
Masons	Name: Vijay Kumar	Contact No. 9425601333
Ex-Indian Armed Forces	Name: Tilak Raj	Contact No. 9805247522

Equipment & tools can be used during SAR and Camp Management

Item	Quantity	Item	Quantity
Big flash lights	15	Hurricane Lamp	5
Rope	20	Ladder	6
Helmets	9	Water tank	8
Saw	15	Hammer	20
Shovels	12	Pick Axe	22
Digging Bar	30	Water tank	8
First Aid Box	5	Tent	NA
Food stock	NA	Electric Generator	NA

Gandhiyar Revenue Village

Head of the Mohal: Vijlo Devi

Contact number: 8262862737

Total population: 408

Total population under age 14 years 58, above age 60 years: 72

Total female population: 211

Total male population between ages 18-50 is 49 and total female population between ages 18-50 years is 52.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transportation system of the village is good HRTC bus service is available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service as well as mobile services in the village. The village has a public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity and have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	1	NA	HP Govt	Y	Y	Y

Skilled human resources			
Persons trained /experienced in Search & Rescue	Name:	Bunty Kumar	Contact No. 9882794361
Persons trained/experienced in Camp Management	Name:	Madan Lal	Contact No. 9805987215
Carpenters	Name:	Sonu	Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	6
Rope	12	Ladder	4
Helmets	5	Water tank	NA
Saw	4	Hammer	4
Shovels	8	Pick Axe	20
Digging Bar	8	Water tank	NA
First Aid Box	NA	Tent	NA
Food stock	4 tonnes	Electric Generator	NA

Kaswa Bathri 82 Revenue Village

Head of the Mohal: Shiv Kumar

Contact number: 8679160625

Total population: 194

Total population under age 14 years 40, above age 60 years: 26

Total female population: 94, physically disabled: 2

Total male population between ages 18-50 is 47 and total female population between ages 18-50 years is 36.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in Small business and private jobs.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service and mobile services in the village.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity and have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground						
School	1	NA	HP Govt	Y	Y	Y
Community Hall						

Skilled human resources			
Persons trained /experienced in Search & Rescue	Name: Ravi Mahajan	Contact No. 9418085881	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	NA	Ladder	NA
Helmets	NA	Water tank	NA
Saw	NA	Hammer	8
Shovels	8	Pick Axe	2
Digging Bar	8	Water tank	NA
First Aid Box	NA	Tent	NA
Food stock	NA	Electric Generator	NA

Khorti Revenue Village

Head of the Mohal: Prakash

Contact number: 8894545148

Total population: 75

Total population under age 14 years 11, above age 60 years: 14

Total female population: 38

Total male population between ages 18-50 is 21 and total female population between ages 18-50 years is 23.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transportation system of the village is poor as no HRTC bus service is available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are available in the village. The village doesn't have a public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity and have access to toilet.

Skilled human resources			
Carpenters	Name: Darshan Kumar	Contact No. 9418711492	
Masons	Name: Sunil Kumar	Contact No. 9459577792	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	2
Rope	8	Ladder	4
Helmets	NA	Water tank	NA
Saw	5	Hammer	8
Shovels	10	Pick Axe	15
Digging Bar	12	Water tank	NA
First Aid Box	NA	Tent	NA
Food stock	10 Quintal	Electric Generator	NA

Kuthplahn Revenue Village

Head of the Mohal: Chaman Lal

Contact number: 9625423330

Total population: 524

Total population under age 14 years 82, above age 60 years: 62

Total female population: 276

Total male population between ages 18-50 is 178 and total female population between ages 18-50 years is 188.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transport situation is poor in the village with no HRTC service available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are available in the village.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity and have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1	NA	HP Govt	N	N	N
School	1	NA	HP Govt	Y	Y	Y

Skilled human resources			
Persons trained /experienced in Search & Rescue	Name: Tilak Raj Sadhu Ram Raj Kumar	Contact No. 9625699053 9882033506 8263082110	
Masons	Name: Rakesh Kumar Dev Raj Raju	Contact No. 9418717112 9625139235 9418426863	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	2	Hurricane Lamp	3

District Disaster Management Authority, Chamba (HP)

Rope	15	Ladder	10
Helmets	NA	Water tank	NS
Saw	6	Hammer	15
Shovels	30	Pick Axe	70
Digging Bar	60	Water tank	NA
First Aid Box	NA	Tent	NA
Food stock	NA	Electric Generator	NA

Manola Revenue Village

Head of the Mohal: Saroj Kumari
9882611732

Contact number:

Total population: 171

Total population under age 14 years 28 above age 60 years: 32

Total female population: 80

Total male population between ages 18-50 is 82 and total female population between ages 18-50 years is 60.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transportation system of the village is good HRTC bus service is available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is landline telephone service as well as mobile services in the village. The village has a public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity and have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground						
School	1	NA	HP Govt	Y	Y	Y
Community Hall						

Skilled human resources			
Persons trained /experienced in Search & Rescue	Name: Kishori Lal	Contact No. 9817479311	
Persons trained/experienced in Camp Management	Name: Bittu Kumar	Contact No. 9418594150	
Carpenters	Name: Sonu	Contact No.	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	10
Rope	12	Ladder	2
Helmets	4	Water tank	NA
Saw	NA	Hammer	2
Shovels	10	Pick Axe	20
Digging Bar	15	Water tank	NA
First Aid Box	NA	Tent	NA
Food stock	2 tonne	Electric Generator	NA

Sherpur Revenue Village

Head of the Mohal: Jagdish

Contact number: 9418165000

Total population: 782

Total population under age 14 years 376 above age 60 years: 129

Total male population between ages 18-50 is 385 and total female population between ages 18-50 years is 231.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transportation system of the village is good as HRTC bus service is available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are available in the village. The village have a public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity and have access to toilet.

District Disaster Management Authority, Chamba (HP)

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
Play ground	1	NA	NA	N	N	N
School	1	NA	HP Govt	Y	Y	Y
Community Hall						
Clubs						
Other	3	NA	NA	NA	NA	NA

Skilled human resources			
Carpenters	Name: Ashok Kumar Harish Kumar Surinder		Contact No. 9318957709 9817503813 8988215028
Masons	Name: Kamal Kumar Pravin		Contact No. 9625547687 9817033420
Ex-Indian Armed Forces	Name: Gyan Chand		Contact No. 9459640365
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	27	Ladder	24
Helmets	39	Water tank	5
Saw	6	Hammer	24
Shovels	3	Pick Axe	29
Digging Bar	4	Water tank	5
First Aid Box	NA	Tent	NA
Food stock	10 Quintal	Electric Generator	NA

Siharu Revenue Village

Head of the Mohal: Pritam Singh
9464589815

Contact number:

Total population: 140

Total population under age 14 years 25, above age 60 years: 3

Total female population: 78

Total male population between ages 18-50 is 50 and total female population between ages 18-50 years is 70.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transportation system of the village is good HRTC bus service is available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are available in the village. The village has a public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity and have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	1	NA	HP Govt	Y	Y	Y

Skilled human resources			
Persons trained /experienced in Search & Rescue	Name: Pritam Singh	Contact No. 9464589815	
Persons trained/ experienced in Camp Management	Name: Karam Chand	Contact No. 9780457640	
Carpenters	Name: Hakam Chand	Contact No.	
Masons	Name: Hakm Chand	Contact No.	
Electricians	Name: Chaman Lal	Contact No.	
Ex-Indian Armed Forces	Name: Mahindr Singh	Contact No.	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	1	Hurricane Lamp	1
Rope	3	Ladder	3
Helmets	1	Water tank	1
Saw	2	Hammer	2
Shovels	3	Pick Axe	3
Digging Bar	4	Water tank	NA
First Aid Box	NA	Tent	NA
Food stock	11 Quintal	Electric Generator	NA

Samleu Revenue Village

Head of the Mohal: Suresh Kumar

Contact number: 9418313348

Total population: 1597

Total population under age 14 years 82, above age 60 years: 40

Total female population: 660

Total male population between ages 18-50 is 470 and total female population between ages 18-50 years is 450.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transportation system of the village is good HRTC bus service is available.

Health centre, police station and fire station are in the village which may help during relief after a disaster.

There is landline telephone service as well as mobile services in the village. The village has a public communication system to use during a disaster time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity and have access to toilet.

The village has a 17 bedded health centre with 3 doctors and 4 nurses. The health centre is having its own electric and water connection

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	2	NA	HP & Central Govt	Y	Y	Y
Clubs	1	NA	Central Govt	Y	Y	Y
Other	4	NA	Govt	Y	Y	Y

Skilled human resources		
Persons trained /experienced in Search & Rescue	Name: Narendra Raj Kumar	Contact No. 9736440059 9816945917
Persons trained/experienced in Camp Management	Name: Manohar Bal Ravi Kumar	Contact No. 9418909688 9736396621

District Disaster Management Authority, Chamba (HP)

Carpenters	Name: Mahinder	Contact No. 9736205468	
Masons	Name: Surinder	Contact No. 9736081049	
Electricians	Name: Dharam Pal	Contact No. 9736487582	
Ex-Indian Armed Forces	Name: Desraj	Contact No. 8988295833	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	10	Hurricane Lamp	26
Rope	20	Ladder	18
Helmets	400	Water tank	4
Saw	12	Hammer	25
Shovels	9	Pick Axe	35
Digging Bar	14	Water tank	NA
First Aid Box	15	Tent	2
Food stock	20 Qt.	Electric Generator	25

Tritha Revenue Village

Head of the Mohal: Ranjit Singh

Contact number: 8091479892

Total population: 209

Total population under age 14 years 24 above age 60 years: 28

Total male population between ages 18-50 is 55 and total female population between ages 18-50 years is 52.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Pukka constructions making it vulnerable during earthquake and heavy rain. Majority of the population is engaged in farming.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are available in the village. The villagers have public communication system.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity and have access to toilet.

Open area to be used for relief camps and medical aid:

District Disaster Management Authority, Chamba (HP)

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	1	NA	HP Govt	Y	Y	Y

Skilled human resources			
Carpenters	Name:	Contact No.	
	Desraj	8988327577	
Masons	Name:	Contact No.	
	Mohan Lal	9459758831	
Electricians	Name:	Contact No.	
	Jodha	9817532649	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	10
Rope	20	Ladder	3
Helmets	3	Water tank	10
Saw	1	Hammer	5
Shovels	1	Pick Axe	15
Digging Bar	12	Water tank	NA
First Aid Box	NA	Tent	NA
Food stock	20 Quintal	Electric Generator	NA

Basa Revenue Village

Head of the Mohal: Amar Singh

Contact number: NA

Total population: 123

Total population under age 14 years 26, above age 60 years: 2

Total male population between ages 18-50 is 43 and total female population between ages 18-50 years is 59.

Vulnerability analysis: Most of the houses in the village are single and double storey with Kutcha and Semi Pukka constructions making it vulnerable during earthquake and heavy rain.

Connectivity: The village is far away from the sub-divisional head quarter making it more vulnerable to a disaster as they may not be able to get the relief early.

The transportation system of the village is good as HRTC bus service is available.

Health centre, police station and fire station are far away from the village which may create a problem during relief after a disaster.

There is no landline telephone service but mobile services are available in the village.

Capacity analysis:

The drinking water source of the village is from tap which is situated within village with enough potable quality water.

All the villagers have housing with electricity and have access to toilet.

District Disaster Management Authority, Chamba (HP)

Open area to be used for relief camps and medical aid:

Place	Qt	Area in sq mt	Ownership	Water	Electricity	Toilet
School	1	NA	HP Govt	Y	Y	N

Skilled human resources			
Persons trained /experienced in Search & Rescue	Name:	Amar Singh	Contact No.
Persons trained/ experienced in Camp Management	Name:	Gandho	Contact No.
Carpenters	Name:	Gauri	Contact No.
Masons	Name:	Karam Singh	Contact No.
Electricians	Name:	Raghubir Singh	Contact No.
Ex-Indian Armed Forces	Name:		Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	NA	Hurricane Lamp	NA
Rope	2	Ladder	2
Helmets	2	Water tank	1
Saw	1	Hammer	3
Shovels	3	Pick Axe	3
Digging Bar	2	Water tank	1
First Aid Box	NA	Tent	NA
Food stock	50 Qt.	Electric Generator	NA

Pangi Sub-division

Pangi is the remotest part of the Chamba district and remain cut off with the other parts of the district for 4-5 months during the winter season. The sub-division and many villages can only be connected via Jammu and Kashmir and Manali side of Himachal. Snowfall and heavy snowfall is an annual hazard for the region. Moreover the villages in the sub-division have witnessed heavy rain, landslide, earthquake, forest fire, etc. The main occupations in this remote area are cultivation, small business, daily wage labour, and a few in service.

The housing is a bit different than the other parts of the district with double storied, stone and mud houses pre dominant which are good for winter. But, these may get damage during earthquake shaking and heavy rain. These all factors have increased the vulnerability of the community from earthquake and heavy rain types of hazards which can damage the housing. But, major problem of vulnerability is its connectivity. Many parts are cut off during entire winter and there is hardly telephone services in the villages. Only a few villages have mobile and land telephone services. The relief distribution after any devastating winter earthquake will be very difficult and have to be entirely dependent on helicopters. So, it is very essential that the local authority should select sites in each village where helicopter can land.

Bus connectivity to the villages is poor with poor kutcha road condition. Villages are far away from the motor-able road. There are dispensaries in many villages with not adequate health personnel and facilities like bed. Although villagers have housing but the electricity and toilet for all is still a distant dream. Only 60%-80% of the households have access to the basic amenities. Good part of the preparedness is that the villagers have some minimum tools and equipment to do an initial search and rescue if some emergency happens. But, the poor road condition and the landslides may hamper the relief in many places. Overall the villages have medium to very high risk based on their proximity to the sub-divisional office, socio-economic condition, vulnerability of housing and type of hazards.

Kuffa Revenue Village

Head of the Mohal: Satish Sharma

Contact number: 9418696000

Total population: 799

Total population under age 14 years are 230 above age 60 years are: 119

Total female population: 342, Physically handicapped population: 5

Total male population between ages 18-50 is 235 and total female population between ages 18-50 years is 215.

Hazard analysis: The village may suffer from heavy rain, heavy snowfall, high wind and earthquake. It has low probability of rock fall and forest fire also.

Vulnerability analysis: Most of the houses in the village are double storey with semi-pukka constructions with mud making it very vulnerable for heavy rain and earthquake. The villagers are engaged in variety of occupation with average income has turned the village more susceptible to disasters.

Connectivity: The village is connected with a kutcha road and the HRTC bus service comes to the neighbouring village only. They have both land and mobile telephone services.

Capacity analysis:

The drinking water source of the village is from tap which is situated within the village limited potable quality water.

All the villagers have housing, electricity and more than 60% have access to toilet.

The villagers need to go 2 Km to reach the nearest hospital through a kutcha road. The hospital has 25 beds, 4 doctors and 7 nurses and 8 other staff. It is connected to water and electricity. There is enough medicine for the villagers.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	2	9 bigha	HP Govt			
School	3			Y	Y	5
Community Hall	1			Y	Y	1
Clubs	1			Y	Y	2
Any other building	3			Y	Y	3
Crop field	2	3.1 bigha	Pvt			

The open space can be used as helipad and accommodate all the villagers.

Houses can be used or converted as warehouse

House	Accessibility	Condition	Ownership
3	600 mts	Good	Govt

Skilled human resources		
Carpenters	Name: Man Singh	Contact No. 9418821394
Masons	Name: Karam Lal	Contact No. 9418896426
Electricians	Name: Sher Chand	Contact No. 9459454794
Ex-Indian Armed Forces	Name: Mohan Lal	Contact No. NA

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights		Hurricane Lamp	40
Rope		Ladder	25
Helmets	40	Water tank	40
Saw	60	Hammer	73
Shovels	140	Pick Axe	43
Digging Bar	2	Water tank	
First Aid Box	5	Tent	
Food stock	Six month	Electric Generator	

Overall the village has moderate risk to hazards considering its overall vulnerability and capacity.

Kuthal Revenue Village

Head of the Mohal: Hir Chand

Contact number: NA

Total population: 542

Total population under age 14 years are 177 above age 60 years are: 49

Total female population: 282, Physically handicapped population: 5

Total male population between ages 18-50 is 159 and total female population between ages 18-50 years is 136.

Hazard analysis: The village may suffer from heavy rain, fire, heavy snowfall, high wind and earthquake. In the recent past it has suffered from 2 heavy rain, 3 fire and 2 heavy snowfall incidences.

Vulnerability analysis: Most of the houses in the village are double storey with kutcha constructions with mud making it very vulnerable for heavy rain, heavy snowfall and earthquake. The villagers are engaged in variety of occupation with average income has turned the village more susceptible to disasters.

Connectivity: The village is far from the sub-divisional head office making it more vulnerable as they may not be able to get the relief early. The connected road is in bad shape and there are two bridges in the road leading to the SDO. There is no bus service and connected with only mobile telephone services.

Capacity analysis:

The drinking water source of the village is from tap which is situated within the village limited potable quality water.

All the villagers have housing, electricity and access to toilet.

The villagers need to go 4 Km to reach the nearest hospital through a kutcha road. The hospital has 4 beds, 1 doctor and 1 other staff. It is connected to water and electricity. There is enough medicine for 7 days.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	1	1-10 bigha	HP Govt			
School	2			Y	Y	2
Crop field	20	85 bighas	Pvt			

Skilled human resources			
Carpenters and camp management	Name: Heer Chand		Contact No. 9418821394
Masons	Name: Mason		Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights		Hurricane Lamp	
Rope	200mts	Ladder	Yes

District Disaster Management Authority, Chamba (HP)

Helmets		Water tank	Yes
Saw	10	Hammer	25
Shovels	8	Pick Axe	
Digging Bar	20	Water tank	Yes
First Aid Box		Tent	
Food stock	Yes	Electric Generator	

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Sahli Revenue Village

Head of the Mohal: Deepak Ram (Up-pradhan)
200322

Contact number: 01897-

Total population: 227

Total population under age 14 years are 61 above age 60 years are: 18

Total female population: 120, Physically handicapped population: nil

Total male population between ages 18-50 is 73 and total female population between ages 18-50 years is 75.

Hazard analysis: The village may suffer from heavy snowfall, high wind and earthquake. It has low probability of rock fall, and landslide also. There are 4 incidences of heavy snowfall cases in the recent years.

Vulnerability analysis: Most of the houses in the village are double storey with semi-pukka constructions with brick and mud making it very vulnerable for heavy rain and earthquake. The villagers are engaged in govt services, farming, small business and a few are unemployed. With variety of occupations and more than average income has turned the village susceptible to disasters.

Connectivity: The village is far from the sub-divisional head office making it more vulnerable as they may not be able to get the relief early. The village is connected with a road in poor condition with three bridges, with no bus service. There is no telephone services. All the emergency services are far away except the health facility which is within the village.

Capacity analysis:

The drinking water source of the village is from tap which is situated within the village limited potable quality water.

All the villagers have housing, more than 60% have electricity and more than 60% have access to toilet.

The village health centre has 1 doctor and 1 other staff. It is connected to water and electricity. There is enough medicine for 7 days.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	1	1 bigha	HP Govt			

District Disaster Management Authority, Chamba (HP)

School	2			Y	Y	3
Any other building	3			Y	Y	3
Crop field	20	10 bigha	Pvt			

Sahli already has a helipad and the open space is enough for accommodating the villagers.

Houses can be used or converted as warehouse

House	Accessibility	Condition	Ownership
1	yes	Good	Govt

Skilled human resources

Masons	Name: Amar Chand	Contact No.
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Equipment & tools can be used during SAR and Camp Management

Item	Quantity	Item	Quantity
Big flash lights		Hurricane Lamp	
Rope	120	Ladder	10
Helmets		Water tank	12
Saw	15	Hammer	80
Shovels	20	Pick Axe	50
Digging Bar	10	Water tank	
First Aid Box	1	Tent	50
Food stock	50	Electric Generator	

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Mojhi Revenue Village

Head of the Mohal: Devi Chand (Ward Member)

Contact number: nil

Total population: 93

Total population under age 14 years are 30 above age 60 years are: 4

Total female population: 40, Physically handicapped population: nil

Total male population between ages 18-50 is 33 and total female population between ages 18-50 years is 26.

Hazard analysis: The village has low probability from heavy rain, heavy snowfall, high wind and earthquake.

Vulnerability analysis: Most of the houses in the village are double storey with kutcha constructions with mud making it very vulnerable for heavy rain and earthquake. The villagers are engaged in variety of occupation with average income has turned the village more susceptible to disasters.

District Disaster Management Authority, Chamba (HP)

Connectivity: The village 10kms away from the nearest road and very far from the far from the sub-divisional head office making it more vulnerable as they may not be able to get the relief early. There are three bridges on the road to the sub-division and one landslide prone area called Maguien. Health centre, veterinary, police station are far away. There is no mobile or other telephone connectivity.

Capacity analysis:

The drinking water source of the village is from tap which is situated within the village limited potable quality water.

All the villagers have housing, more than 60% have electricity and more than 60% have access to toilet.

The villagers need to go 3 Km to reach the nearest hospital and it is connected to water and electricity.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	1	2 bigha	HP Govt			
School	1			Y	Y	1
Any other building	2			Y	Y	2
Crop field	10	5 bigha	Pvt			

Skilled human resources

Carpenters	Name: Devi Chand	Contact No. nil
Masons	Name: Dhani Ram	Contact No.

Equipment & tools can be used during SAR and Camp Management

Item	Quantity	Item	Quantity
Big flash lights	3	Hurricane Lamp	10
Rope	20	Ladder	20
Helmets	10	Water tank	10
Saw	20	Hammer	65
Shovels	15	Pick Axe	20
Digging Bar	40	Water tank	
First Aid Box	5	Tent	10
Food stock	6 months	Electric Generator	3

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Kawas Revenue Village

Head of the Mohal: Smt. Sebo Devi

Contact number: 9418433451

Total population: 664

Total population under age 14 years are 94 above age 60 years are: 187

Total female population: 325, Physically handicapped population: nil

Total male population between ages 18-50 is 194 and total female population between ages 18-50 years is 188.

Hazard analysis: The village may suffer from heavy rain, heavy snowfall, and earthquake. It has low probability of rock fall and forest fire also.

Vulnerability analysis: Most of the houses in the village are double and triple storey with semi-pukka and kutcha constructions with mud making it very vulnerable for heavy rain and earthquake. The villagers are mainly engaged in govt. services, farming, and daily labourer. The occupation with average income has turned the village more susceptible to disasters.

Connectivity: The village is connected with a kutcha road but there is a bus stop nearby. The health centre and the police station is nearby. They have both land and mobile telephone services.

Capacity analysis:

The drinking water source of the village is from tap which is situated within the village limited potable quality water.

All the villagers have housing, electricity and more than 60% have access to toilet.

The villagers need to go 2 Km to reach the nearest hospital through a kutcha road. The hospital has 25 beds, 4 doctors and 7 nurses and 8 other staff. It is connected to water and electricity. There is enough medicine for the villagers.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	2	8 bigha	HP Govt			
School	2			Y	Y	2
Community Hall	1			Y	Y	2
Clubs	1			Y	Y	1
Any other building	1			Y	Y	2
Crop field	2	4-6 bigha	Pvt			

The open space can be used as helipad and accommodate all the villagers.

Houses can be used or converted as warehouse

House	Accessibility	Condition	Ownership
3	200 mts	Good	Govt

Skilled human resources		
Carpenters	Name: Man Singh	Contact No. NA
Masons	Name: Prem Singh	Contact No. 9459823603
Electricians	Name: Karam Lal	Contact No. 9418574188

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights		Hurricane Lamp	55
Rope		Ladder	35
Helmets		Water tank	60
Saw	45	Hammer	80
Shovels	60	Pick Axe	83
Digging Bar		Water tank	45
First Aid Box	90	Tent	
Food stock	Six month	Electric Generator	

Overall the village has moderate risk to hazards considering its overall vulnerability and capacity.

Tundra Revenue Village

Head of the Mohal: Devihal Thakur

Contact number: 9418442178

Total population: 242

Total population under age 14 years are 65 above age 60 years are: 10

Total female population: 118, Physically handicapped population: nil

Total male population between ages 18-50 is 87 and total female population between ages 18-50 years is 80.

Hazard analysis: The village may suffer from heavy snowfall and recent past they have experienced earthquake tremors of 4.3 and 2.6 magnitude.

Vulnerability analysis: Most of the houses in the village are double storey with kutcha constructions with mud making it very vulnerable for heavy rain and earthquake. The villagers are engaged in govt. service, farming, daily labour and many are unemployed with average income has turned the village susceptible to disasters.

Connectivity: The village is connected with a bad condition road to the sub-division which is 15 kms away. As the village is in an average distance from the sub-division so the relief may be distributed on time.

Capacity analysis:

The drinking water source of the village is from tap which is situated within the village. Villagers have electricity and have access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	1	4 bigha	HP Govt			
School	1			Y	Y	2
Open space	1	4 bighas	Govt			

The open space can be used as helipad and accommodate all the villagers.

Houses can be used or converted as warehouse

House	Accessibility	Condition	Ownership
3	600 mts	Good	Govt

Skilled human resources			
Carpenters	Name: Dev Raj, Hukam Chand		Contact No.
Masons	Name: Dev Raj, Hukam Chand		Contact No. 9418896426
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights		Hurricane Lamp	
Rope	20 nos.	Ladder	
Helmets		Water tank	
Saw	10	Hammer	
Shovels		Pick Axe	
Digging Bar		Water tank	2
First Aid Box		Tent	
Food stock		Electric Generator	

Overall the village has very high risk to hazards considering its overall vulnerability and capacity.

Chask Bhabri Revenue Village

Head of the Mohal: Ram Nath

Contact number: nil

Total population: 142

Total population under age 14 years are 38 above age 60 years are: 8

Total female population: 68, Physically handicapped population: nil

Total male population between ages 18-50 is 53 and total female population between ages 18-50 years is 43.

Vulnerability analysis: Most of the houses in the village are double storey with kutcha constructions with mud making it very vulnerable for heavy rain and earthquake. The villagers are engaged in variety of occupation with average income has turned the village more susceptible to disasters.

Connectivity: The village is connected with a motor-able road and it is 34kms from the sub-division making it very vulnerable. They don't have any telephone connection.

Capacity analysis:

District Disaster Management Authority, Chamba (HP)

The drinking water source of the village is from spring, which is situated within the village, available anytime and potable quality water.

More than 60% people have housing, electricity and access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	2	1 bigha	HP Govt			
School	2			Y	Y	2
Any other building	1			Y	Y	1
Crop field	5	1 bigha	Pvt			

The open space can be used to accommodate all the villagers.

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	5	Hurricane Lamp	20
Rope	20	Ladder	10
Helmets	20	Water tank	6
Saw	20	Hammer	50
Shovels	20	Pick Axe	50
Digging Bar	40	Water tank	
First Aid Box	3	Tent	10
Food stock	6 months	Electric Generator	1

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Michham Revenue Village

Head of the Mohal: Sham Dei (Pradhan)

Contact number: 01897-200322

Total population: 101

Total population under age 14 years are 15 above age 60 years are: 08

Total female population: 48, Physically handicapped population: nil

Total male population between ages 18-50 is 37 and total female population between ages 18-50 years is 41.

Hazard analysis: The village may suffer from heavy rain, fire, rock fall, heavy snowfall, high wind and earthquake.

Vulnerability analysis: Most of the houses in the village are double storey with kutcha constructions with mud making it very vulnerable for heavy rain and earthquake. The villagers are engaged in variety of occupation with average income has turned the village more susceptible to disasters.

Connectivity: The nearest motor-able road is 3 kms away and not in good condition. As the village is far away from the sub-division so the relief may be distributed very late. There is no bus service and have to cross three bridges to reach the sub-division office. There is no telephone service in the village.

Capacity analysis:

The drinking water source of the village is from tap which is situated within the village with limited potable quality water.

More than 80% villagers have housing, electricity and access to toilet.

The villagers need to go 2 Km to reach the nearest hospital. The hospital has 1 doctor and 2 other staff. It is connected to water and electricity. There is enough medicine for 6 days.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Any other open space	1	1 bigha	Pvt			
Crop field	30	20 bigha	Pvt			

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights		Hurricane Lamp	
Rope	100 nos.	Ladder	5
Helmets		Water tank	10
Saw	10	Hammer	20
Shovels	12	Pick Axe	40
Digging Bar		Water tank	10
First Aid Box	2 dispensary	Tent	15
Food stock	6 months	Electric Generator	

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Shisal Revenue Village

Head of the Mohal: Jalam Singh

Contact number: nil

Total population: 338

Total population under age 14 years are 100 above age 60 years are: 23

Total female population: 160, Physically handicapped population: 3

Total male population between ages 18-50 is 114 and total female population between ages 18-50 years is 99.

Hazard analysis: The village may suffer from heavy rain, heavy snowfall, landslide and earthquake. It has 2 heavy rain, 3 landslide and 2 heavy snowfall incidences in the recent past.

Vulnerability analysis: Most of the houses in the village are double storey with kutcha constructions with mud making it very vulnerable for heavy rain and earthquake. The villagers are engaged in variety of occupation with average income has turned the village more susceptible to disasters.

Connectivity: The nearest motor-able road is 10 kms away and not in good condition. As the village is 25 kms far away from the sub-division so the relief may be distributed very late. There is no bus service and have to cross two bridges to reach the sub-division office. There is no telephone service in the village. All the critical services like hospital, police station, and veterinary are far way.

Capacity analysis:

The drinking water source of the village is from tap which is situated within the village limited potable quality water.

More than 60% villagers have housing and the people with housing have electricity. The villagers need to go 5 Km to reach the nearest hospital through a kutcha road. The hospital has 4 beds, 1 doctors and 2 nurses and 1 other staff. It is connected to water and electricity. There is enough medicine for 7 days.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	1	1bigha	HP Govt			
School	1			Y	Y	1
Crop field	5	20 bigha	Pvt			

The open space can be used to accommodate all the villagers.

Skilled human resources			
Camp Management	Name: Jalam Singh		
Carpenters	Name: Khajan Singh		Contact No.
Masons	Name: Sen Chand		Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights		Hurricane Lamp	
Rope	150	Ladder	Yes
Helmets		Water tank	Yes
Saw	20	Hammer	20
Shovels	10	Pick Axe	Yes
Digging Bar	15	Water tank	
First Aid Box		Tent	
Food stock	Yes	Electric Generator	

Overall the village has very high risk to hazards considering its overall vulnerability and capacity.

Chaloli Revenue Village

District Disaster Management Authority, Chamba (HP)

Head of the Mohal: Dhyan Singh (ex-pradhan)

Contact number: nil

Total population: 247

Total population under age 14 years are 79 above age 60 years are: 28

Total female population: 127, Physically handicapped population: nil

Total male population between ages 18-50 is 81 and total female population between ages 18-50 years is 95.

Hazard analysis: The village may suffer from heavy rain, fire, landslide, heavy snowfall, high wind and earthquake. It has low probability of rock fall.

Vulnerability analysis: Most of the houses in the village are double storey with kutcha constructions with mud making it very vulnerable for heavy rain and earthquake. The villagers are engaged in variety of occupation with average income has turned the village more susceptible to disasters.

Connectivity: The road leading to the village from the SDO is kutcha and 17 kms. There are many bridges to cross before reaching the villages which means it is in very remote vulnerable place. The bus service is only available in summer time. Critical facilities like hospital and police station are far away. Only the veterinary is in the village. The village is connected with mobile phone.

Capacity analysis:

The drinking water source of the village is from tap which is situated within the village, available anytime and potable quality water.

All the villagers have housing, but less than 60% have electricity and access to toilet.

There is one nurse in the village and with enough medicine for a day.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	1	2 bigha	HP Govt			
School	1			Y	Y	1

The open area may not be enough to accommodate all the villagers.

Houses can be used or converted as warehouse

House	Accessibility	Condition	Ownership
30			Pvt

Skilled human resources			
Carpenters	Name: Laxmi Nath, S/O Tulsi Ram		Contact No.
Masons	Name: Ram Kishan S/O Shiv Ram		Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity

District Disaster Management Authority, Chamba (HP)

Big flash lights		Hurricane Lamp	
Rope		Ladder	
Helmets		Water tank	
Saw	2	Hammer	45
Shovels	38	Pick Axe	36
Digging Bar	40	Water tank	
First Aid Box		Tent	
Food stock		Electric Generator	

Overall the village has moderate risk to hazards considering its overall vulnerability and capacity.

Kuthah Revenue Village

Head of the Mohal: Smt. Laccho Devi

Contact number: nil

Total population: 522

Total population under age 14 years are 120 above age 60 years are: 51

Total female population: 255, Physically handicapped population: nil

Total male population between ages 18-50 is 198 and total female population between ages 18-50 years is 157.

Hazard analysis: The village may suffer from heavy rain, landslide, rock fall, heavy snowfall, and earthquake. It has low probability of rock fall, flood, high wind and forest fire also.

Vulnerability analysis: Most of the houses in the village are double storey with kutcha constructions with mud making it very vulnerable for heavy rain and earthquake. The villagers are engaged in variety of occupation with average income has turned the village more susceptible to disasters.

Connectivity: The road leading to the village from the SDO is kutcha and 17 kms. There are many bridges to cross before reaching the villages which means it is in very remote vulnerable place. The bus service is only available in summer time. Critical facilities like hospital, veterinary and police station are far away. The village is connected with mobile phone.

Capacity analysis:

The drinking water source of the village is from tap which is situated within the village, available anytime and potable quality water.

All the villagers have housing, but less than 60% have electricity and access to toilet.

There hospital is 3 kms away in another village with few medicines for a day.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	1	3 bigha	HP Govt			
School	1			Y	Y	2
Household	50					

Skilled human resources			
Carpenters	Name: Sher Sing S/O Mohan Lal	Contact No.	
Masons	Name: Bazir Chand S/O Sujana Ran	Contact No.	
Electricians	Name: Jai Singh S/O Bihari Lal	Contact No.	
Ex-Indian Armed Forces	Name: Gian Chand S/O Sangara Ram	Contact No.	
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights		Hurricane Lamp	
Rope		Ladder	
Helmets		Water tank	
Saw	4	Hammer	50
Shovels	40	Pick Axe	30
Digging Bar	20	Water tank	
First Aid Box		Tent	
Food stock		Electric Generator	

Overall the village has moderate risk to hazards considering its overall vulnerability and capacity.

Kumar Revenue Village

Head of the Mohal: Dila Ram

Contact number: nil

Total population: 434

Total population under age 14 years are 115 above age 60 years are: 29

Total female population: 206, Physically handicapped population: nil

Total male population between ages 18-50 is 149 and total female population between ages 18-50 years is 141.

Hazard analysis: The village may suffer from heavy snowfall, landslide, high wind and earthquake. It has already experienced 1 landslide and 8 cases of heavy snowfall in the recent past.

Vulnerability analysis: Most of the houses in the village are double storey with kutcha constructions with mud making it very vulnerable for heavy rain and earthquake. The villagers are engaged in variety of occupation with average income has turned the village more susceptible to disasters.

Connectivity: The road leading to the village from the SDO is not in good condition and 22 kms. With two bridges. As it is far away from the SDO so the relief will arrive late. The bus service is only available in summer time. Critical facilities like hospital and police station are far away. Veterinary is in the village. The village is connected with mobile phone.

Capacity analysis:

The drinking water source of the village is from tap which is situated within the village limited potable quality water.

District Disaster Management Authority, Chamba (HP)

All the villagers have housing, electricity and have access to toilet.

A doctor is there in the small health centre with 7 days of medicine.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	1		HP Govt			
School	2			Y	Y	4
Any other building	2			Y	Y	2
Crop field	15	10 bigha	Pvt			

The open space can be used as helipad and accommodate all the villagers.

Skilled human resources			
Camp Management expert	Name: Dila Ram		
Carpenters	Name: Sugu Ram		Contact No.
Masons	Name: Bhagat Ram		Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights		Hurricane Lamp	
Rope	150	Ladder	15
Helmets		Water tank	
Saw	20	Hammer	25
Shovels	20	Pick Axe	10
Digging Bar	15	Water tank	2
First Aid Box	1	Tent	
Food stock	30 Kilo	Electric Generator	

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Ghangeet Revenue Village

Head of the Mohal: Kishan Chand Chopra

Contact number: nil

Total population: 430

Total population under age 14 years are 152 above age 60 years are: 21

Total female population: 207, Physically handicapped population: nil

Total male population between ages 18-50 is 275 and total female population between ages 18-50 years is 158.

Hazard analysis: The village may suffer from heavy rain, heavy snowfall, landslide, high wind and earthquake. It has low probability of rock fall and forest fire also.

Vulnerability analysis: Most of the houses in the village are double storey with kutcha constructions with mud making it very vulnerable for heavy rain and earthquake. The villagers are engaged in variety of occupation with average income has turned the village more susceptible to disasters.

Connectivity: The road leading to the village from the SDO is kutcha and 4 kms. As it is near the SDO so the relief will arrive timely. The bus service is only available in summer time. Critical facilities like hospital and police station are far away. Veterinary is in the village. The village is connected with mobile phone.

Capacity analysis:

The drinking water source of the village is from tap which is situated within the village, available anytime and potable quality water.

All the villagers have housing, 60% have electricity and 60% have access to toilet.

The health centre is 1 km away with limited medicine.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
School	2		HP Govt	Y	Y	4
Crop field			Pvt			

Skilled human resources			
Carpenters	Name: Bhim Singh S/O Gulab Chand		Contact No.
Masons	Name: Pancchi Lal S/O Shiv Ram		Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights		Hurricane Lamp	
Rope		Ladder	
Helmets		Water tank	1
Saw	20	Hammer	30
Shovels	30	Pick Axe	50
Digging Bar	40	Water tank	
First Aid Box		Tent	
Food stock		Electric Generator	

Overall the village has moderate risk to hazards considering its overall vulnerability and capacity.

Luj Revenue Village

Head of the Mohal: Baldev Ram (Pradhan)

Contact number: 9418499018

Total population: 840

Total population under age 14 years are 185 above age 60 years are: 58

Total female population: 417, Physically handicapped population: nil

Total male population between ages 18-50 is 214 and total female population between ages 18-50 years is 229.

Hazard analysis: The village may suffer from heavy rain, heavy snowfall, landslide, forest fire, high wind and earthquake. It has low probability of rock fall and fire also.

Vulnerability analysis: Most of the houses in the village are double storey with kutcha constructions with mud making it very vulnerable for heavy rain and earthquake. The villagers are engaged in variety of occupation with average income has turned the village more susceptible to disasters.

Connectivity: The road leading to the village from the SDO is kutcha and 12 kms. As it is not very far from SDO so the relief will arrive timely. The bus service is only available in summer time. They need to connect with the outer world via Manali or J&K in summer only. Veterinary is in the village. The village is connected with mobile phone.

Capacity analysis:

The drinking water source of the village is from tap which is situated within the village, available anytime.

All the villagers have housing, 60% have electricity and access to toilet. Village has a health centre and limited medicines are available.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground			Pvt			
School	1			Y	Y	2
Community Hall	1			N	Y	N
Total household	90		Pvt			

Skilled human resources

Carpenters	Name: Jai Singh S/O Basant Ram		Contact No.
Masons	Name: Jai Singh S/O Prem Lal		Contact No.
Electricians	Name: Bhagawan Chand S/O Kahan Chand		Contact No.
Ex-Indian Armed Forces	Name: Hoshiar Chand S/O Agya Ram		Contact No.

Equipment & tools can be used during SAR and Camp Management

Item	Quantity	Item	Quantity
Big flash lights		Hurricane Lamp	
Rope		Ladder	
Helmets		Water tank	
Saw	20	Hammer	50
Shovels	30	Pick Axe	40
Digging Bar	45	Water tank	
First Aid Box		Tent	
Food stock		Electric Generator	

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Rei Revenue Village

Head of the Mohal: Meera

Contact number: nil

Total population: 1125

Total population under age 14 years are 315 above age 60 years are: 60

Total female population: 469, Physically handicapped population: nil

Total male population between ages 18-50 is 320 and total female population between ages 18-50 years is 260.

Hazard analysis: The village may suffer from heavy rain, heavy snowfall, high wind and earthquake. It has experienced 2 road accident and 2 cases of heavy snowfall in the recent past.

Vulnerability analysis: Most of the houses in the village are double storey with kutcha constructions with mud making it very vulnerable for heavy rain and earthquake. The villagers are engaged in variety of occupation with average income has turned the village more susceptible to disasters.

Connectivity: The road leading to the village from the SDO is not in good condition and 25 kms. As it is very far from SDO so the relief will arrive late. The bus service is only available in summer time. All critical facilities like hospital, veterinary and police station are far away. The village is connected with mobile phone.

Capacity analysis:

The drinking water source of the village is from tap which is situated outside village, available anytime with potable quality water.

Less than 60% have housing and those who have housing 80% of them have electricity and access to toilet.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	4	5 bigha	HP Govt			
School	3			Y	Y	4
Community Hall	1			Y	Y	2
Any other building	3			Y	Y	3
Crop field	50	100 bigha	Pvt			
Other space for helipad	3	15 bigha	Pvt			

The open space can be used as helipad and accommodate all the villagers.

Houses can be used or converted as warehouse

House	Accessibility	Condition	Ownership
1	good	Good	Govt

Skilled human resources			
Camp Management	Name: Meera		
Carpenters	Name: Ravinder Janamjeet		Contact No.
Masons	Name: Deep Kumar, Bhagat Ram		Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights		Hurricane Lamp	
Rope	150	Ladder	10
Helmets	2	Water tank	10
Saw	10	Hammer	5
Shovels	20	Pick Axe	100
Digging Bar	10	Water tank	10
First Aid Box	Yes	Tent	50
Food stock	Yes	Electric Generator	

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Kulal Revenue Village

Head of the Mohal: Bhag Dei

Contact number:

Total population: 251

Total population under age 14 years are 34 above age 60 years are: 11

Total female population: 123, Physically handicapped population: 2

Total male population between ages 18-50 is 98 and total female population between ages 18-50 years is 89.

Hazard analysis: The village may suffer from heavy snowfall, high wind, forest fire and earthquake. It has experienced 1 heavy snowfall in the recent past.

Vulnerability analysis: Most of the houses in the village are double storey with kutcha constructions with mud making it very vulnerable for heavy rain and earthquake. The villagers are engaged in variety of occupation like- govt, small business, farming, and with lots of unemployed with average income has turned the village more susceptible to disasters.

Connectivity: The road leading to the village from the SDO is not in good condition and 18 kms with 5 bridges in between. As it is very far from SDO so the relief will arrive late. All critical facilities like hospital, veterinary and police station are far away. The village is connected with mobile phone.

Capacity analysis:

The drinking water source of the village is from tap which is situated within the village limited water.

All the villagers have housing, electricity and more than 80% have access to toilet.

District Disaster Management Authority, Chamba (HP)

The villagers need to go 6 Km to reach the nearest hospital through a kutchha road. The hospital has 6 beds, 1 doctor. It is connected to water and electricity. There is enough medicine for 7 days.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	1	4 bigha	HP Govt			
School	1			Y	Y	1

Equipment & tools can be used during SAR and Camp Management

Item	Quantity	Item	Quantity
Big flash lights		Hurricane Lamp	
Rope	30 nos.	Ladder	Yes
Helmets		Water tank	
Saw	6	Hammer	10
Shovels	4	Pick Axe	
Digging Bar	5	Water tank	
First Aid Box		Tent	5
Food stock	yes	Electric Generator	

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Pragran Revenue Village

Head of the Mohal: Dhiyan Chand (Ex Pradhan)

Contact number: nil

Total population: 162

Total population under age 14 years are 62 above age 60 years are: 14

Total female population: 66, Physically handicapped population: nil

Total male population between ages 18-50 is 48 and total female population between ages 18-50 years is 38.

Hazard analysis: The village may suffer from heavy snowfall, landslide, high wind, and earthquake. It has low probability of rock fall and forest fire also.

Vulnerability analysis: Most of the houses in the village are double storey with kutchha constructions with mud making it very vulnerable for heavy rain and earthquake. The villagers are engaged in variety of occupation like- govt, small business, farming, and with lots of unemployed with average income has turned the village more susceptible to disasters.

Connectivity: The road leading to the village from the SDO is kutchha and 10 kms with 8 bridges in between. As it is not very far from SDO so the relief will arrive early. All critical facilities like hospital, and police station are far away. The veterinary is within the village. The village is connected with mobile phone.

Capacity analysis:

The drinking water source of the village is from tap which is situated within the village with anytime availability. All the villagers have housing, 60% have electricity and 60% have access to toilet.

Open area to be used for relief camps and medical aid:

District Disaster Management Authority, Chamba (HP)

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground			Pvt			
School	1			Y	Y	Y
Community Hall	1			Y	Y	
Any other building	3		Pvt	Y	Y	1

Skilled human resources			
Ex-Indian Forces	Armed	Name: Gian Chand S/O Hardial	Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights		Hurricane Lamp	
Rope		Ladder	
Helmets		Water tank	
Saw	3	Hammer	8
Shovels	10	Pick Axe	8
Digging Bar	10	Water tank	
First Aid Box		Tent	
Food stock		Electric Generator	

Overall the village has moderate risk to hazards considering its overall vulnerability and capacity.

Keral Revenue Village

Head of the Mohal: Smt Sebo Devi

Contact number: 9418433451

Total population: 271

Total population under age 14 years are 45 above age 60 years are: 110

Total female population: 210, Physically handicapped population: nil

Total male population between ages 18-50 is 165 and total female population between ages 18-50 years is 140.

Hazard analysis: The village may suffer from snowfall, high wind and earthquake. It has low probability of rock fall and forest fire also.

Vulnerability analysis: Most of the houses in the village are double storey with kutcha constructions with mud making it very vulnerable for heavy rain and earthquake. The villagers are engaged in variety of occupation like- govt, small business, farming, and with lots of unemployed with average income has turned the village more susceptible to disasters.

Connectivity: The road leading to the village from the SDO is 10 kms with 2 bridges in between. As it is not very far from SDO so the relief will arrive timely. All critical facilities like hospital, veterinary and police station are not far away. The village is connected with mobile phone.

Capacity analysis:

The drinking water source of the village is from tap which is situated within the village limited potable quality water.

All the villagers have housing, electricity and more than 60% have access to toilet. The villagers need to go 1 km to reach the nearest hospital which is connected to water and electricity.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	1	3.18 bigha	HP Govt			
School	1			Y	Y	1
Any other building	2			Y	Y	3
Crop field	1	3.11 bigha	Pvt	Y	Y	3
Open space for helipad	1	4 bigha				

The open space can be used as helipad and accommodate all the villagers.

Skilled human resources			
Carpenters	Name: Tara Chand		Contact No. 9418520048
Masons	Name: Des Raj		Contact No. 9418240699
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	8	Hurricane Lamp	15
Rope	35	Ladder	30
Helmets	15	Water tank	25
Saw	30	Hammer	70
Shovels	25	Pick Axe	65
Digging Bar	55	Water tank	
First Aid Box	15	Tent	15
Food stock	25	Electric Generator	

Overall the village has moderate risk to hazards considering its overall vulnerability and capacity.

Twon Revenue Village

Head of the Mohal: Man Singh (Pradhan)

Contact number: nil

Total population: 332

Total population under age 14 years are 57 above age 60 years are: 15

Total female population: 169, Physically handicapped population: nil

Total male population between ages 18-50 is 131 and total female population between ages 18-50 years is 129.

Hazard analysis: The village may suffer from heavy snowfall, high wind and earthquake.
Vulnerability analysis: Most of the houses in the village are double storey with kutcha constructions with mud making it very vulnerable for heavy rain and earthquake. The villagers are engaged in variety of occupation like- govt, small business, farming, and with lots of unemployed with average income has turned the village more susceptible to disasters.

Connectivity: The road leading to the village from the SDO is 35 kms with 5 bridges in between. As it is very far from SDO so the relief may arrive late. All critical facilities like veterinary and police station are not far away. There is no phone connection and no bus connectivity.

Capacity analysis:

The drinking water source of the village is from tap which is situated within the village with anytime availability of potable quality water.

More than 80% villagers have housing, electricity and access to toilet. The village dispensary has 1 nurse and a bed with enough medicine for 7 days.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	2	2.0 bigha	HP Govt			
School	2			Y	Y	2
Community Hall	1			Y	Y	1
Any other building	1			Y	Y	1
Crop field	20	10 bigha	Pvt			

The open space can be used as helipad and accommodate all the villagers.

Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Big flash lights	5	Hurricane Lamp	40
Rope	10	Ladder	20
Helmets	30	Water tank	10
Saw	40	Hammer	75
Shovels	50	Pick Axe	60
Digging Bar	50	Water tank	-
First Aid Box	5	Tent	10
Food stock	6 months	Electric Generator	2

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Rusmus Revenue Village

Head of the Mohal: Deepak Kumar

Contact number: Nil

Total population: 336

Total population under age 14 years are 65 above age 60 years are: 33

Total female population: 166, Physically handicapped population: nil

Total male population between ages 18-50 is 95 and total female population between ages 18-50 years is 102.

Hazard analysis: The village may suffer from heavy rain, heavy snowfall, landslide, flood, high wind and earthquake. It has low probability of rock fall and forest fire also.

Vulnerability analysis: Most of the houses in the village are double storey with kutcha constructions with mud making it very vulnerable for heavy rain and earthquake. The villagers are engaged in variety of occupation like- govt, small business, farming, and with lots of unemployed with average income has turned the village more susceptible to disasters.

Connectivity: The road leading to the village from the SDO is kutcha and 23 kms away with 11 bridges in between. As it is very far from SDO so the relief may arrive late. All critical facilities like veterinary and police station are not far away. Bus service in the summer season only and there is mobile phone service in the village.

Capacity analysis:

The drinking water source of the village is from tap which is situated within the village limited potable quality water.

All the villagers have housing, less than 60% have electricity and access to toilet.

The dispensary is 2kms away and there is medicine for a day.

Open area to be used for relief camps and medical aid:

Place	Qt	Area	Ownership	Water	Electricity	Toilet
Play ground	1	2 bigha	HP Govt			
School	1			Y	Y	2
Any other building	4			Y	Y	4
Household	50		Pvt			

The open space mayn't be able to accommodate all the villagers.

Skilled human resources			
Carpenters	Name: Natha Ram S/O Maya Ram		Contact No.
Masons	Name: Roshan Lal S/O Tej Ram		Contact No.
Ex-Indian Armed Forces	Name: Bansi Lal S/O Labhu Ram		Contact No.
Equipment & tools can be used during SAR and Camp Management			
Item	Quantity	Item	Quantity
Saw	4	Hammer	51
Shovels	30	Pick Axe	37
Digging Bar	29	Water tank	
First Aid Box		Tent	
Food stock		Electric Generator	

Overall the village has high risk to hazards considering its overall vulnerability and capacity.

Chapter - 3

Institutional Mechanism

National Level

The Disaster Management Act, 2005 lays down institutional, legal, financial and coordination mechanisms at the National, State, District and Local levels. These institutions are not parallel structures and will work in close harmony. The new institutional framework is expected to usher in a paradigm shift in DM from erstwhile relief centric approach to a proactive regime that lays greater emphasis on preparedness, prevention and mitigation. The NDMA, as the apex body at national level for disaster management, is headed by the Prime Minister. The Act also provides for the National Executive (NEC) at the National level. The NEC comprises the Union Home Secretary as Chairperson, and the Secretaries to the GoI in the Ministries/Departments of Agriculture, Atomic Energy, Defence, Drinking Water Supply, Environment and Forests, Finance (Expenditure), Health, Power, Rural Development, Science & Technology, Space, Telecommunications, Urban Development, Water Resources and the Chief of the Integrated Defence Staff of the Chiefs of Staff Committee as members. Secretaries in the Ministry of External Affairs, Earth Sciences, Human Resource Development, Mines, Shipping, Road Transport & Highways, and the Secretary, NDMA will be special invitees to the meetings of the NEC. The NEC is the executive committee of the NDMA, and is mandated to assist the NDMA in the discharge of its functions and also ensure compliance of the directions issued by the Central Government. The NEC is to coordinate the response in the event of any threatening disaster situation or disaster.

State Level

2. At the State level, the State Disaster Management Authority under the chairmanship of the Chief Minister stood constituted on 1.6.2007 and has the responsibility of policies, plans and guidelines for DM 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 approve the State Plan in accordance with the guidelines laid down by the NDMA, approve DMPs 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, 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 disaster in the State. The State Executive Committee (SEC) headed by the Chief Secretary and four other Secretaries as its members shall be there to assist the SDMA in the performance of its functions. The SEC will further provide necessary technical assistance or give advice to District Authorities and local authorities for carrying out their functions effectively, advise the State Government regarding all financial matters in relation to disaster management, examine the construction, in any local area in the State and, if it is of the opinion that the standards laid for such construction for the prevention of disaster is not being or has not been followed, may direct the District Authority or the local authority, as the case may be, to take such action as may be necessary to secure compliance of such standards, lay down, review and update State level response plans and guidelines and ensure that the district level plans are prepared, reviewed and updated, ensure that communication systems are in order and the disaster management drills are carried out

periodically. The SEC will also provide information to the NDMA relating to different aspects of DM.

State and District Crisis Management Group

3. The crisis management group at State and districts level have been constituted for the State. The State Crisis Management Group (SCMG) is headed by the Chief Secretary. The SCMG shall normally handle all crisis situation and advice and guide the District Crisis Management Group (DCMG) also. The DCMG is headed by the District Magistrate and is responsible for on-scene management of the incident emergency.

District Disaster Management Authority (DDMA)

4. The DDMA for the district has been notified on 1.6.2007 as under:-

i)	Deputy Commissioner	Chairman
ii)	Superintendent of Police	Member
iii)	Chief Medical Officer	Member
iv)	Superintendent Engineer (I & PH)	Member
v)	Superintendent Engineer (Power)	Member
vi)	Superintendent Engineer (PWD)	Member
vii)	Chairman Zila Parishad	Member
viii)	Additional District Magistrate	-Member Secretary

5. The roles and responsibilities of the DDMA have been elaborated in Section 30 of the DM Act, 2005. 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, inter alia prepare the District DM plan for the District and monitor the implementation of the National Policy, the State Policy, the National Plan, the State Plan and the District Plan. The DDMA will also ensure that the guidelines for prevention, mitigation, preparedness and response measures lay down by the NDMA and the SDMA are followed by all the Departments of the State Government at the District level and the local authorities in the District. The DDMA will further ensure that the areas in the district vulnerable to disasters are identified and measures for the prevention of disasters and the mitigation of its effects are taken, ensure that the guidelines for prevention of disasters, mitigation of its effects, preparedness and response measures as laid down by the National Authority and the State Authority are followed by all departments, lay down guidelines for prevention of disaster management plans by the department of the Government at the districts level and local authorities in the district, monitor the implementation of disaster management plans prepared by the Departments of the Government at the district level, lay down guidelines to be followed by the Departments of the Government at the district level for purposes of integration of measures for prevention of disasters and mitigation in their development plans and projects and monitor the implementation of the same, review the state of capabilities and preparedness level for responding to any disaster or threatening disaster situation at the district level and take steps for their up gradation as may be necessary, organise and coordinate specialised training programmes for different levels of officers, employees and voluntary rescue workers in the district, facilitate community training and awareness programmes for prevention of disaster or mitigation with the support of local authorities, governmental and non-governmental organisations, set up, maintain, review and upgrade the mechanism for early warnings and dissemination of proper information to public, prepare, review and update district level response plan and guidelines.

6. The DDMA will also coordinate response to any threatening disaster situation or disaster, coordinate with, and provide necessary technical assistance or give advice to the local authorities in the district for carrying out their functions, examine the construction in any area in the district and issue direction the concerned authority to take such action as may be necessary to secure compliance of such standards as may be required for the area, and identify buildings and places which could, in the event of any threatening disaster situation or disaster, be used as relief centers or camps and make arrangements for water supply and sanitation in such buildings or places, establish stockpiles of relief and rescue materials or ensure preparedness to make such materials available at a short notice. The DDMA will encourage the involvement of non-governmental organisations and voluntary social-welfare institutions working at the grassroots level in the district for disaster management, ensure communication systems are in order, and disaster management drills are carried out periodically.

Local Authorities

7. For the purpose of this Policy, local authorities would include Panchayati Raj Institutions (PRI), Municipalities, District and Cantonment Institutional and Legal Arrangements Boards, and Town Planning Authorities which control and manage civic services. These bodies will ensure capacity building of their officers and employees for managing disasters, carry out relief, rehabilitation and reconstruction activities in the affected areas and will prepare DM Plans in consonance with the guidelines of the NDMA, SDMAs and DDMA. Specific institutional framework for dealing with disaster management issues in mega cities will be put in place.

Role of State Government Departments at District Level

8. It shall be the responsibility of every department of the Government to prepare DMP with respect to their respective departments as per the guidelines issued by DDMA, take measures necessary for disasters prevention, mitigation, capacity-building and preparedness in accordance with the guidelines laid down by the National Authority, the State Authority and the District Authority. The departments will inter alia integrate into its development plans and projects, the measures for prevention of disaster and mitigation, allocate funds for prevention of disaster, mitigation, capacity-building and preparedness, respond effectively and promptly to any threatening disaster situation or disaster in accordance with the DMP and director issued by the SEC or the DDMA, review the enactments administered by it, its policies, rules and regulations with a view to incorporate therein the provisions necessary for prevention of disasters, mitigation or preparedness, provide assistance, as required, by the National Executive Committee, the State Executive Committee and District Authorities, for drawing up mitigation, preparedness and response plans, capacity-building, data collection and identification and training of personnel in relation to disaster management, assessing the damage from any disaster, and carrying out rehabilitation and reconstruction.

9. The department will also make provision for resources in consultation with the State/District Authority for the implementation of the District Plan by its authorities at the district level, make available its resources to the National Executive Committee or the State Executive Committee or the District Authorities for the purposes of responding promptly and effectively to any disaster in the State, including measures for- providing emergency communication with a vulnerable or affected area, transporting personnel and relief goods to and from the affected area, providing evacuation, rescue, temporary shelter or other immediate relief, carrying out evacuation of persons or live-stock from an area of any threatening disaster situation or disaster, setting up temporary bridges, jetties and landing places, and providing drinking

water, essential provisions, healthcare and services in an affected area and such other actions as may be necessary for disaster management.

District Administration

10. At the District level, DDMA's will act as the District planning, coordinating and implementing body for disaster management and will take all measures for the purposes of disaster management in the District in accordance with the guidelines laid down by NDMA and SDMA or the SEC.

Other Institutional Arrangements

Armed Forces

11. Conceptually, the Armed Forces are called upon to assist the civil administration only when the situation is beyond their coping capability. In practice, however, the Armed Forces form an important part of the Government's response capacity and are immediate responders in all serious disaster situations. On account of their vast potential to meet any adverse challenge, speed of operational response and the resources and capabilities at their disposal, the Armed Forces have historically played a major role in emergency support functions. These include communication, search and rescue operations, health and medical facilities, and transportation, especially in the immediate aftermath of a disaster. Airlift, heli-lift and movement of assistance to neighbouring countries primarily fall within the expertise and domain of the Armed Forces. The Armed Forces will participate in imparting training to trainers and DM managers, especially in CBRN aspects, heli-insertion, high-altitude rescue, Watermanship and training of paramedics. At the National level, the Chief of the Integrated Defence Staff to the Chairman Chiefs of Staff Committee has already been included in the NEC. Similarly, at the State and District levels, the local representatives of the Armed Forces will be included in their executive committees to ensure closer coordination and cohesion.

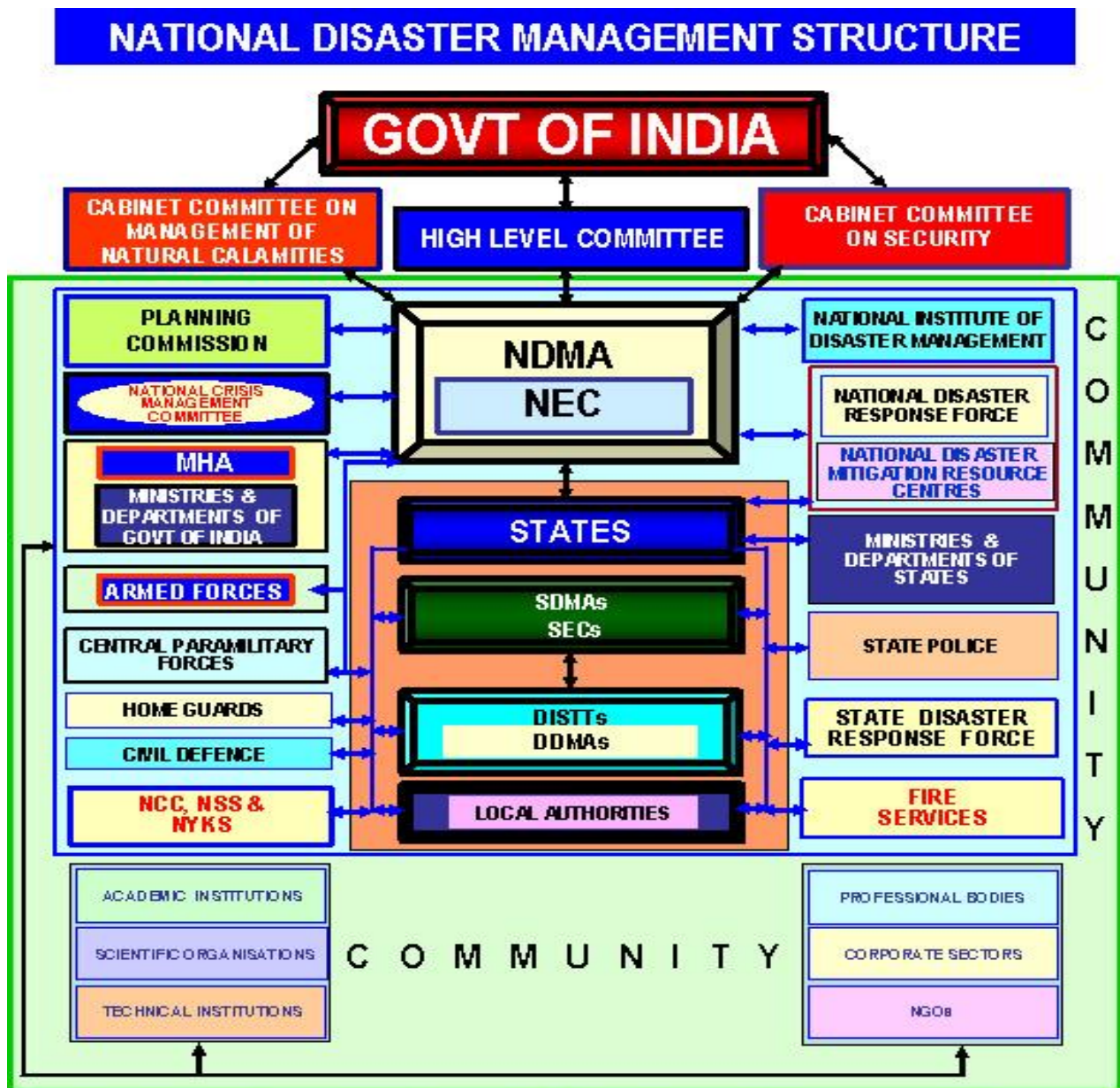
Central Paramilitary Forces

12. The Central Paramilitary Forces (CPMFs), which are also the Armed Forces of the Union, play a key role at the time of immediate response to disasters. Besides contributing to the NDRF, they will develop adequate disaster management capabilities within their own forces and respond to disasters which may occur in the areas where they are posted. The local representatives of the CPMFs located in the district will be co-opted/invited in the DDMA meeting for better coordination.

State Police Forces and India Reserve Battalions

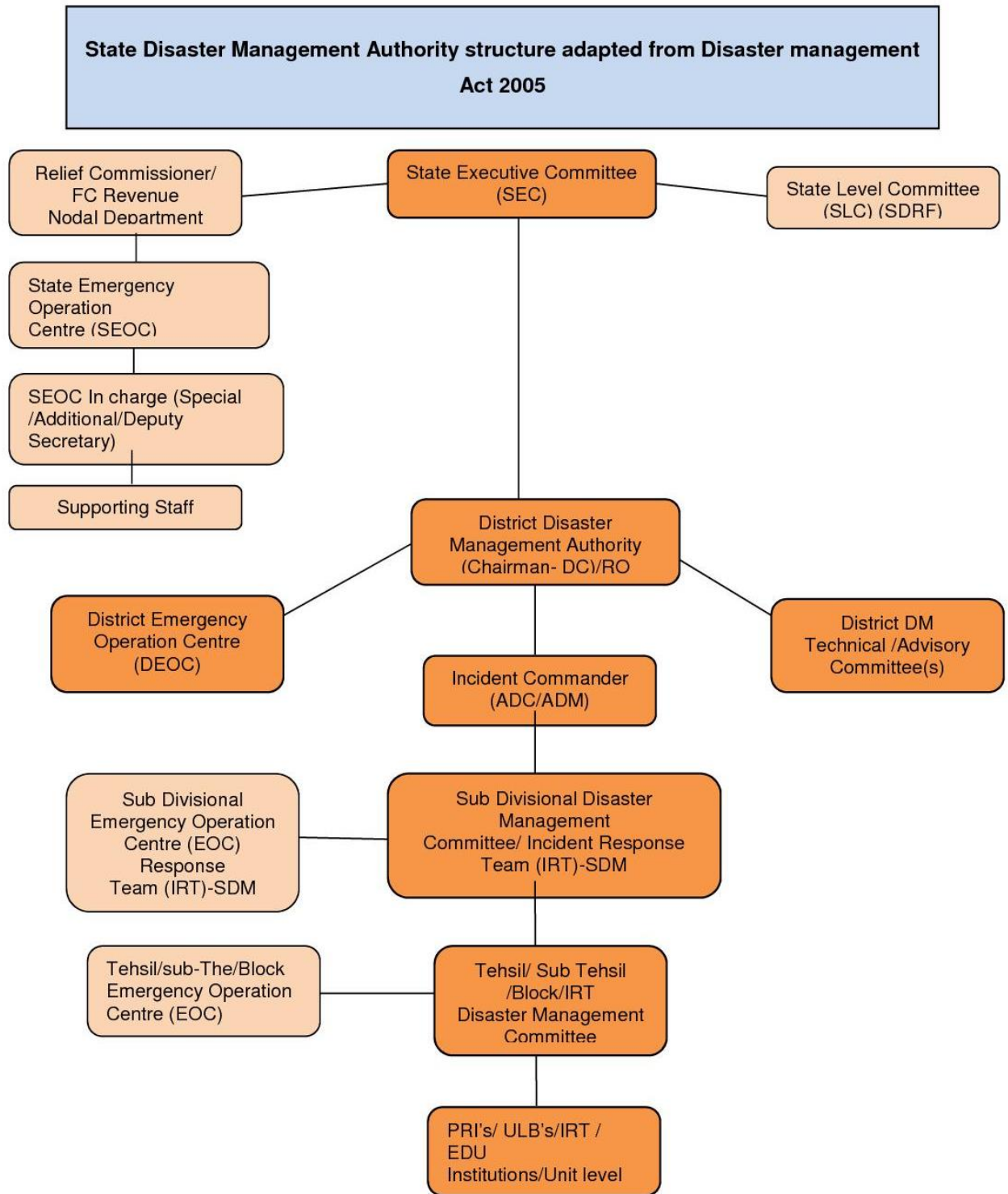
13. The State Police Forces and the India Reserve Battalions are crucial for immediate responders to disasters. The existing Police Forces located in the district will be trained in advanced SAR and MFA techniques so that their services can be utilised in disaster situations/events.

The overall institutional structure for DM is as in the next page:-



- Notes:**
1. This diagram reflects interactive linkages for synergised management of disasters and not a hierarchical structure.
 2. Backward and forward linkages, especially at the functional level, are with a view to optimise efficiency.
 3. Participation of the Community is a crucial factor.

Figure: Disaster Management Structure PRI's/ ULB's/IRT /



Fire Services and Home Guards

14. The Home Guards and Fire Services will be assigned an effective role in the field of disaster management. They will be deployed for community preparedness, conduct of mock drill and public awareness. A culture of voluntary reporting to duty stations in the event of any disaster will be promoted. The Fire Services upgraded to acquire multi-hazard rescue capability. The existing set up of these services would be strengthened to take up the new role more effectively.

Role of National Cadet Corps (NCC), National Service Scheme (NSS), Nehru Yuva Kendra Sangathan (NYKS), Scouts and Guides, Youth and Women Organisations.

15. NCC, NSS, NYKS, Scouts and Guides, Mahilla and Yuvak Mandals as organisations would be roped in DM. They will be trained in search and rescue (SAR) and medical first aid (MFA) and other aspects of DM as per the need. The potential of these organisation would be also be used for education and awareness generation in DM. And a database of trained personnel would be created and uploaded regularly in the DDMA website.

Role of District Collector in Disaster Management

16. The Act prescribes responsibilities to various authorities at all levels. The roles and responsibilities of DDMA has been elaborated in Section 30, 31, 33, and 34 of the Act. Keeping in view the provisions of the Act, the District Collector, and the Chairman of the DDMA shall ensure the following:-

- i. Preparation of the Disaster Management Plan (DDMP) for the District with the assistance of the DDMA and other experts as per the provisions of the Act, guidelines issued by the NDMA, SDMA and the State Executive Committee (SEC);
- ii. Preparation of DMP by the departments of the Government and other agencies based on the DDMP;
- iii. Periodic mock drill to test the efficacy of the DMPs;
- iv. Integration of Disaster Risk Reduction (DRR) into development programmes and policies of all departments;
- v. To monitor the implementation of the DDMA and regular updating of the same;
- vi. Setting up the district control room and making it function effectively;
- vii. Earmarking and entrusting responsibility to the various departments including Emergency Support Functions (ESF) and appointment of Nodal Officers by various departments to perform the ESFs;
- viii. Coordination with all the line departments of the State, Central, Armed Forces and other agencies;
- ix. Periodic review of preparedness of departments at all levels;
- x. To liaise with the Government periodically about the disaster and the action taken;
- xi. Integrating the MARG (Mutual Aid and Response Group) of the industrial belt with the disaster management committee;
- xii. Equip and prepare the district machinery before the disaster;
- xiii. Identification of building/open spaces for relief camps and setting up relief camps and transit camps whenever needed;
- xiv. Conducting relief and rescue operations;
- xv. Establishing GO-NGO Coordination during normal time so that it works during emergencies and to coordinate the actions of NGOs/CBOs, relief agencies and departments for effective disaster response and relief;

District Disaster Management Authority, Chamba (HP)

- xvi. Organizing Training and conducting mock drills to the Government officials, community and other stakeholders;
- xvii. Ensure public awareness on all the hazards which the district face regularly;
- xviii. Transmission of Early Warning alters to the vulnerable community with the effective means of communication;
- xix. Maintaining the supply of essential commodities;
- xx. Stocking of minimum essential relief material for ready availability; and
- xxi. Any other action which is needed for the requirement of the situation or to comply with the provisions of the DM Act and instructions issues by the NDMA, SDMA or the SEC.

District Emergency Operation Centre (DEOC)

17. The District Collector would be assisted to perform the roles assigned to him and the DDMA by the District Emergency Operation Centre (Control Room). The DEOC would perform the following functions:-

- i. District control room would be the nerve centre for the disaster management;
- ii. To monitor, coordinate and implement the actions for disaster management;
- iii. Activate the ESF in the event of a disaster and coordinate the actions of various departments/agencies;
- iv. Ensure that all warning, communication systems and instruments are in working conditions;
- v. Receive information on a routine basis from the district departments on the vulnerability of the various places and villages (parts of the districts);
- vi. Receive reports on the preparedness of the district level departments and the resources at their disposal to arrange and meet their requirements;
- vii. Upgrade the Disaster Management Action according to the changing scenario;
- viii. Maintain a web-based inventory of all resources through the India Disaster Resource Network (IDRN);
- ix. Provide information to the Relief Commissioner' Office of the disaster/emergencies/accidents taking place in the district regularly and maintain a database of disasters and losses caused by them;
- x. Monitor preparedness measures and training activities;
- xi. Providing information at district level, local level and disaster prone areas through appropriate media;
- xii. Brief the media of the situations and prepare day to day reports during the disasters;
- xiii. To report the actual scenario and the action taken by the District Administration;
- xiv. Maintain a database of trained personnel and volunteers who could be contacted at any time;
- xv. Liaise with on-site operation centre, State EOC and other emergency services.

18. The Assistant Commissioner to Deputy Commissioner shall be the Nodal Officer for Disaster Management would be in-charge of the DEOC. The design, layout, equipment and operation of the DEOC would be as per the EOC Manual prepared at the State level.

Measures to be taken for Disaster Management

19. Generally speaking the following measure would help in dealing with disasters in the district:-

- i) Preparation of Disaster Management Plans at District and local Level
- ii) Implementing of Disaster Management Plans
- iii) Holding regular meetings at District and Sub-Division level to reviewing the readiness of the administrative machinery to deal with disasters.
- iv) Constitution of Relief Committees at all levels.
- v) Regular training programmes of Government functionaries, PRIs, ULBs and other stakeholders in various facets of disaster management.
- vi) Public awareness and education in disaster management.
- vii) Community training and empowerment
- viii) Taking preventive and mitigation measures for the identified hazards
- ix) Integration of Disaster Risk Reduction (DRR) into on-going development programmes of all departments.
- x) Establishing effective early warning system for the vulnerable areas and communities.
- xi) Improving the response capacities of the search and rescue teams.
- xii) Conducting regular mock drills

Action during Disasters

20. The following would be the broad guidelines for actions during disasters:-

- a) Assess the full extent of the disaster/calamity and the damages/losses incurred
- b) Plan and supervise search and rescue operations
- c) Allocate clear responsibilities to the officers and provide them necessary resources along with necessary delegations
- d) Mobilise resources from outside the district if the situation so warrants
- e) Finalise the relief to be provided to the affected persons and ensure its timely distribution
- f) Collect and maintain full information of the disaster and steps taken to tackle it
- g) Document the disaster including the lessons learnt
- h) Last but not least, keeping informing the higher authorities about the whole incident

Chapter - 4

Mitigation Strategy for the District

The adverse effects of disasters can be minimised if mitigation policies, plans, and projects are undertaken. Keeping in view the hazard and vulnerability profile of the district the following mitigation actions would be taken to mitigate the impacts of various hazards.

I. Action Plan for Earthquake Mitigation

- i. Revision and adoption of model building bye-laws for construction both in urban and rural area.
- ii. Enforcing building bye-laws is very essential in the rural areas where the community have no idea how to construct the building.
- iii. Wide dissemination of earthquake-resistant building codes, the National Building Code 2005, and other safety codes.
- iv. Training of trainers in professional and technical institutions.
- v. Training professionals like engineers, architects, and masons in earthquake resistant construction.
- vi. Mason training in the village level is very essential because hardly any engineer reaches the rural areas. The survey says there are many masons and carpenters in the villages and they should be trained.
- vii. Launching demonstration projects to disseminate earthquake-resistant techniques.
- viii. Launching public awareness campaigns on seismic safety and risk reduction and sensitising all stakeholders to earthquake mitigation.
- ix. Establishing appropriate mechanisms for compliance review of all construction designs submitted to ULBs.
- x. Undertaking mandatory technical audits of structural designs of major projects by the respective competent authorities.
- xi. Developing an inventory of the existing built environment.
- xii. Assessing the seismic risk and vulnerability of the existing built environment by carrying out structural safety audits of all critical lifeline structures.
- xiii. Developing seismic strengthening and retrofitting standards and guidelines for existing critical lifeline structures.
- xiv. Undertaking seismic strengthening and retrofitting of critical lifeline structures, initially as pilot projects and then extending the exercise to the other structures (as detailed in a phased manner).
- xv. Preparation of DM plans by schools, hospitals, main buildings visited by large number of public etc., and carrying out mock drills for enhancing preparedness.
- xvi. Strengthening the EOC network and flow of information.
- xvii. Streamlining the mobilisation of communities, civil society partners, the corporate sector and other stakeholders.
- xviii. Preparing community and village level DM plans, with specific reference to management of earthquakes.
- xix. Carrying out the vulnerability assessment of earthquake-prone areas and creating an inventory of resources for effective response.
- xx. Introducing earthquake safety education in schools, colleges and universities and conducting mock drills in these institutions.
- xxi. Strengthening earthquake safety research and development in professional technical institutions.

- xxii. Preparing documentation on lessons from previous earthquakes and their wide dissemination.
- xxiii. Developing an appropriate mechanism for licensing and certification of professionals in earthquake-resistant construction techniques by collaborating with professional bodies.
- xxiv. Preparing an action plan for the up gradation of the capabilities of the IMD and BIS with clear roadmaps and milestones.
- xxv. Developing appropriate risk transfer instruments by collaborating with insurance companies and financial institutions.
- xxvi. Operationalising the local companies of Home Guards and IRBs/Police for disaster response.
- xxvii. Strengthening the medical preparedness for effective earthquake response, etc.
- xxviii. Enforcement and monitoring of compliance of earthquake-resistant building codes, town planning bye-laws and other safety regulations.

II. Land Slide and rock fall Mitigation

The main features to be included in the plan are:

- i) Revision of town planning bye-laws and adoption of model land use bye-laws in hilly areas.
- ii) Wide dissemination of model land use practices in hilly areas.
- iii) Training of trainers in professional and technical institutions.
- iv) Training of professionals like engineers and geologists for landslide mapping, investigation techniques, analysis, and observational practices.
- v) Launching public awareness campaigns on landslide hazard and risk reduction, and sensitising all stakeholders on landslide hazard mitigation.
- vi) Establishing appropriate mechanisms for compliance reviews of all land use bye-laws in hilly areas.
- vii) Preparing an inventory of existing landslides, active or inactive, in the area.
- viii) Developing an inventory of the existing built environment in areas around existing landslides and in high hazard zones as per the LHZ maps.
- ix) Assessing the status of risk and vulnerability of the existing built environment.
- x) Preparation of DM plans by educational and health institutes/organisations, government offices, etc., and carrying out mock drills for enhancing preparedness in vulnerable areas.
- xi) Strengthening the EOC and communication network.
- xii) Streamlining the mobilisation of communities, government agencies, the corporate sector, and other stakeholders.
- xiii)** Preparing community and village level DM plans, with specific reference to the management of landslides.

III. Management of Drought

The salient features of mitigation plan will be:

- i) A Drought Management Cell (DMC) will be established in the Local Agriculture Department.
- ii) Drought management plans for the entire season will be prepared by the Agriculture Department well in advance in the month of May, based on the long season forecast issued by IMD in April and also the previous season's rain fall.
- iii) Drought management plans will be prepared block wise.

- iv) As the season progresses from June onwards, the DMC will review the plans prepared earlier at the onset of the monsoon and revise the strategy if required.
- v) Weekly monitoring of the season and crop condition from June onwards till the end of the season and make necessary midseason corrections as and when required.
- vi) The DMC will make use of the frontier techniques like remote sensing and GIS while providing the inputs to the DDMA.
- vii) A sound database will be created and updated regularly on weather, crop conditions, input supply, credit, insurance and market information, fodder supply etc. in order to assist the DDMA for Drought declaration and Management.
- viii) Awareness will be brought among the farmers on drought regulations and enforcement.

IV. Heavy rainfall, heavy snow, cloudburst, flashflood.

These are all hydro-meteorological hazards and the occurrence, causes are quite similar. So the mitigation processes are:

- i) Many of the hazards cause damage to the housing and landslide, so the mitigation steps are as discussed above in the earthquake and landslide sections.
- ii) All these hazards provide a lot of early warning and the Indian Meteorological Department (IMD) provide those early warning through TV and Radio. So, the district should try to make a system that those early warning reaches to the community.
- iii) There is need of proper drainage in the village level as the water runoff never ever blocked.
- iv) The drainage should be cleaned before the rainy season starts
- v) The administration should strictly monitor the housing in near the nallas and river bed.
- v) There should be crop insurance system in place to give relief to the farmers during heavy rain or snowfall crop damage.

V. Managing Chemical, Biological, Radiological and Nuclear Emergencies - Contamination of Water Supply.

To manage an incident of CBRN contamination of water supply, a modal SOP as given under may be referred to:

Incident Reporting

Any breach of security or suspected event of accidental or intentional contamination should be communicated to the officer in charge of the water facility through quickest possible means. Subsequently, he will inform the same to local police, law enforcement and intelligence agencies, and request for physical quarantine of the contamination site. The incident should also be reported to all pre-identified nodal agencies with request to remain at stand by.

Site Characterization

Water facility in charge along with law enforcement agencies would visit the site and make onsite inspection for identification of physical evidences to confirm the incident. Police & Law enforcement agencies would collect and preserve physical evidences for further investigation and necessary action. Water facility in charge will also make an initial hazard assessment based on available evidences for determining potential need for specialized men, material, techniques or equipment. Based on the findings of initial site evaluation, both to and fro water supply should be stopped immediately.

Preliminary Screening

Trained personnel would be deployed for sample collection and spot testing as described in this document. Sample should be collected from the nearest point. Sample collected should be divided into two, one for spot testing and another for laboratory testing. First set should be subjected to spot testing by prescribed methods. Once the incident and nature of contamination is established the same should be communicated to district administration in precise and clear language for activating their crisis management plan. Following positive screening, second half of the sample should be immediately sent to pre identified reference laboratories.

Risk Communication

District administration in association with disaster management authority will make public pronouncement of contamination event in clear and precise language along with requisite precautions to be taken. All care to be taken to avoid undue panic situation.

Alternate Supply

The Water facility manager in association with district administration would make alternate supply arrangements. In absence of alternate supply, water should be decontaminated through the technique of reverse osmosis. The mobile water purification van developed by DRDO could be utilized for same.

Decontamination

Supply lines and storage facilities should be decontaminated using appropriate and available technology. Do not try to decontaminate water that has been exposed to chemical agents by using chemicals; rather it should be purified through the systems based on Reverse Osmosis and Carbon Columns. Such a system has been developed by Defence Laboratory, Jodhpur and is named as Water Purification System (WPS) and it is suitable for purification of water including that contaminated by CBRN agents.

Restoration of supply

Following repair and decontamination of facility, a fresh water sample should be retested and certified for public consumption.

VI. Psycho-Social Care and Mental Health Support (PSSMHS)

- i) Strengthening of District Counselling Centres under the Department of Social Welfare & Child Development.
- ii) Integrating with DM mental health plans and Health/Hospital DM Plans.
- iii) Integrating with all training in the area of Psychology, Social Work, Mental Health, Emergency Medical Response, Hospital Administration, Nursing and Paramedics.
- iv) Inclusion in the CBDM Plan and training of PRI team members.
- v) Developing awareness material for the community.
- vi) Evolve a mechanism for community outreach education programmes on PSSMHS.
- vii) Creation of a core group of master trainers at district level.

VII. Early Warning System for Flash Floods/GLOFs

Forecasting and early warning helps in mitigating the effects of disasters. The loss of life and property can be considerably reduced with accurate and timely warning. Climate-meteorological disaster such as flash floods, GLOF, avalanches etc. be predicted with certain degree of accuracy.

- i) A network of rain/snow gauges would be strengthened in the district.
- ii) Tie-up with IMD, CWC would be strengthened so that EWS can be effectively communicated to the vulnerable community.
- iii) Community networking would be done to communicate the EWS to the vulnerable sections.
- iv) Modern media would be utilized to communicate the EWS.
- v) Tie-up for sharing of information would be done with the power projects.
- vi) For GLOF related events arrangement would be made with the Chinese authorities through Government of India for timely sharing of information.
- vii) ICT tools need to be used for data receptions, forecasting and timely dissemination.

VII Mitigation Strategy for Fires

- i) Vulnerable habitations would be identified and mitigation actions would be taken to avoid/reduce incidents of domestic fires.
- ii) Community education would be initiated to reduce and mitigate fire incidents.
- iii) Fire and emergency services would be strengthened in the district.
- iv) Fire insurance would be promoted to transfer the risk.
- v) Community would be involved in tackling forest fires and their participation would be ensured.
- vi)

VIII. Training and Capacity Building

- a) Training and orientation of Government official would be carried out immediately and in a time frame for the same would be prepared.
- b) Training would be carried out as per the training needs assessment of various departments.
- c) Regular refresher courses would be organized at regular intervals.
- d) The training would be practical in nature and would focus on skill up-gradation.
- e) The capacity of the departmental training institutes would be upgraded so that they can take up training on DM.
- f) The community, CBOs, NGOs would be targeted for training and capacity building.
- g) A Cadre of local volunteers would be created who would be trained in various aspects of DM such as SAR, MFA etc.
- h) The list of trained officials would be maintained and uploaded in the DDMA website and regularly updated.
- i) New entrants to the Government services would be trained and oriented to DM at the entry level training.
- j) Safe construction practices needs to be promoted and for this local masons, bar benders, carpenters, construction supervisors, contractors would be specifically trained and targeted.

IX Public Awareness

- a) Focused and targeted public awareness programmes would be launched on various aspects of DM.
- b) Hazard specific do's and don'ts would be communicated to the local population in the simplest language.
- c) Traditional modes of promoting knowledge and awareness would be adopted such as use of folk songs, *nukad nataks*, etc.
- d) Community would be targeted through local fairs and festivals.
- e) Documentaries in local language would be screened through local cable networks etc. and mass media would be roped to promote education and awareness.

X Institutional Strengthening

Disasters can be effectively handled and their adverse effects minimized only when the institutional strengthening is done. The departments which have role in emergencies such as fire, police, home guards, health, PWD, I & P, revenue etc. would be strengthened and equipped so that their capacity to deal with disasters is increased. Specific actions would include:

- a) The DDMA would be made functional and active.
- b) DEOC would be set-up
- c) Network of fire services would be increased and they would be equipped to deal with other emergencies too.
- d) Home Guards companies would be equipped to deal with and respond to emergencies.
- e) SAR equipment would also be given to police and fire stations.
- f) Local units of police force would be trained in specialized SAR operations.

XI. Climate Change Adaptation

There are evidences to indicate that Himalayas are warming at a higher rate than the global average rate. It is a matter of great concern as the region has more snow and ice than any other region in the world outside the Polar caps, Himalayas are the maker of climate of much of the South Asia, and the Himalayas glaciers are receding faster than glaciers of the other parts of world. Alpine ecosystems are particularly vulnerable to warming. It may also affect recreational tourism like skiing. Many important forest species are likely to fail to regenerate if the synchrony between their seed ripening and commencement of monsoon rains is broken due to the climate change. Therefore, climate change is likely to impact our glacial reserves, water balance, agriculture, forestry, bio-diversity and human and animal health. There are definite indications that climate change would increase the frequency and intensity of natural disasters like cyclones, floods, cloudbursts, flash floods and droughts in the coming years. In order to meet these challenges in a sustained and effective manner, synergies in our approach and strategies for climate change adaptation and disaster risk reduction shall be encouraged and promoted.

The frequency and magnitude of the hydro-meteorological hazards will increase with the climate change. So, the district may have to encounter with high rainfall and snowfall.

XII. Medical Preparedness and Mass Casualty Management

Medical preparedness is a crucial component of any DM Plan. DM plans for all the hospitals to handle mass casualty and incorporating training and capacity building of medical teams, paramedics in trauma and psycho-social care, mass casualty management and triage would be prepared and integrated with DDMP. The NDMA has formulated policy guidelines to enhance capacity in emergency medical response and mass casualty management and the department will use these guidelines for medical preparedness. The plans should inter-alia include safety of structural and non-structural elements in hospital, evacuation plan, provision of alternative hospital and identification of open spaces which could be used as open hospitals to handle the rush of disaster victims. The medical authorities will be encouraged to formulate appropriate procedures for treatment of casualties by private hospitals during disasters. The hospital DMPs will also address post-disaster disease surveillance systems, networking with hospitals, referral institutions and accessing services and facilities such as availability of ambulances and blood banks. The medical DMP will also have provision for mobile surgical teams, mobile hospitals and heli-ambulances for evacuation of patients. There is a need to focus on creating adequate mortuary facilities. Proper and speedy disposal of dead bodies and animal carcasses deserves due weightage. Web-enabled database of blood donors will be prepared to facilitate arrangement of blood supply chains during emergencies. For this purpose networking with Red Cross and NGOs would be worked out.

XIII. Communications and Information Technology (IT) Tools for DM

Use of modern communication and information technology tools is crucial for effective and efficient disaster management. The communication and IT tools would be utilised for compiling of information, dissemination, and for spread of forecasting and early warnings. The digital mapping of resources would be done and the same would be hosted in web-based portals for easy access and retrieval. These tools can be used in the following areas:

- a) Creating decision support system for the policy makers, disaster managers and responsible officers at all levels;
- b) Real time dissemination of early warning to the all the stakeholders –authorities, DMTs, QRTs, threatened community etc.;
- c) Information and broadcasting mediums such as television, radios, FM stations etc. can be used keeping in view their geographical reach and availability;
- d) Emergency communication system during disasters; and
- e) Collecting and collating information on damage and needs assessment.

XIV. Setting up and strengthening of the Emergency Operations Centres

In line with the national emergency communication plan and national disaster management information and communication system, emergency operation centres (EOCs) would be set-up at the district level. Provision of mobile emergency operation vehicles may be made. EOCs at main locations can also be considered. The EOCs would have fail-safe communication network with multiple levels of built-in redundancy having communication to ensure voice, data and video transfer. Development of Ham Radios network in the district would be encouraged so that it can be utilised during emergency. For last mile connectivity and control of the operations at the disaster hit areas, availability of portable platforms will be catered for. Use of community radios, FM Channels, bulk SMS system and voice messaging system would be made for the last mile connectivity.

XV. Training, Simulation and Mock Drills

Efficacy of DMPs are tested and refined through training, seminars and mock drills. The DDMA and Local Authorities in association with the SDMA and NDMA will also conduct mock drills in different parts of the district to test the efficacy of the plans so prepared. District authorities will be encouraged to generate a culture of preparedness and quick response. Involvement of all the stakeholders and community at large numbers may be ensured to make the mock exercises as a means of awareness generation and community preparation. The inputs and lessons learnt during the mock exercises will be utilised to upgrade and improve the DMPs.

Partnerships for Mitigation and Preparedness

XVI. Community Based Disaster Preparedness

Communities are not only the first to be affected in disasters but also the first responders. Community participation ensures local ownership, addresses local needs, and promotes volunteerism and mutual help to prevent and minimise damage. The community participation for DM would be promoted on the motto of “self-help”, “help thy neighbour” and “help thy community”. The needs of the elderly, women, children and differently able persons require special attention. Women and youth will be encouraged to participate in decision making committees and action groups for management of disasters. Networking of youth and women based organisation would be done and they will be trained in the various aspects of response such as first aid, search and rescue, management of community shelters, psycho-social counselling, distribution of relief and accessing support from government/agencies etc. Community plans will be dovetailed into the Panchayat, Block and District plans.

XVII. Mobilising Stakeholders' Participation

The DDMA will coordinate with Home Guards, NCC, NYKS, NSS, sports and youth clubs, women based organisations, faith based organisations and local Non-Governmental Organisations (NGOs), CSOs etc. for DM. They will be trained in various aspects of DM more particularly in SAR and MFA. They will also be encouraged to empower the community and generate awareness through their respective institutional mechanisms. Efforts to promote voluntary involvement will be actively encouraged.

XVIII. Corporate Social Responsibility (CSR) and Public-Private Partnership (PPP)

Historically, the corporate sector has been supporting disaster relief and rehabilitation activities. However, the involvement of corporate entities in disaster risk reduction activities is not significant. PPP between the Government and private sector would also be encouraged to leverage the strengths of the latter in disaster management. The DDMA would need to network with the corporate entities to strengthen and formalise their role in the DM process for ensuring safety of the communities. The corporate sector also needs to be roped up for on-site and off-site emergency plans for hydro-power projects. The role of corporate sector for awareness generation and local capacity building is also important and efforts would be made to involve corporate sector in this effort.

XIX. Media Partnership

The media plays a critical role in information and knowledge dissemination in all phases of DM. The versatile potential of both electronic and print media needs to be fully utilised. Effective partnership with the media will be worked out in the field of community awareness,

early warning and dissemination, and education regarding various disasters. The use of vernacular media would be harnessed for community education, awareness and preparedness at the local level. The DPRO in consultation with the DDMA would take appropriate steps in this direction.

Chapter - 5

Response Plan

There is need of a response structure to activate the Disaster Management Plan (DDMP) once a disaster strikes. In Chamba District the Deputy Commissioner shall be the focal point acting as a Responsible Officer for directing, supervision, and monitoring the DDMP. The Deputy Commissioner shall function with the assistance of the District Emergency Operation Centre (DEOC) to be activated to its full capacity at time of disaster and shall be the nodal centre for disaster management. All information regarding disaster situations shall at once be communicated to the District Emergency Operation Centre (DEOC). The DEOC would work as per the EOC manual.

Role of Emergency Operation Centre (EOC) on occurrence of disaster

The EOC will function to its fullest capacity on the occurrence of disaster. The district EOC will be fully activated during Level 0 and Level 1 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 such agency which is competent to issue such a 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 occurrence of Level 1 and Level 2 disaster will be communicated to the following by means of telephone and subsequently fax:-

- i) Governor;
- ii) Chief Minister;
- iii) Revenue Minister;
- iv) MPs and MLAs from affected areas;
- v) Chief Secretary
- vi) State Disaster Management Authority
- vii) Relief Commissioner
- viii) NEOC
- ix) Joint Secretary, NDM, Ministry of Home Affairs, GOI.

The disaster/emergency would be communicated to the following DM, SP, CMO, SDM, Commandant Home Guard, Fire Officer immediately on phone. A written report about the disaster/event would be sent to the DM by the local agency/ authority where disaster took place.

The occurrence of disaster shall be immediately communicated to the members of District Disaster Management Authority at district and sub-division level and other stakeholders such as NGOs, trained SAR volunteers through SMS gateway for which specific provision of group mobile directory would be made. The directory would be grouped according to the disaster specific response groups. All the messages received in and sent out of the EOC will be entered into the message register.

The occurrence of disaster would essentially mean the following activities have to be undertaken:

- a) 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.
- b) Establish an on-going VSAT, wireless communication and hotline contact with the Divisional Commissioner, and Collector/s of the affected district/s.

[The EOC in its expanded form will continue to operate as long as the need for emergency relief and operations continue and the long-terms plans for rehabilitation are finalized].

BRANCH OFFICERS/NODAL OFFICERS

Branch arrangements would be activated only on the occurrence of major disaster in and it would provide for division of tasks, information gathering and record keeping and accountability of the Branch officer to the Responsible Officer for specific functions. Each Branch should have a Branch Officer of the rank of Deputy Secretary or Joint Secretary at the State Level and Head of Office of the concerned department at the District level assigned.

- i) The Branch/Nodal Officers for Operations, Services, Logistics, Communication and Information Management, Resource Branches will be from the Revenue Deptt.
- ii) For Health Branch, the officer will be from the Public Health Deptt.
- iii) For Public works and Engineering, the officer will be from the Public Works Deptt.
- iv) For adequate water supply, the officer will be from I & PH Deptt.
- v) For Food and Supply, the officer will be from Food & Public Distribution Deptt.
- vi) For Law and Order, the officer will be from Police Deptt.

All Branch/Nodal Officers will work under the overall supervision and administrative control of the Responsible Officer. All the decisions taken in the DEOC during emergency have to be approved by the District Magistrate/ Sub Divisional Magistrate.

Besides the above the DEOC would also do the following functions:-

- 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 response of different departments and agencies.
- e) Coordinate relief and rehabilitations operations
- f) Hold press briefings.

The DEOC would function through Emergency Support Functions (ESFs). The ESF Plan for the district has been prepared and placed. The response for search and rescue, medical, arrangements for logistics, communication, food, water, temporary shelter etc. would be as per the ESF plan prepared for the district. The primary agency responsible for a particular ESF would act a coordinator and seek necessary assistance from the secondary agency. If the assistance of the secondary agencies involves the requisitioning from the Deputy Commissioners office, the primary agency would place a request to this effect with the DEOC.

Response Structure

The response structure would be based on Incident Response System (IRS) as per the Guidelines issued by the NDMA. The IRS system would work through various service divisions. The IRS system would contract and expand depending upon the nature and magnitude of emergency/disaster. The IRS structure would work at District, Sub-Division, Tehsil, Block level. IRS Structure for District level is given in Figure 25. Deputy Commissioner (Responsible Officer) works through Incident Commanders and Incident Response Teams.

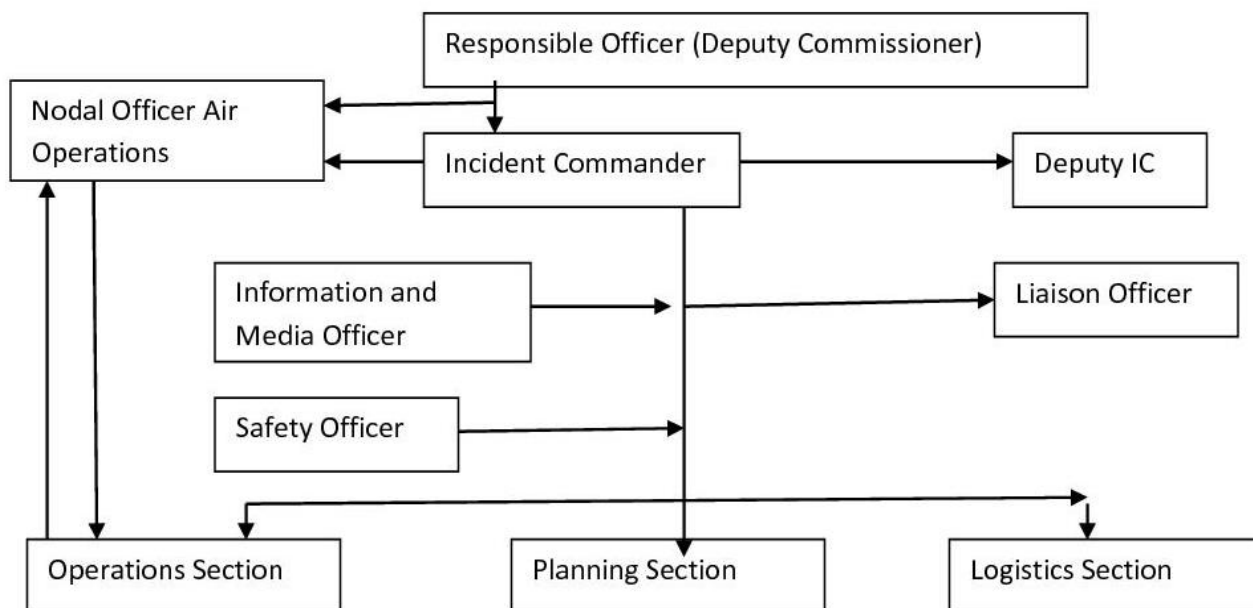


Figure 25: Structure of IRS at District Level

The Incident Commander would be assisted by various service divisions of the District Disaster Management Authority and Sub-Divisional Authorities. These sections would work to the requirement of the emergency. Incident Commander would be assisted by the Incident Response Teams (IRTs) consisting of functionaries from various department depending upon ESF Plan and roles of various departments. The DDMA would notify in-charge for all positions as per the IRS system for the district, Sub-division and block level. A sample IRT framework is given in figure 26. The DDMA would also form IRTs for all divisions and notify them. All the functionaries of IRT and IRS would be trained to understand the IRS system.

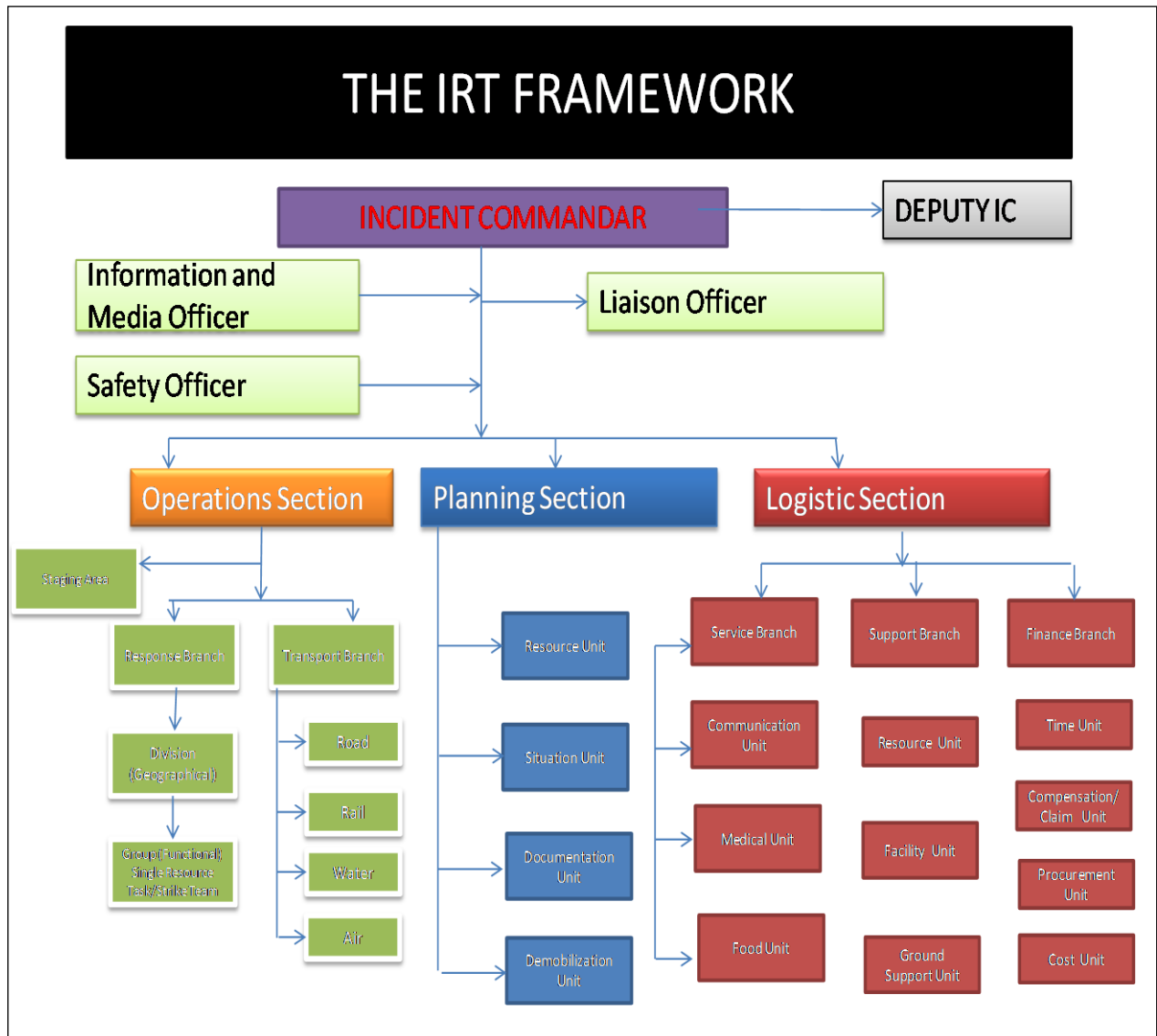


Figure: IRT Framework

Incident Response Structure (IRS) Leadership

The response structure would run parallel from district to village/panchayat level on the basis of ESF plan for various departments and agencies. The IRS would be headed at the district level by the Deputy Commissioner, Sub-division level by the Sub-Divisional Officer (Civil), Tehsil (where Tehsil and Sub-Division is not co-terminus) by the Tehsildar, at the MC level by the Chairman of the ULB and at the Panchayat level by the Panchayat Pradhan. The officers/officials of various departments would be provide the ESF at the appropriate level.

Emergency Warning and Dissemination

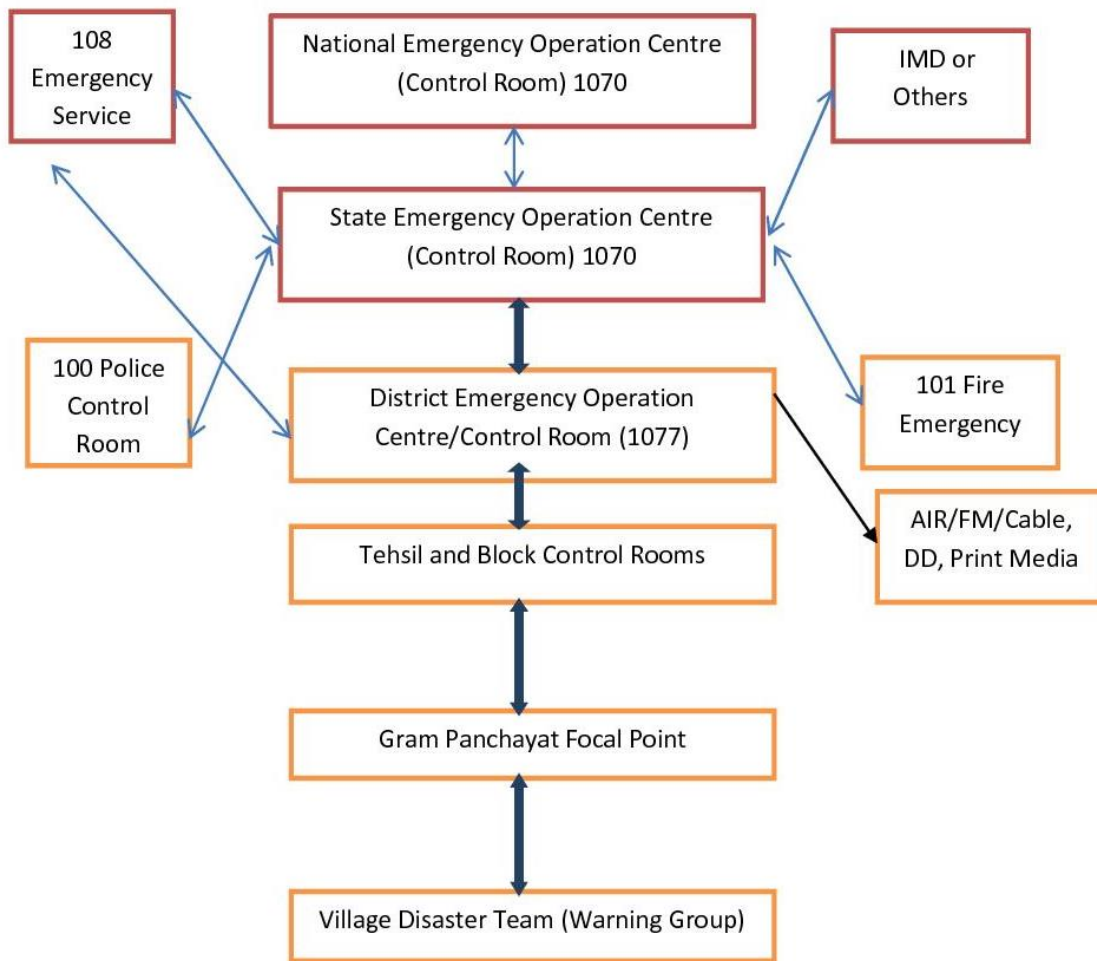


Figure: Flow of Early Warning System

The EOC would utilize the ICT tools and various other modes available for early transmission of early warning to the vulnerable groups and also activate the responders.

The bulk group messaging services would also be utilized to alert the vulnerable groups and activate the SAR parties and all the responders. A model of early warning dissemination is given in fig 27 above. The timely flow of early warning system from the source to the targeted stakeholder is very important. The dissemination of early warning should be institutionalized so that it reaches the stakeholders in minimum possible time by recognized means of communication.

Rapid Damage Assessment and Reporting

The response to disaster would be more effective if the damage assessment is immediate and timely. The field staff and agencies of various departments would communicate the damage/loss to the DEOC at the earliest. Initially first information report would be sent which would be followed by the detailed damage assessment reports. The formats for damage assessment are given in the annexures.

Response vis a vis Various Disasters

i) Drought

Response Action of Administration

- The DC shall ensure calling to tenders through advertisement in at least one English and one vernacular newspaper by end of April for supply of potable drinking water throughout the district in advance so that at the time of drought, the formalities be completed.
- The DC shall ensure identification of suppliers and fixation of rates for transportation of drinking water through tankers/tractors Sub-division wise by the first week of April in case of poor rainfall during the preceding winter and otherwise by end of May.
- The DC shall authorize the SDMs for issuing orders for supply of drinking water through tankers as per need.
- The DC shall identify nearest market in adjoining district/ state from where fodder (Straw) is easily available and direct SDMs to advise people to procure fodder from such place and fix the rates thereof plus freight rates to the different places.
- The DC shall submit report to the Government regarding crop loss due to drought and seek funds for utilization in employment generation.
- The DC shall submit report to Government with regard to situation of drinking water supply.
- The DC in consultation with Animal Husbandry dept. shall assess requirement of fodder on the occurrence of drought and submit report to the Government.
- The DC shall constitute joint emergency Sub-Division level and Tehsil level teams consisting of Executive Magistrate, Doctor, SDO (I&PH) for monitoring outbreak of water borne diseases.
- The DC shall issue direction regarding cleaning of Traditional water Bodies prior to onset of summer and succeeding rainy season.
- The DC shall review availability of stock in all fair price shops in view of crop failure.
- The DC shall issue prohibitory orders with regard to sale of over ripe/rotten fruits and vegetables.
- The DC shall ensure stocking of medicines for water borne diseases in all health institutions.
- The DC shall ensure availability of Chlorine tablets and bleaching powder at the village/ Panchayats level.
- The DC shall converge various programmes and schemes of government for tackling drought situations.

Response Action of SDM

- SDM shall submit weekly report regarding drinking water availability in respective jurisdiction from first week of May to the DC.
- SDM shall prepare route chart for distribution of drinking water in consultation with the Executive Engineer I&PH department.
- SDM shall identify source of drinking water in consultation with I&PH dept. from where shall take their supply.
- SDM shall direct deployment of water tankers for supply of drinking water.

- SDM shall monitor smooth supply of water through tankers. There shall be made at least two trips in a day by the tankers.
- SDM shall keep record of movement of water tankers in coordination with I&PH dept.
- SDM shall constitute a team comprising of panchayat Pradhan, Patwari and Veterinary Doctors at local level for verification of fodder procured.
- SDM shall ensure proper voucher/ invoice/ bill produced for providing transport subsidy as per relief manual.
- SDM shall have the drinking water transportation bills verified through I&PH dept. and release payment for the same.

Response Action by I&PH

- The XEN shall submit weekly reports of status of water supply in departmental schemes from the week of May to the Superintendent Engineer.
- The SE shall compile status of water in the district and submit same to the DC on weekly basis.
- The XEN shall submit demand of supply of water through tankers to the SDM.
- The XEN shall identify source for filling of water tanker.
- The XEN shall ensure chlorination of such water supply.
- The XEN shall ensure purification of natural water sources and all departmental schemes.
- The XEN shall deploy personal (eg. Water guard) with each tanker to ensure proper and equitable distribution of water.
- The XEN shall maintain a register of movement and supply by each tanker which shall be verified by officer authorized by him.
- The XEN shall try to install more hand pumps in areas which chronically face water scarcity during summer.

Response Action by Agriculture Department.

- The Agriculture Officer shall monitor the situation for impact of drought on crop growth and consequent yield.
- The Agri. Officer shall submit weekly report starting from last week of May and first week of January regard to status of Kharif and Rabi crops.
- The Agri. Officer shall prepare contingency plan for any crop failure due to drought and submit same to the Government and DC.
- The Agri. Officer in view of drought shall organize extensive field camps to advise farmers on alternative crop and strategies.

Response Action by Horticulture Department.

- The Deputy Director Horticulture shall monitor the situation for impact of drought on tree growth and consequent fruit yield.
- The Deputy Director shall submit weekly report starting from last week of May and first week of January with regard to status of fruit bearing trees.
- The Deputy Director shall prepare contingency plan for any crop failure due to drought and submit same to the Government and DC.
- The Deputy Director shall view of drought shall organize extensive crop and strategies.

Response Action by Health Department.

- The CMO shall ensure all medical institutions are stocked with adequate medicines, especially for water borne diseases.
- The CMO shall constitute emergency medical teams at all PHC level to attend to outbreak of any epidemic (eg. Water borne disease.).
- The CMO shall convene a meeting under the DC of all concerned departments including Revenue, Rural Deptt. I&PH, Ayurveda with regard to prevention of water borne diseases.
- The CMO shall ensure issuance of notification banning sale of over ripe/rotten and uncovered fruits/vegetables/flood by the District Magistrate.

ii) **Road Accident**

Response Action by SDM

- The SDM shall immediately inform the DC of occurrence of accident and establish a control room at Sub-Divisional headquarter.
- The SDM shall immediately direct SHO concern to rush Police personnel to sport.
- The SDM shall immediately direct the Tehsildars/Naib-Tehsildar to rush to the spot.
- The SDM shall immediately put the Health Dept. on the alert by information CMO/BMO concerned.
- The SDM shall depending upon the magnitude of the accident request for assistance from Commandant Home Guard, PWD etc.
- The SDM shall depending upon the magnitude rush to the spot of the accident.
- The SDM shall arrange for search & rescue on the spot taking assistance of Police, Home Guard, Fire Brigade, PRIs, NGOs and local population.
- The SDM shall evacuate people directly involved in the accident and also general public if it is deemed necessary.
- The SDM shall direct the health dept. to depute ambulance and paramedical and medical staff to the spot immediately for on the spot treatment and first aid.
- The SDM shall arrange for dead van if so required.
- The SDM shall coordinate between the Police, Health dept. Victims and their kith and kin for search and rescue, law and order, traffic management post shall coordinate with the health dept. For conduct of immediate post mortem and early handing over of dead bodies to kith and kin.
- The SDM shall ensure submission of a brief and comprehensive detailed report of the accident within 12 Hrs to the DC. The report shall contain the following information.
 - ❖ Location and details of vehicle involved in the accident.
 - ❖ Prima facie cause of accident.
 - ❖ Detail of passengers with identification if any.
 - ❖ Detail of relief provided in from of medicines and cash.
- The SDM shall keep the DC informed on action being taken on the spot from time to time.

Response Action for Health Department

District Disaster Management Authority, Chamba (HP)

- The CMO on receiving information regarding the accident shall immediately put on casualty/ emergency ward of District Hospital for referred cases.
- The CMO shall inform the BMO concerned and the SMO of the concerned sub-divisional hospital for similar action.
- The CMO shall arrange for immediate movement of ambulance with medical and paramedical staff to the site of accident.
- The CMO shall ensure portable stretchers are available site for evacuation on the injured and the dead.
- The CMO shall ensure availability of first Aid on the spot.
- The CMO shall depute doctors from surrounding PHC/CHC to the CHC where the injured have been evacuated if staff strength is not enough at that health institution.
- The CMO shall maintain a detail of victims admitted to various health institutions including those referred to specialized health institutions outside the district. The CMO submit in writing to the DC such detail including status if health within 12 Hrs. in consultation with the SDM.

Response Action of SHO

- The SHO shall immediately inform the SDM, SP and DC regarding the incident with details of site.
- The SHO shall immediately deputy a team of police personal to the site.
- Depending upon the magnitude, the SHO shall rush to the site and personally coordinate search and rescue, evacuation, traffic regulation, law and order.
- The SHO shall communicate factual information to the SP on reaching the spot on the following.
 - ❖ Exact location
 - ❖ Prima facie cause of accident
 - ❖ Vehicles involved, transport company
 - ❖ No. of injured
 - ❖ No. of fatalities
 - ❖ Status of driver and conductor
 - ❖ Status of injured
- The SHO shall arrange for search and rescue in consultation with the SDM.
- The SHO shall ensure smooth movement of traffic.
- The SHO shall divert the traffic if required in consultation with the SDM.
- The SHO shall arrange for a guard to protect the property of the victims at the site.
- The SHO shall take necessary legal action as law and also initiate an inquiry into the causes of the accident.
- The SHO shall arrange for early post mortems and quick release of bodies to the kith and kin.
- The SHO shall submit a brief and comprehensive report regarding the accident in consultation with the SDM to the SP within 12 Hrs of the accident.

Response Action of PWD

- The XEN concerned shall provide equipment and manpower to the SDM at the accident site on request.

- Equipment such as crane, JCB, Bulldozer, Gas cutter etc shall be provided by the XEN as per request of the SDM.
- The XEN/SDO/JE shall supervise such operations at site depending upon the magnitude of the accident as assessed by the SDM.
- The XEN shall ensure manpower is provided at site on the request of the SDM.

Response Action of Home Guards

- The Commandant shall ensure movement of fire brigade immediately to the site when called for by the SDM.
- The Commandant shall provide manpower for assistance in search and rescue, removal of dead, traffic management, first aid etc.

iii) Landslide

Response Action for PWD

- SDO/JE shall immediately inform XEN, SDM, Police Station/ Police Post concerned of occurrence of land slide.
- SDO/JE of B&R/NH shall immediately rush to the spot on receipt of report of landslide along with Moving Vehicle-JCN/Bulldozer and manpower with manual equipment.
- SDO/JE shall assess on spot magnitude of slide and intimate XEN concerned who shall immediately inform DC / SDM. The assessment shall be of estimate time of clearance, need for diversion of traffic if any, requirement of additional equipment and manpower.
- XEN shall rush to the spot depending upon the magnitude of the land slide.
- XEN shall intimate DC/SP regarding need for diversion of traffic.
- XEN shall intimate DC in case of need for additional requirement of equipment, manpower from adjoining division or district for coordination.
- On clearance of road of landslide shall report back to SDM/DC.

Response Action for Police.

- SHO shall immediately inform SDM, PWD, SP, DC regarding occurrence of landslide.
- SHO shall immediately rush personnel to the spot for traffic control and management.
- Depending upon the magnitude of the landslide the SHO shall personally move to the spot and supervise the situation.
- SHO shall submit his independent assessment of the situation to the SP.
- In case of assessment of need to divert traffic, SHO shall in discussion with the SDM intimate SP/DC.
- SP shall intimate DC regarding need for diversion of traffic for coordination.
- The Police personal shall ensure maintenance of law and order at spot.
- The personal shall ensure non-interference in the road clearing work PWD.
- On opening of road, the Police personnel shall on the spot till all traffic has cleared.
- On clearance of road and traffic shall report back to the SP.

Response Action of Administration

- SDM shall immediately inform DC of occurrence of landslide.
- SDM shall immediately inform PWD of occurrence of landslide and direct movement of equipment and manpower to spot.
- SDM shall immediately inform Police Station of occurrence of landslide and direct SHO to rush personnel to spot.
- SDM shall direct Tehsildar/Naib-Tehsildar concerned to move to spot as per magnitude of the landslide.
- SDM shall activate revenue staff for assessment and report from the spot.
- SDM shall coordinate with Police and Home Guard if any Search and Rescue effort is to be launched under intimation to DC
- SDM shall rush to the spot depending upon the magnitude of the land slide and coordinate PWD, Police and Public.
- SDM shall assess need for diversion of traffic in consultation with PWD and Police order for same in consultation with the DC.
- In case of unavailability of alternate route for diversion and long duration of clearing operation, SDM shall coordinate with PRIs/NGOs/Local population to make available water and refreshment for the travellers/tourists.

Chapter – 6

Role of Key line Departments at District Level

Role of key line departments at District Level

Role of Key Line Departments at District Level	
Major Points of Attention: Each Department and Government agency involved in Disaster Management and Mitigation will:	
1.	Designate a Nodal officer for emergency response who will act as the contact person for that department/agency.
2.	Ensure establishment of fail-safe two-way communication with the State, District and other emergency control rooms, as well as within the organization.
3.	Focus on communication systems used regularly in normal times with more emphasis on the use of VHF's with automatic repeaters, mobile phones with publicized numbers, HF radio sets, etc. It should be remembered that SAT phones fail during prolonged emergencies and electric failure. Phones also fail if they cannot be re-charged.
4.	Work under the overall supervision of the District Collector during emergencies.
5.	Develop Disaster Management Plans; Update the Disaster Management Plan quarterly, with focus on Hazard, Vulnerability, Risk and Capacity Analysis (HVRCA). Plan preparation should involve all concerned line departments and stakeholders in the district.
6.	Ensure awareness generation of the community to various hazards, its impact, basic do's and don'ts, their roles and responsibility for reducing the risk, as well as their role to support the response mechanism.
Revenue	
(In-charge Officer: District Revenue Officer/ADM Revenue/ Deputy Collector (Emergency)/any other officer designated by the District Collector)	
Pre-Disaster	
1	Convene the meetings of District Disaster Management Authority to take stock of mitigation and preparedness
2.	Prepare and quarterly update the District Disaster Management Plan, with focus on Hazard, Vulnerability, Risk and Capacity Analysis (HVRCA) of the district with the active involvement of all concerned line departments and local bodies in the district.
3	Make personnel available to the Deputy Commissioner/District Collector/District Magistrate, within the affected district/sub-division, Tehsil. If more personnel are required, recall those on leave.
4.	Operate District and Sub-Divisional Control Rooms.

District Disaster Management Authority, Chamba (HP)

5.	Establish communications with all stakeholders for the purpose of receiving and sending early warning and information exchange through District Control Room.
6.	Establish early warning systems between the local and district levels, and also with media.
7.	Ensure compliance of construction norms for all types of buildings and public infrastructure as per Building Codes.
8.	Carry out identification of safe places for establishment of relief camps.
9.	Appoint Officers in-charge of Response Base
10	Prepare pre-positioning of staff list for site operation centres and intimate staff.
11.	Identify staff to form teams from concerned departments who would undertake damage land need assessment and provide them training.
12.	Prepare a training calendar and facilitate training involving different stakeholders to enhance capacity building of the community and all departmental staff.
13.	Regularly check and update inventory of resources.
14.	Ensure capacity building of the community and all departmental staff through regular drills and mock exercises.
15.	Review the status of the godowns (warehouse) and ensure supply of food grains through the public Distribution System.
16.	Prepare a list of relief items to be distributed for different hazards.
17.	Invite tenders/quotations for all the relief items and fix the rates and suppliers.
18.	Ensure formalizing supply contracts for all departments that require additional manpower during emergencies.
19.	Create teams including transport, relief material and equipment for responding to the disaster incident.
During and Post-Disaster	
20.	Convene an emergency meeting and take stock of the situation.
21.	Prepare an evacuation plan for the marooned/devastated areas.
22.	Prepare a list of transit/temporary shelters, and check their suitability for accommodating people.
23.	Establish relief camps and organized relief materials in consultation with local bodies.
24.	Facilitate preparation of a transportation plan for supply of relief items.
25.	Convene meetings of NGOs, Youth Clubs, Self-Help Groups, etc., in the district, and assign them specific responsibilities for relief, recovery and rehabilitation.

District Disaster Management Authority, Chamba (HP)

26.	Activate Village Level Preparedness Teams with the help of PRIs, local NGOs, and revenue officials.
27.	Prepare evacuation plan for population from dangerous buildings, if pre-quake vibrations are felt and if the central agencies advise.
28	Coordinate with Army, Air Force, and Navy for support towards evacuation, rescue and relief.
29	Initiate IRS and Emergency Support function System.
30	Recall important functionaries from leave; communicate to the staff to man their places of duties like the ward and divisional offices, as well as respective departments.
31.	Plan for proper disposal of dead bodies and carcasses through Police, NGOs, Medical, Public Health and Forest Departments.
32.	Sanction the general cleaning of the entire city area through water and sanitation, Municipal Corporation, Public Health Department etc.
33.	Ensure collation of expenditure accounts for sanctions and audits.
34.	Ensure disbursal of compensation.
35.	Facilitate preparation of rehabilitation plan for displaced population.
36	Activate the help-lines through police and health departments and district public relations office.
37	Ensure proper media briefings through District Public Relations Officer.
38.	Exhort the public to maintain calm and avoid panic
39	Have a back-up communication system.
40	Ensure provision of nutritional aspects of food for disaster victims and privacy for young girls, pregnant women and elderly.
Police:	
(In-charge Officer: Senior Superintendent of Police/Superintendent of Police)	
Pre-Disaster	
1.	Prepare and quarterly update disaster management plan, especially identifying the sensitive areas with the active involvement of all concerned line departments and local bodies in the district.
2.	Prepare a Deployment Plan for the Police Force, based on the needs of the most vulnerable and sensitive areas.
3.	Ensure that a sufficient number of Police Force is available for responding to the disaster situation.
4.	Ensure adequate personnel are available for response, if more personnel are required: recall the out-of-station officers or those on leave.

District Disaster Management Authority, Chamba (HP)

5.	Constitute 'Search & Rescue' Teams from the Police Force, and arrange training for these units. At least, one Search and Rescue Team for every district should be in place; more Teams could also be constituted depending upon the area and magnitude of disaster.
6.	Establish coordination with the State Armed Police, Defense and House Guards.
7.	Check the wireless communication network, and secure additional wireless sets for deployment during a disaster.
8.	Installation of radio communications at: <ul style="list-style-type: none"> • District Control Room, Deputy Commissioner/District Collector/District Magistrate and SP Office; • Control Room at affected site; and • Departmental Offices within the District and Division.
9.	Keep the police vehicles and other modes of transport in readiness for deployment of the police.
10.	Review and update emergency measures and procedures, and ascertain with staff the precautions that have been taken to protect equipment.
During and Post-Disaster	
11.	Call for emergency meeting to take stock of the situation. Develop a strategy and a mission underlining objectives.
12.	Ensure that all field staff and stationed officers submit the necessary action reports to the Control Room.
13.	Ensure that evacuation ordered by Deputy Commissioner/District Collector/District Magistrate and Superintendent of Police is carried out.
14.	Seek assistance from community leaders for evacuation of community and livestock, under appropriate security, law and order.
15.	Report all evacuation to Deputy Commissioner/District Collector/District Magistrate and Senior Superintendent of Police/Superintendent of Police immediately.
16.	Dispatch Police to systematically identify and assist people and communities in life-threatening situations.
17.	Provide convoys for relief materials.
18.	Provide guards wherever needed, particularly at stores and distribution centres.
19.	Help injured people, and assist the community in organizing emergency transport of seriously injured to medical treatment centres, with the assistance of health professionals.
20.	Ensure the functioning of police station staff in disaster situation.
21.	Assist relevant agencies and the community in road-cleaning operation.
22.	Assess and identify roads on the bases of following conditions/facilities:

District Disaster Management Authority, Chamba (HP)

	<ul style="list-style-type: none"> • One-Way • Blocked • Alternate route • Overall Traffic Management, and • Other access roads.
23.	Organize training and mock-drill for police officers to handle disaster/crisis situation.
24.	Provide security in transit and relief camps, affected villages, hospitals, and medical centres, and identify areas to be cordoned off.
25.	Divert transport carrying transit passengers (that is, passengers travelling through trains or buses and passing through the district)
26.	Ensure security of key installations like power, water and supply, telecommunication, etc.
27.	Provide security arrangements for visiting VVIPs and VIPs.
28.	Assist district authorities to take necessary action against Hoarders, Black Marketers and those found manipulating relief material.
29.	<p>Activate a public helpline, with the help of government offices, to:</p> <ul style="list-style-type: none"> • Respond to personal inquiries about the safety of relatives in the affected areas; • Serve as a rumour control centre: and • Build confidence among the public.
30.	Make available officers to inquire into deaths and record; them, as there is likely to be shortage of time or personnel available to carry out Standard Post-mortem Procedures.
31.	Monitor the medical needs and welfare of people sheltered in relief camps.
32.	Establish coordination with the Fire Services.
33.	Coordinate with military service personnel in the area.
34.	Provide adequate security to personnel of International Agencies for Search and Rescue, Medical Assistance and Security for their relief material and equipment, etc.
State Fire Department	
(In charge of Search & Rescue, Response and Capacity Building)	
Pre Disaster	
1.	Fire auditing of life line buildings, schools, etc.
2.	Training and capacity development of government officials and in other institutions
3.	Resource Mapping and community awareness
During and Post Disaster	
1.	Search & Rescue after any incident

2.	Provision of divers and Life guards for responding to any drowning incident
3.	House hold, industrial and forest fire fighting
4.	Handling chemical related incidents.
Irrigation (In-charge Officer: Superintendent Engineer, Irrigation)	
Pre-Disaster	
1.	Prepare and quarterly update the disaster risk and vulnerability map with active involvement of all concerned line departments and local bodies in the district. The map should show the vulnerability and risks of the critical infrastructure related to irrigation and the presence of alternate source of water within the district.
2.	Quarterly update the departmental contingency plan, especially for the maintenance and repairs of bunds and embankments, and seek funds from the district/state authorities.
3.	Make personnel available to the Deputy Commissioner/District Collector/District Magistrate, within the affected district/sub-division. Tehsil. If more personnel are required, recall those on leave.
4.	Commence timely repairs of critical bunds before and after monsoons, after surveying the damages of disasters/disaster in the previous year, and ensure that all the repairs are completed in time.
5.	Check the wireless network connecting disaster stations, and undertake necessary repairs.
6.	Set up; the protocol for exchange of information with Disaster Control Rooms at District, State and National levels.
7.	Prepare a duty chart for in-charge Junior Engineers. Make sure that the officials of the department at district level are aware of their role as per Incident Response System plan. Make available the list of in-charge Junior Engineers to Response Base, District/ Sub Divisional Magistrates, and all the control rooms.
8.	Undertake channel improvement for rivers and nullas to the extent possible. Take up de-silting/clearing of nullas and canals to improve the flow of water.
9.	Check all the siphons and regulators on the bunds and canals. Clean siphons before the monsoon. Increase their capacity or replace; them if the size of siphons and regulators is too small to prevent water from flowing in.
10.	Provide all necessary help for promoting fodder cultivation by providing water for irrigation on a priority basis. Such water could be provided to the farmers at a cheaper rate.
11.	Allow reservoir and tank beds under its control, to be leased out for cultivating short duration grass or seasonal fodder crops.
12.	Keep in readiness essential tool kits and protection material; at; critical; places for emergency deployment. These may include:

	<ul style="list-style-type: none"> • Empty Cement Bags • Boulders • Ropes • Sand • Wire mesh • Shovels • Baskets • Lights, and • First Aid Kit
13.	Check all the rain-gauge stations and ensure that they are functioning properly. Ensure that the readings from these stations are available immediately to the Irrigation Department. Prescribe a register for recording of rainfall.
14.	Make emergency tool kits available to each technical assistant.
15.	Ensure that all staff is well-aware of precautions to be taken to protect their own life, office and personal property.
During and Post-Disaster	
16	Recall important functionaries from leave; communicate to the staff to report to their places of duties.
17	Organize round the clock inspection and repair of: <ul style="list-style-type: none"> • Bunds • Dams • Irrigation channels • Bridges • Culverts • Control gates • Overflow channels • Pumps • Generators • Motor equipment, and • Station building
18.	Make certain that the level of impounding in the lakes is reduced to create increased capacity, and coordinate the same with officers on other site and District Control Room, if heavy rains are expected. The amount of lowering will depend on the rain fall forecast.
19.	Forewarn the settlements, in case of possibilities of a disaster in the downstream, and give necessary warnings for evacuation to the adjoining districts and to those districts beyond the state borders.
20.	Inspect the inlet and outlet of lakes and reservoirs to ensure that waterways are unobstructed by trees or vegetation and encroachments.
21.	Secure all repairs/under construction activity with sand bags, rock falls, etc.

22.	Cover all material, stored inside and outside, which is likely to be damaged by rains, such as concrete in bags, electric motors, office records, etc., with plastic.
23.	Ensure that for all the bunds, which are close to villages, there are roads available for the movement of vehicles.
24.	<p>Field Office Priorities:</p> <ul style="list-style-type: none"> • Continue round the clock inspection and repair of bunds, dams, irrigation channels, bridges, culverts, control gates and overflow channels, etc; • Make round the clock inspection and repair of pumps, generators, motor equipment and station buildings; • Clear the inlet and outlet to lake or reservoirs, on an on-going basis, in order to ensure that waterways are unobstructed by trees or vegetation; and • Use information formats and monitoring checklist for programme monitoring and development, and for reporting to Emergency Operations Centre (EOC). This is in addition to existing reporting system in the department.
Health	
(In-charge officer: Chief Medical Officer of the District)	
Pre-Disaster	
1.	Prepare and quarterly update health contingency plan with the active involvement of all concerned line departments and local bodies in the district. It should also include a list of civil and private hospitals, primary health centres and sub-centres, and medical personnel along with their capacity to handle emergency patients.
2.	Make personnel available to the Deputy Commissioner/District Collector/District Magistrate, within the affected district/sub-division, tehsil. If more personnel are required, recall those on leave.
3.	Assign medical personnel for each Response Base, as identified by the district administration, to the extent possible. Keep essential medicines and first aid facilities with each Response Base.
4.	Constitute mobile response units consisting of a doctor, health workers and ANMs, and prepare a deployment plan. Each mobile health unit should be capable to cover at least one Response Base in a day.
5.	Orient field staff with standards of services, procedures including tagging.
6.	Review and update precautionary measures and procedures with each hospital and medical centre.
7.	Review with staff, the precautions that have been taken to protect medical and non-medical equipment and stock emergency medical equipment.
8.	Undertake special vaccination programme in the most vulnerable villages.
9.	Keep ready at least one operating facility in each Response Base. Maintain all the equipment necessary for operations.
10.	Develop emergency admission procedures.

11.	<p>Check stocks of equipment and drugs which are likely to be needed most in disaster management. These can be categorized generally as:</p> <ul style="list-style-type: none"> • Drugs used in treatment of wounds and fractures such as tetanus toxoid, analgesics, antibiotics, dressing material, and splints; • Drugs used for treatment of diarrhoea, influenza, malaria, and infective hepatitis; • Drugs required for treating snake bite and infection; • Drugs needed for detoxification including breathing equipment; and • Intravenous fluids.
12.	<p>Hospital administration should:</p> <ul style="list-style-type: none"> • Establish work schedules to ensure that adequate staff is available for patients' needs; • Organize in-house emergency medical teams to ensure that adequate staff is available at all times to handle emergency casualties: and • Set up teams of doctors, nurses and paramedical staff as per IRS.
13.	<p>Procedures of engagement should be clarified with:</p> <ul style="list-style-type: none"> ▪ Health Services of Government, private and other establishments at transit camps, relief camps and affected site/villages; ▪ PHCs(Primary Health Centres); ▪ CHCs (Community Health Centres); ▪ Civil hospital; ▪ Private Hospitals; and ▪ Blood Banks; etc.
14.	<p>Ensure that local police, rescue teams and ambulance teams are aware of the resources at each hospital.</p>
During and Post-Disaster	
15.	<p>Ensure that provision of medical services is coordinated by Civil Surgeon with District EOC and site operation centres.</p>
16.	<p>Move medical personnel both for each Response Base and mobile unit as soon as possible.</p>
17.	<p>Determine type of injuries/illness expected and drugs and other medical items required, and accordingly ensure that extra supplies of medical items are obtained quickly.</p>
18.	<p>Provide information to all health staff about the disaster, likely damages and impact in the aftermath, as well as the ways to protect life equipment and property.</p>
19.	<p>Relocate non-ambulatory patients to the safest areas within the hospital. The safest rooms are likely to be:</p> <ul style="list-style-type: none"> • On ground floor; • Rooms in the Centre of the building away from windows; and • Rooms with concrete ceilings,
20.	<p>Sterilize a large enough number of dressing pads, to last for 4-5 days.</p>

21.	<p>Secure medical supplies in adequate quantity for dealing with these situations, which may include:</p> <ul style="list-style-type: none"> • Oral Rehydration Solutions; • Chlorine Tablets; • Bleaching Powder; • Anti-diarrheal and Antiemetic (Used for controlling vomiting and nausea) medicines; • Intravenous fluids; • Suture material (A foreign body implanted into human tissues for closure of wounds); • Surgical Dressings; • Splints; • Plaster Rolls; • Disposable Needles and Syringes; and • Local Antiseptics.
22.	Pack all valuable instruments such as surgical tools, ophthalmoscopes, portable sterilizers, ECG machine, dental equipment, ultrasound machine, analyser, invertors, and computer hardware, etc., in protective coverings and store in rooms considered to the most damage proof.
23.	Protect all immovable equipment such as X-ray machines, Sterilizer, Dental Chair by covering them with tarpaulins or polythene
24.	Ensure adequate supply of blood in the district through District Red Cross Society and other prominent agencies.
25.	Ready the designated operating facility for operations.
26.	Prepare a maternity facility for pregnant women in every Response Base/Advance Medical Post.
27.	Seek mutual aid arrangement with civil and military hospitals in the covered and nearby area.
28.	All electrical equipment likely to be affected should be marked & unplugged when disaster warning is received.
29.	Check the emergency electrical generator to ensure that it is operational and that buffer stock of fuel exists. If an emergency generator is not available at the hospital, arrange for one.
30.	Request central warehouse immediately to dispatch supplies likely to be needed in hospitals, on an emergency priority basis.
31.	Fill hospital water storage tanks, and arrange water storage tanks, if not in existence; and also keep drinking water in clean and protected containers.
32.	Prepare an area of the hospital for receiving casualties.
33.	Field Office Priorities:

	<ul style="list-style-type: none"> • Arrange transport for transfer of seriously injured/sick patients from villages and peripheral hospitals to general hospitals to general hospitals. If roads are blocked, ensure arrangement of alternate mechanism by Nodal Officer/ Deputy Commissioner/District Collector/District Magistrate; • Establish health facilities and treatment centres at disaster affected site; • Maintain check posts and surveillance at all railway stations, bus stands, depots and all entry and exit points of the affected area, especially during the threat or existence of an epidemic/ pandemic • Develop a system of monitoring the outbreak of disease to ensure that timely measures can be initiated to counter them. Carry out monitoring for potable water and quality of food and disposal of waste in transit/ relief camps, feeding centres and affected villages. • Plan for emergency accommodation for auxiliary staff from outside the area. • Use information formats and monitoring checklist for programme monitoring and development and report to emergency operation centre at state level. This is in addition to existing reporting system in the department. • Seek security arrangements from Senior Superintendent of Police to keep curious persons from entering hospital areas and to protect staff from hostile actions. • Establish “Health Helpline” with means of communication to assist in providing an organized source of information. The hospital is responsible for keeping the community informed of its potential and limitations in disaster situations, and providing the list of admitted patients and dead persons, etc.
<p>Agriculture (In-charge Officer: District Agriculture Officer/Deputy Director, Agriculture Department/Head, Agriculture Department at the District)</p>	
<p>Pre-Disaster</p>	
1.	Develop and quarterly update disaster management plan that includes the Contingency Action Plan for the Department based on HVRC analysis with active involvement of all concerned line departments and local bodies in the district.
2.	Make personnel available to the Deputy Commissioner/District Collector/District Magistrate, within the affected district/sub-division, tehsil. If more personnel are required, recall those on leave.
3.	Establish communication linkage between department, District Control Room and Agriculture colleges, and seed banks, nurseries (Private and public) within the division to deal with emergency situation.
4.	Review and update precautionary measures and procedures.
5.	Check and stock equipment, if possible agricultural materials, which are likely to be needed most, during and after a disaster.
6.	Review damages/ losses and diseases that are likely to occur, and the drugs and other insecticide items that will be required, in addition to, the requirements of setting up extension teams for crop protection; and accordingly ensure that extra supplies and materials, be obtained quickly.

7.	Suggest variety of seeds and cropping pattern, which can reduce losses and reduce the risks to farmers.
8.	Develop a pest and disease monitoring system so that timely steps can be taken to reduce damage to crops.
9.	Make the NGOs and other organization aware of the resources of the department.
During and Post-Disaster	
10.	Recall important functionaries from leave; communicate to the staff to man their places of duties like the ward and divisional offices and respective departments.
11.	Call for emergency meeting to take stock of the situation. Develop strategy and objectives for early recovery.
12.	Assess the extent of damage to soil, crop, plantation, micro-irrigation systems and storage facilities and ascertain the requirements of seeds, pesticides, equipment, etc., to salvage the situation or go for plantation.
13.	Pack all valuable equipment and instruments in protective coverings and store in room that is most damage-resistant.
14.	Unplug all electrical equipment when disaster/disaster warning is received.
15.	Assist Extension Officers to: <ul style="list-style-type: none"> a. Establish work schedules to ensure that adequate work force is available; and b. Set up teams of extension personnel and assistants for visiting disaster/disaster affected sites.
16.	Establish contact with soil and water testing laboratories.
17.	Coordinate the provision of agricultural services with irrigation department, DRDA, District EOC, Site operations Centres.
18.	Ensure that certified seeds of required varieties are available in adequate quantities. The Agriculture Department should work with National Seeds Corporation and other suppliers and ensure availability at their depots or have agents appointed for the same.
19.	Print and widely distribute the list of points where certified seeds are available along with names of varieties and rates. Affix notices at public places such as bus stands, buses, PHCs. Block headquarters, Tehsils, etc.
20.	Organize transport, storage and distribution of the above with adequate record keeping procedures.
21.	Ensure that adequate conditions through cleaning operations are maintained to avoid water logging and salinity.
22.	Plan for emergency accommodation for agriculture staff from outside the area.
23.	Use information formats and monitoring checklists as given in the section on 'Information and Monitoring Tools' for programme monitoring and development,

	and for reporting to District EOC. This is in addition to existing reporting system in the department.
24.	Establish a public information centre with means of communication, to assist in providing updated information to people. Ensure that the department is responsible for keeping the community informed of its potential and limitations in disaster situation.
25.	Assist farmers to re-establish their contacts with agriculture produce market and ensure that produce gets proper support price.
26.	Develop a strategy for farmers who have taken agricultural loans.
Animal Husbandry (In-Charge Officer: District Animal Husbandry Officer/ Head, Animal Husbandry Department at the District)	
Pre-Disaster	
1.	Develop and quarterly update the disaster management plan that includes the Contingency Action Plan for the Department based on HVRC analysis with the active involvement of all concerned line departments and local bodies in the district.
2.	Make personnel available to the Deputy Commissioner/District Collector/District Magistrate, within the affected district/sub-division, tehsil. If more personnel are required, recall those on leave.
3.	Review and update precautionary measures and precautions that have been taken to protect equipment.
4.	Prepare a list of water borne diseases that are preventable by vaccination. Publicize the information about common diseases affecting livestock and the precautions that need to be taken.
5.	Assist the Revenue Department in preparing plans for cattle camps and cattle feeding centres.
6.	Stock emergency medical equipment, which may be required during and post-disaster.
7.	Determine the kind of injuries/illnesses that could be expected, and the drugs and other medical items that may be required
8.	Make information on disasters available to all staff of veterinary hospitals and centres. Apprise them on likely damages and impact in disaster aftermath, and give information on the ways to protect life, equipment and property.
9.	Organize vaccination campaigns in hazard prone villages before disaster.
10.	Develop emergency admission procedures (with adequate record keeping).
11.	Undertake campaigns in the drought-affected areas to increase the awareness of farmers about cattle health issues related to fodder and feed, vitamins and minerals, and sanitation issues.

12.	Ensure that the local police and rescue groups are aware of the resources of each veterinary aid centre and hospital.
During and Post-Disaster	
13.	Call for emergency meeting to take stock of the situation. Develop a strategy for disaster preparedness.
14.	Establish radio communications with: <ul style="list-style-type: none"> • Divisional Commissioner • Deputy Commissioner/District Collector/District Magistrate • District Control Room, and • Veterinary aid centres and hospitals (including private practitioners) within the division.
15	Establish cattle camps and additional veterinary aid centres at affected sites, and accordingly ensure that extra supplies of medical items and materials are obtained quickly.
16	Assemble and sterilize surgical packs to last for 4-5 days.
17.	Store the sterilized surgical pack in protective cabinets to ensure that they do not get wet. Cover the stock with polythene as an added safety measure.
18.	Pack all valuable equipment and instruments in protective coverings and store in room that is most damage-proof.
19.	Unplug all electrical equipment when disaster warning is received.
20	Organize vaccination campaigns in disaster prone villages before, during and after the disaster.
21.	Prepare kits for veterinary diseases, which could be provided to veterinary doctors at the block level and extension officers at the village level.
22.	Check the emergency electrical generator, to ensure that it is operational, and that a buffer stock of fuel exists, Hire an emergency generator, if not available at the hospital.
23.	Arrange for emergency supplies of anaesthetic drugs.
24.	Organize special vaccination campaigns in hazard prone villages during and after the disaster.
25	Request central warehouses, on an emergency priority basis, that supplies likely to be needed be dispatched to the hospital immediately.
26	Fill department vehicles with fuel and park them in a protected area.
27	Fill hospital water storage tanks and encourage water savings. If no storage tanks exist, draw water for drinking in clean and protected containers.
28	Prepare an area of the hospital for receiving large number of livestock.
29	Cattle camps and hospital administrators should:

District Disaster Management Authority, Chamba (HP)

	<ul style="list-style-type: none"> • Establish work schedules to ensure that adequate staff are available; • Set up teams of veterinary doctors, and assistants for visiting disaster affected sites; • Fix the quantity and quality of fodder and feed to be provided in the cattle camp. Issue fodder and feed for each cattle in accordance with these standards; • Arrange water supply for all the cattle camps in accordance with the total number of cattle admitted in these camps; and • Maintain accounts of the fodder and the feed provided through the cattle camps and reconcile it with the number of cattle staying in the cattle camp.
30.	Organize transfer of seriously injured livestock from villages to veterinary aid centres, wherever possible.
31.	Ensure coordination of the provision of medical services by the District Animal Husbandry Officer with District Control Room, Site Operations Centres and cattle camps.
32.	Estimate the requirement of water, fodder and animal feed, for cattle camps and organize the same.
33.	Procure fodder through Forest Department, traders, private cultivators and neighbouring stages, if required.
34.	Fix the price of fodder so that it is affordable to the farmers.
35.	Arrange for grazing of cattle in Army establishments, such as training centres or firing ranges.
36.	Ensure that adequate sanitary conditions through cleaning operations are maintained in order to avoid outbreak of any epidemic.
37.	Develop a system of monitoring outbreak of diseases to ensure that timely measures can be initiated to contain them.
38.	Plan for emergency accommodation for veterinary staff from outside the area.
39.	Use information formats and monitoring checklists for programme monitoring and development, and for reporting to Emergency Operations Centre. This should be in addition to its potential and limitations in disaster situations.
40	<p>Set standards for Cattle Camps:</p> <ul style="list-style-type: none"> • The minimum number of cattle in the camp should be about 100 and the maximum 500; • The cattle camps should be located at suitable sites, bearing in mind that adequate supply of water and shade are most essential for the well-being of the cattle; • Cattle sheds constructed should not exceed 20 sq. feet per animal. Suitable arrangements for water trough and Supervisor(s) should be made; and • The feeding centres for cattle should be located in such a manner that: <ol style="list-style-type: none"> 1. They should be within the radius of 8 km from the affected villages.

	<p>2. They fulfil the cattle feed requirement of 6 kg per cattle head per day of fodder, and 1 to 1.5 Kg per cattle head per day, of concentrate like Bago molasses.</p> <p>3. There is a minimum of one camp manager, two labourers and two sweepers in each cattle camp.</p>
<p>Water Supply and Sanitation (In-charge Officer: Superintending Engineer (Public Health) Head, Water Supply and Sanitation Department at the District)</p>	
<p>Pre-Disaster</p>	
1.	Develop and quarterly update the disaster management plan that includes the Contingency Action Plan for the Department based on HVRC analysis with the active involvement of all concerned line departments and local bodies in the district.
2.	Make personnel available to the Deputy Commissioner/District Collector/District Magistrate, within the affected district/sub-division, tehsil. If more personnel are required. Recall those on leave.
3.	Review and update precautionary measures and procedures and ascertain with staff the precautions that have been taken to protect equipment.
4.	Assess the availability of water, depending on various factors, such as rainfall, the extent of percolation and ground water recharge, water storage and water use.
5.	Plan out the water resource management process for estimating the demand for water. It can be undertaken on the basis of the consumption needs of the total population of the district and the demand for water from industrial service and agricultural sector.
6.	Formulate a plan for managing the water situation in a drought-affected area through reservoir management; repairs and augmentation of existing water supply schemes; special measures and schemes for areas with drinking water scarcity, namely construction of temporary piped water supply, construction of bore wells and other emergency measures for supply of drinking water, including supply of water through tankers and bullock carts.
7.	Make sure the hospital storage tank is full, and the hospital is conserving water.
8.	Inform people to store an emergency supply of drinking water.
9.	Install standby diesel pumps or generators in damage proof buildings
10.	Make sure auxiliary generators and standby engines are in good working condition.
11.	Acquire a buffer stock of fuel for the motors and store in a protected place, especially in vulnerable pockets.
12.	Establish procedures for the emergency distribution of water, if existing supply is disrupted.

13.	Pre-requisition to acquire containers and storage tanks, required for storing water on an emergency basis.
14	Maintain a minimum level of stock for emergencies that includes extra lengths of pipe connections, joints, hydrants and bleaching powder Keep adequate tools on hand to carry out emergency repairs.
15.	Establish emergency work gangs for immediate and post-disaster repairs.
16.	Investigate alternate source of water and its supply.
During and Post-Disaster	
17	On the receipt of Disaster warning, organize continuous monitoring of: <ul style="list-style-type: none"> • Wells • Intake structures • Pumping stations • Buildings above ground, and • Pumping mains; and Treatment plant.
18	Call for emergency meeting to take stock of the situation. Develop a strategy and a mission underlining objectives
19	Make available standby water supply in the event of damage, saline intrusion or other pollution of the regular supply.
20	Make provisions to acquire tankers and establish other temporary means of distributing water on an emergency basis
21.	Prepare plans for water distribution to all transit and relief camps, affected villages and cattle camps and ensure proper execution of these plans.
22.	Safeguard pumps and motors with adequate protection (if the building is not disaster-resistant) to prevent damage.
23.	Increase the concentration of the disinfecting solution to 100 mg/litre and reduce the contact period to 1 hour, if the demand for water is urgent, or the repaired main cannot be isolated.
24.	Take samples for bacteriological analysis and determination of chlorine residue, at the end of disinfection operations, but before the main is put back into service.
25	Repair sewage lines where damage is detected.
26	Fix water pipelines wherever damaged.
27	Use methods described in the following paragraphs, when water treatment plant, pumping station, or distribution system is badly damaged and operation cannot be restored for some time: <ul style="list-style-type: none"> • Connect water from these sources, with adequate chlorination as necessary, to a distribution system or to the points of consumption; • Identify unacceptable water sources and take necessary precautions to ensure that no water is assessed from such sources, either by sealing such arrangements or by posting the department guards;

District Disaster Management Authority, Chamba (HP)

	<ul style="list-style-type: none"> • Ensure that potable water supply is restored, as per the standards and procedures laid down in “Standards for Potable Water”. • Plan for emergency accommodations for staff from outside the area; and • Take special measures and schemes for areas with Drinking Water Supply.
Forest	
(In-Charge Officer: Divisional Forest Officer/Head, District Forest Office)	
Pre-disaster	
1.	Develop and quarterly update the disaster management plan that includes the Contingency Action Plan for the Department based on HVRC analysis with the active involvement of all concerned line departments and local bodies in the district.
2.	Make personnel available to the Deputy Commissioner/District Collector/District Magistrate, within the affected district/sub-division, tehsil. If more personnel are required, recall those on leave.
3.	Identify areas that could be opened or made available for grazing or fodder collection in case of disaster.
4.	Ensure that adequate supply of small poles or bamboo is available for reconstruction of houses of the affected people, as well as wood for cremation of dead.
5.	Ensure plantation to the maximum possible extent.
During and Post-Disaster	
6.	Call for emergency meeting to take stock of the situation. Develop a strategy and a mission underlining objectives.
7.	Open certain forest land for free grazing when disaster waters enter villages, and there is not enough fodder available.
8.	Allow the transportation of fodder from forest areas, when the fodder is not freely available.
9.	Permit local farmers to take forest produce, such as fodder yielding trees, free of charge or on payment of fee.
10.	Provide wooden poles and bamboo for relief and reconstruction at subsidized rate. Supply these materials to all the technical departments, which need them.
11.	Recall important functionaries from leave; and communicate to the staff to man their places of duties like the ward and divisional offices and respective departments.
Public Works Department (Buildings & Roads)	

(In-Charge Officer: Superintending Engineer, PWD (B&R)/Head, PWD (B&R) of the District)	
Pre-Disaster	
1.	Develop and quarterly update the disaster management plan that includes the Contingency Action Plan for the Department based on HVRC analysis, with the active involvement of all concerned line departments and local bodies in the district.
2.	Make personnel available to the Deputy Commissioner/District Collector/District Magistrate, within the affected district/sub-division, tehsil. If more personnel are required, recall those on leave.
3.	Ensure; personnel are aware and nominated to be available for emergency duties within the affected district and sub-division.
4.	Establish radio communications with State Emergency Operations Centre, Divisional Commissioner, District Control Room and departmental offices within the division/district.
5.	Make certain the Office In-charge PWD (B&R) is familiar with pre-disaster precautions and during and post-disaster procedures for road clearing and defining safe evacuation routes where necessary.
6.	Appoint Nodal officers (technical officers) and ensure they meet the staff to review emergency procedures in their jurisdiction.
7.	Review and update precautionary measures and procedures, and assess with staff the precautions that have been taken to protect equipment.
8.	Inspect vehicles, fill fuel tanks and batteries and cover electrical wiring as necessary.
9.	Move heavy equipment, such as front-end loaders to areas likely to be damaged and put them in a safe place.
11.	Maintain all the highways and access roads, which are critical from the point of view of supplying relief.
12.	Inspect all buildings and structures of the state government (including hospital buildings) by a senior engineer, and identify structures which are endangered by the impending disaster.
13.	Assemble emergency tool kits for each division, and ensure these include: <ul style="list-style-type: none"> • Crosscut saws • Axes • Power chain saw with extra fuel, oil • Sharpening files • Chains and tightening wrenches, and • Pulley block with chain and rope.
14.	Identify, mark and designate routes strategic to evacuation and relief, in close coordination with police and District Control Room.

15.	Establish a priority listing of roads which will be opened first. Among the most important are the roads to hospitals and main trunk routes.
16.	Plan for the layout of roads, gardens and other alternative routes, from the view-point of preventing congestions, and facilitating quicker response.
17.	Inspect old buildings and suggest retrofitting of weak buildings/demolition of dangerous structures and evacuation of population.
During and post-Disaster	
18.	Ensure the Officer-in-charge-PWD (B&R) is responsible for mobilizing staff and volunteers to clear the roads in his section.
19.	Dispatch extra transport vehicles from headquarters and ensure these are stationed at safe strategic spots along routes likely to be affected.
20.	Give priority attention to urgent repair works that need to be undertaken in disaster affected areas.
21.	Secure all under construction works with ropes, sandbags and cover them with tarpaulins if necessary.
22.	Ensure emergency inspection by mechanical engineer of all plants and equipment at the district workshops.
23.	Check the evacuation routes and assist people, if they have to evacuate an area.
24.	Construct/reinforce the connecting roads from villages to roads, canals and bunds and raise their level so that people can access the high ground.
25.	Provide a work team carrying emergency tool kits, depending on the nature and extent of the disaster, essential equipment such as: <ul style="list-style-type: none"> • Towing vehicles • Earth moving equipment, and • Cranes, etc.
26.	Install adequate road signs to guide and assist the drivers.
27.	Coordinate with Public Works Department and Zila Parishad.
28.	Mobilize community assistance for road clearing by contacting community based organizations.
29.	Undertake clearing of ditches, grass cutting, burning or removal of debris, and the cutting of dangerous trees along the roadside in the affected area through area engineer's staff.
30.	Institute repair of all paved and unpaved road surfaces, including edge metaling, pothole patching and any failure of surface, foundations in the affected areas by maintenance engineer's staff and keep monitoring their conditions.
31.	Take on construction of temporary roads to serve as access to temporary transit and relief camps and medical facilities for disaster victims.

32.	As per the decisions of the District Control Room, undertake construction of temporary structures required, for organizing relief work and construction of relief camps, feeding centres, medical facilities, cattle camps and Site Operations Centres.
33.	Keep an up-to-date report of all damage and repairs in the district office report book and communicate the same to the District Control Room.
Power Supply (In-charge Officer: Superintending persuade Electricity Board/Corporation/Head, power Supply Department/Board at the District)	
Pre-Disaster	
1.	Develop and quarterly update the disaster management plan that includes the Contingency Action Plan for the Department based on HVRC analysis with the active involvement of all concerned line departments and local bodies in the district.
2.	Make personnel available to the Deputy Commissioner/District Collector/District Magistrate, within the affected district/Sub-Division, tehsil. If more personnel are required, recall those on leave.
3.	Ensure all personnel are available as per the IRS plan.
4.	Establish radio communications with State Emergency Operation Centre, Divisional Commissioner, District Control Room and departmental offices within District/Division.
5.	Review and update precautionary measures and procedures, and review with staff the precautions that have been taken to protect equipment.
6.	Protect Power Stations from disaster. Raise the height of compound walls. Arrange gunny bags. Install pump sets for draining water in case of Disaster/Cyclone/Tsunami, etc.
During and Post-Disaster	
7.	Ensure that the Power Supply department makes alternate arrangements of emergency supply for the following offices on receipt of warning: <ul style="list-style-type: none"> • Hospitals • Public Health Departments • Deputy Commissioner/District Collector/District Magistrate Office • District EOC, Sub-Divisional EOC, Site Operation Centres. • Police Stations • Telecommunications buildings • Meteorological stations • Irrigation Office, and • Any other place, if required.
8.	Check emergency tool kits, and assemble any additional equipment needed.
9.	After receiving alert warning, immediately undertake inspection of the following: <ul style="list-style-type: none"> • High tension lines

District Disaster Management Authority, Chamba (HP)

	<ul style="list-style-type: none"> • Towers • Sub-stations • Transformers • Insulators • Poles, and • Other equipment.
10.	Review the total extent of the damage to power supply installations by a reconnaissance flight, if possible.
11.	Instruct district staff to disconnect the main electricity supply for the affected area temporarily to avoid outbreak of fire, electrocution, etc.
12.	Dispatch emergency repair groups equipped with food, bedding, tents, and tools.
13.	Provide information to the people about the state of power supply, as it is one of the most important sources of information.
14.	Call for emergency meeting to take stock of the situation. Develop a strategy and a mission underlining objectives.
15.	Hire casual labourers on an emergency basis for clearing of damaged poles and salvaging conductors and insulators.
16.	Undertake repair/reconstruction.
17.	Assist hospitals in establishing an emergency supply by assembling generators and other emergency equipment, if necessary.
18.	Establish temporary electric supplies to other key public facilities, public water system, etc., to support emergency relief.
19.	Establish temporary electric supplies to transit camps feeding centres, relief camps and Site Operation Centre, District EOC and on access roads to the same.
20.	Set up temporary electric supplies for staging area (staging area to hold the data, and perform data cleansing and merging, before loading the data into warehouse).
21.	Compile an itemized assessment of damage, from reports made by various electrical receiving centres and sub-centres.
22.	Report all activities to the head office and district EOC
23.	Plan for emergency accommodation for staff from outside the area.
<p>Transport (In-Charge Officer: District Transport Officer/Head, Transport Department at the District)</p>	
<p>Pre-Disaster</p>	
1.	Develop and quarterly update the disaster management plan that includes the Contingency Action Plan for the Department based on HVRC analysis, with the active involvement of all concerned line departments and local bodies in the district.

District Disaster Management Authority, Chamba (HP)

2.	Make personnel available to the Deputy Commissioner/District Collector/District Magistrate, within the affected district/Sub-Division, tehsil. If more personnel are required, recall those on lease.
3.	Prepare a list of vehicles-trucks, buses, jeeps, tractors, etc., of government and private agencies in the district, and provide the list to the District Control Room.
4.	Issue standing instructions to the state transport department for providing buses for evacuation and relief.
During and Post-Disaster	
5.	Call for emergency meeting to take stock of the situation. Develop a strategy and a mission underlining objectives.
6.	Provide required vans and ambulances for mobile health and animal husbandry teams.
7.	Make available trucks, buses, jeeps, tractors, etc., for evacuation and supply chain management.
8.	Recall important functionaries from leave; communicate to the staff to man their places of duties like the ward and divisional offices, as well as respective departments.
Food and Civil Supplies. (In-Charge Officer: District Food and Civil Supplies Officer/Head, Food and Civil Supplies Department at the District)	
Pre-Disaster	
1.	Develop and quarterly update the disaster management plan that includes the Contingency Action Plan for the Department based on HVRC analysis with the active involvement of all concerned line departments and local bodies in the district.
2.	Make personnel available to the Deputy Commissioner/District Collector/District Magistrate, within the affected district/sub-division, tehsil. If more personnel are required, recall those who are on leave.
3.	Ensure that personnel are available within the affected district and sub division during time of crisis
4.	List out items to be provided by Food and Supply department.
5.	Decide upon the places where the Response Base for Food, Fuel, Raw Material, etc., is to be set up.
6.	Check the inventory of resources.
8.	Check for the supplies of food grains through the Public Distribution System.
9.	List out wholesalers and distributors of food grains within and outside district.
10.	Prepare a list of Petrol Pumps, Kerosene Oil sellers, Gas agencies, etc.
11	List out warehouses of the State and Central Governments.

District Disaster Management Authority, Chamba (HP)

12.	Establish communications with all stakeholders at the District, State and Central levels.
13.	Ensure security of stocks through Police.
14.	Establish co-ordination with Fire services.
15.	Prepare a list of NGOs, CBOs, CBOs, NCC/NSS volunteers who can help in food distribution and other activities of the Civil Supplies department.
During and Post-Disaster	
16.	Review the situation and develop a strategy for relief operation.
17.	Ensure the availability of food grains for starting relief immediately.
18.	Exercise surveillance over prices of essential commodities. If the local prices of food grains increase, bring it to the notice of the Deputy Commissioner/District Collector/District Magistrate who should bring it to the notice of the State Government.
19.	Prevent hoarding of essential commodities and manipulation in prices through creation of artificial scarcities.
20.	Ensure the availability of food grains for starting relief employment works under the MGNREGA or any other food-for-work programme. Wages can be paid to the workers in the form of food grains.
21.	Ensure that in those places, where Fair Price Shops are not available, new ones for the distribution of food grains are to be started through self-help groups or cooperatives or even village panchayats.
22.	Arrange for mobile Fair Price Shops in remote and/or disaster prone areas.
23.	Coordinate with Transport Department for arrangements of transport for supplies of relief materials of response base/relief camps, etc.
24.	Ensure capacity building of Emergency Support functions staff.
25.	Enable proper hygiene condition while preparing and packaging food.
26.	Ensure media briefing related to food stock, distribution, etc., through DPRO.
2.Preparedness Check List for Local Bodies	
Panchayati Raj Institutions.	
1.	Convene the meetings of Block/village Disaster Management Committee along with the executive authority.
2.	Prepare and update the Block/village Disaster Management Plan quarterly, with focus on Hazard, Vulnerability, Risk and Capacity Analysis (HVRCA) of the Block/village, with the active involvement of all concerned stakeholders
3.	Support activation of the Block/Gram Panchayat Level Control Rooms.

4.	Provide support to establish communications with all stakeholders for the purpose of receiving and sending warning and information exchange through Block Control Room.
5.	Ensure support to establish effective warning systems between the District and Block levels, and also with media.
6.	Coordinate and network with all stakeholders in preparedness programmes and emergency situations.
7.	Regularly check inventory of resources.
8.	<p>Ensure community involvement in disaster preparedness on:</p> <ul style="list-style-type: none"> • Risk assessment (to point to which measures to implement); • Early warning systems; • Life safeguarding equipment; • Resources and emergency kits in anticipation of need; • Maintaining emergency rosters and evacuation plans; • Emergency information and communication systems; • Capacity building to ensure adequate emergency response capacity(Particularly amongst the local populace), maintenance of preparedness levels; and • Public education and preparedness campaigns.
9.	<p>Make an inventory of elements at Risk at Block/village level through the following baseline data:</p> <ul style="list-style-type: none"> • Population: age, gender, health; • Livelihoods: types, locations; • Local economy; • Agriculture and fisheries; • Buildings; • Infrastructure; • Cultural assets(that is, libraries, museums, historic monuments, etc.) and • Local institutions.
10.	<p>Mitigate disasters in the Block/village through;</p> <ul style="list-style-type: none"> • Mainstreaming mitigation into development process; • Funding Mechanism; • Specific schemes addressing mitigation; • Capacity Building; • Human Resource Development; • Community Participation; • Training and education; • Public education; • Evacuation Planning; • Institution building; and • Warning systems.

11.	<p>Form Disaster Task Force (DTF or Teams at Village Level. Each Panchayat must have its own Community Emergency Response Team (CERT) comprising 10-20 members. These members should be chosen with the following criteria:</p> <ul style="list-style-type: none"> • They must be young and trained persons; • There should be women representatives in the CERT; • There must be a member of the Gram Panchayat in the DTF; • The members must have detailed knowledge of the area, people and public infrastructure; • They should not be going to distant places for work during the daytime; and • They should have a strong commitment for community service and volunteerism.
12.	<p>Help the line departments in pre-positioning of food, medicine, health functionaries, and water with Disaster Task Force and DM Teams.</p>
13.	<p>Convene meetings of NGOs, Youth Clubs, Self-Help Groups, etc., in the Block/Village, and assign them specific responsibilities for relief, recovery and rehabilitation.</p>
14.	<p>Ensure Disaster Response with focus on:</p> <ul style="list-style-type: none"> • Community Participation in Response Actions. • Timely search, rescue and Evacuation. • Identification of Shelters for Victims. • Distribution of Food, Water, Medicine and Fodder. • Clearance of Debris. • Movement of Injured to Hospitals. • Sympathetic Attitude towards Victims. • Assisting Rescue Teams • Property Security. • Information Dissemination and Checking of Rumours, and • Immediate Damage Assessment.
15.	<p>Actively undertake disaster recovery and rehabilitation through:</p> <ul style="list-style-type: none"> ➤ Damage assessment by including the following aspects: <ul style="list-style-type: none"> ➤ Confirmed number of human losses; Number of livestock losses and their estimated value; ➤ Details of damage to crops and estimated cost of produces; ➤ Number of houses damaged or destroyed and their estimated value; ➤ Loss to public works and utilities including Gram Panchayat property; and ➤ Rough estimation of the financial losses in rupees; <ul style="list-style-type: none"> • Economic rehabilitation's aim is to bring the affected community into the mainstream again. PRIs need to work on the following for economic rehabilitation of the disaster-affected area: ➤ Provide for agricultural rehabilitation of disaster affected area by necessary assistance, with the help of state Government, to affected farmers in activities such as sowing/harvesting; ➤ Make available requisite seeds and fertilizers free of cost to the farmers, of course, with the help of concerned government departments; ➤ Provide agricultural equipment/tools through Banks and other funding agencies

	<ul style="list-style-type: none"> ➤ Help in rehabilitation of artisans and marginal businessmen affected due to the disaster; ➤ Provide small work-sheds, necessary tool kits and soft loans to enable affected people to secure raw materials and to market the final/finished products. Rehabilitation of livestock affected due to the disaster; ➤ Ensure replacement of milch cattle to the affected farmers through free cattle feed for about 2 to 3 months; and ➤ Provide for preventive medication for entire livestock to check the spread of any disease among the surviving cattle. <ul style="list-style-type: none"> • Social rehabilitation with the help of local community, NGOs and other stakeholders to: <ul style="list-style-type: none"> ➤ Make efforts to re-start schools as soon as possible and encourage children to attend school regularly: ➤ Make children participate in activities pertaining to restoration of normalcy in the school. ➤ Prepare school safety plans, conduct regular drills and mock exercises to prepare the children and school management for future disasters, ensure proper counselling of traumatized children and teachers. <ul style="list-style-type: none"> • Special care of women and children by: <ul style="list-style-type: none"> ➤ Protecting widows and orphans, and providing shelter, identifying family members, if that is not possible then identify foster families; ➤ Organizing regular counselling to strengthen the mental health of women and children; ➤ Initiating various training programmes to make the women economically self-sufficient; ➤ Giving due attention to health, nutrition and hygiene in the long-term rehabilitation package for women and children; ➤ Activating/reactivating the angan-wadis within the shortest possible time; ➤ Setting up at least one multi-purpose community centre in the village; ➤ Setting up vocational training camps to improve the skills of orphans and children; and ➤ Ensuring that the existing programmes collaborate with the training efforts for women at the district level.
16.	Mainstream disaster management with development process (Explained at length Section 2.4 of Booklet IV of the Training
Urban Local Bodies	
1.	Convene the meetings of Urban Local Body (ULB)/Ward Disaster Management Committee.
2.	Prepare and update the ULB/Ward Disaster Management Plan quarterly, with focus on Hazard, Vulnerability, Risk and Capacity Analysis (HVRCA) of the ward & village with the active involvement of all concerned stakeholders.
3.	Understand Hazards, Risk and Vulnerabilities of the cities to promote safe environment by the ULBs through: <ul style="list-style-type: none"> • Proper Hazard Risk Vulnerability Assessments of the urban areas;

	<ul style="list-style-type: none"> • Introduction of appropriate institutional mechanisms for DRR by ensuring that all development activities look into the DRR components. It could be accomplished through City Disaster Management Authorities/Committees, constitution of Disaster Management Teams at all levels of decentralized governance structure, as well as institutions like schools, offices, apartments; • Emergency Operations Centres for information collection and dissemination for early warning and effective response and sharing of relevant information; • Strong and enforceable techno-legal regime (Building Laws, Town Planning Act) to ensure safe infrastructure including houses, etc; • Capacity Building of all stakeholders in basic life-saving skills and specialized skills for safe environment like safe-construction techniques, mass-casualty management, etc and • Creation of forums to enhance partnerships for all stakeholders' participation for effective disaster management.
4.	<p>Carry out the exercise of Disaster Mitigation Planning for addressing their specific needs for disaster management, which includes integration of Disaster Risk Reduction elements in land-use planning, infrastructure planning and overall city development planning. ULBs should thus;</p> <ul style="list-style-type: none"> • Facilitate proper coordination mechanisms for preparation and implementation of the plan (through disaster management committee or working group); • Ensure participation of all stakeholders at all levels of planning and implementation; • Ensure that plan covers all the phases of disaster management with clear roles and responsibilities of each agency and stakeholder. Thus, a plan must identify the vulnerability of various parts of the city to different types of hazards; • Establish clear and well-defined roles and responsibilities of each agency involved in the management of the city for all the phases of disaster management; • Incorporate measures to be adopted for the prevention and mitigation of disasters; • Include capacity building and preparedness measures that need to be taken; • Incorporate strategies for integration of mitigation measures with the ongoing development plans and projects; • Facilitate development of sectorial plans (Health, transportation, water supply, etc.) • Provide support in preparation of community plans (ward plans);and • Facilitate formation of a comprehensive crisis management plan covering various possible crises like terrorist attacks, stampedes, etc. This Plan could be a separate Plan, and if so, with proper linkages to the overarching Disaster Management Plan of the City.
5.	<p>Undertake mitigation measures as per the action plan devised under Disaster Management Plan based on HVRCA.</p>

6.	Ensure clearing of drainage and desalting of drainage system within the jurisdiction of ULB well before onset of monsoon.
7.	Ensure implementation of Building Bye-laws, Town Planning Act, etc.,
8.	Coordinate and network among all stakeholders in preparedness programmes and emergency situations.
9.	Identify and engage local leaders for awareness generation and ensuring that various responsibilities for disaster management are clear and understood by the community.
10.	Ensure that local government personnel as well as community receive constant training in disaster management.
11.	<p>Streamline the Fire and Emergency Services, which are the most critical services in urban areas. These services cover a wide range of incidents such as house collapses, train and motor accidents, drowning accidents, tree collapses, earthquakes, floods, landslides, cyclones, oil and acid spillages, etc. These incidents would involve wide ranging skills from lifesaving medical service (First Aid) or rescue operations to basic humanitarian services like counselling or food distribution. ULBs thus need to ensure that:</p> <ul style="list-style-type: none"> • Fire and Emergency Force is adequately equipped as well as trained to save lives and property in case of fire/disaster. • A proper assessment based on Hazard, Risk and Vulnerability is • Taken up to ensure that adequate infrastructure is developed to support this Force; • An interactive platform between community and the services is available to address the grievances; and • Required coordination mechanisms within various departments/agencies for effective services are in place.
12.	<p>Strengthen the Health Sector, which is another critical sector in the ULBs. It is strongly felt that in any given emergency, the first 72 hours are critical in the life of any affected person. To cope with it, ULBs need to ensure that;</p> <ul style="list-style-type: none"> • A well-designed Medical Preparedness and Mass Casualty Management system is in place; • A plan to enhance capacity of all staff for emergency medical response and mass causality management is being implemented; • Systems to address post-disaster disease surveillance systems, networking with hospitals, referral institutes and accessing services and facilities, such as availability of ambulances and blood banks have been created; • A well-managed system of mobile surgical teams, mobile hospitals and heli-ambulances for evacuation of patients is available; • Vulnerability Analysis for Hospitals and other related facilities has been done to address the gaps; and • Disaster resilient medical facilities are developed.
13.	Establish a control room.

District Disaster Management Authority, Chamba (HP)

14.	Establish communication with all stakeholders for the purpose of receiving and sending warning and information through ULB control room.
15.	Help in disseminating timely warning to all concerned including media
16.	Ensure community involvement in all phases of disaster management.
17.	Prepare and regularly update inventory of resources.
18.	Recall important functionaries from leave and communicate to the staff to perform their duties.
19.	Play an effective role in search and rescue. It could be done through planning an urban search and rescue exercise to rescue people from a disaster affected area.
20.	Ensure identification of safe places in each ward for evacuation and establishment of relief camps and confirming their suitability.
21.	Prepare a list of relief items to be distributed.
22.	Ensure proper planning has been done for transport, equipment and materials for responding to a disaster incident.
23.	Constitute and activate, as and when required, ward level preparedness team with the help of elected representative from the concerned ward.
24.	<p>Facilitate business houses and industries in urban areas to:</p> <ul style="list-style-type: none"> • Contribute to the economic health and development of communities through responsible business practices; • Minimize the negative impact of its activities on the environment and community through use of appropriate technologies; • Be accountable to all stakeholders through dialogue and transparency regarding economic, social and environmental impacts of business activities; and • Provide support in Capacity Development, Skill Development and Knowledge Management for disaster management activities ranging from prevention, mitigation and preparedness to response and recovery; and support activities that reduce risk of disasters like Building Safe Infrastructure, carrying out Hazard, Vulnerability Risk, and Capacity Analysis (HVRCA) for better planning, enhancing Early Warning Capability, etc.
25.	<p>Sustain awareness created by large-scale devastations on the need for prevention and mitigation programmes, in order to minimize the loss of development gains and to reduce the vulnerability of communities to natural and human-induced hazards.</p> <p>Even before external aid arrives, local volunteers emerge from the devastation to share their skills and devote their time to assist those in need. Volunteers not only assist in such tasks as arranging shelter, food and first aid, search and rescue efforts, etc, but also help to contain epidemics, rebuild infrastructure and impart training on using technology to prevent and mitigate future disasters.</p>

	<p>Equally evident is the importance of promoting and strengthening the ability of volunteers, now mostly untrained force, to stimulate local populations in realizing their own potential in making any crisis more manageable. Volunteers of government based organizations like Nehru Yuva Kendra Sang than)NYKS),National Service Scheme (NSS), National Cadet Corps (NCC) and Bharat Scouts and Guides, United Nations Development Programme (UNDP), Non- Governmental Organizations, Corporate, Trusts including religious trusts and other volunteers engaged by donor organizations, have shown exemplary contributions in the process of Post-disaster response, rescue, recovery and development. These organizations have, in fact, been individually engaged in creation and promotion of volunteers. The Urban local bodies can thus support in;</p> <ul style="list-style-type: none"> • Creating a common platform for interface of volunteers with government agencies, PRLs, Civil Society Organizations/other networks and vulnerable communities to broaden and enhance opportunities for better voluntary action; • Setting up a system that would encourage volunteers to register; • Facilitating optimal utilization of skilled manpower for disaster response actions and sustained management of volunteer infrastructure through a well-defined institutional mechanisms; • Formulating rules and regulations for volunteers 'engagement during emergencies; and • Developing/Enhancing human resources by undertaking well-designed capacity building programmes.
26	Convene function of IRS (Incident Response System) and ESF (Emergency Support Function).
27	Maintain an Emergency Operation Centre.
28	Convene meetings of NGOs, Youth Clubs, Self-Help Groups, etc., in the urban area, and assign them specific responsibilities for relief, recovery and rehabilitation.
29	<p>Ensure Disaster Response with focus on facilitating the line departments and other stakeholders in carrying out the following post-disaster activities:</p> <ul style="list-style-type: none"> • Arrangements for maintenance of law and order; Arrangements for evacuation of people; • Recovery of dead bodies and their disposal; Arrangements to be made for the medical care for the injured; • Supply of food and water and restoration of water supply lines; • Arrangement for temporary shelters like tents, mental sheds, etc; • Restoration of lines of communication and information flow; Quick assessment of damage and demarcation of damaged areas according to grade or damage; • Arrangement for cordoning off severely damaged structures liable to collapse during aftershocks; and • Establishment of hygienic and sanitary conditions in the relief area, etc.

District Disaster Management Authority, Chamba (HP)

30	Undertake rehabilitation actively through: Damage Assessment; Physical Rehabilitation; Economic Rehabilitation; Social Rehabilitation; Special care of women, children and weaker sections of the society; etc; and
31.	Facilitate mainstreaming of disaster management with development.

Chapter - 7

Relief, Recovery, Rehabilitation, and Reconstruction Plan

Approach

Relief, rehabilitation, reconstruction and recovery are important phases of post disaster response. Relief is no longer perceived only as gratuitous assistance or provision of emergency relief supplies on time. It is on the contrary, 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. The relief needs to be prompt, adequate and of approved standards.

The recovery phase starts after the immediate threat to human life has subsided. During reconstruction it is recommended to consider the location or construction material of the property. The approach to the reconstruction process has to be comprehensive so as to convert adversity into opportunity. Incorporating disaster resilient features to 'build back better' will be the guiding principle. This phase requires the most patient and painstaking effort by all concerned. The administration, the stakeholders and the communities need to stay focused on the needs of this phase, as, with the passage of time, the sense of urgency gets diluted. The appropriate choice of technology and project impact assessment needs to be carried out to establish that the projects contemplated do not create any side effects on the physical, socio-cultural or economic environment of the communities in the affected areas or in their neighbourhood. The involvement of community in decision making is important. Systems for providing psychosocial support and trauma counselling would be developed for implementation during the reconstruction and recovery phase.

Relief

The victims of disaster would need to be provided relief as per the relief code of the State. Displaced population may require to be housed in temporary shelters. The DDMA would identify locations for setting up temporary camps and make an inventory in advance and make inventory of them. Use of premises of educational institutions for setting up relief camps need to be discouraged as it hampers early recovery. Relief camps will have adequate provision of drinking water, and bathing, sanitation and essential health care facilities. The PRIs, ULBs, CSOs and CBOs shall be trained in handling and running relief camps. The disaster affected population can also be roped in to manage community kitchens. Guidelines/SOPs for efficient governance of relief camps such as identification cards, rationing, entitlement, management of donations, procurement, packaging, transportation and storage etc. may be issued in advance. The stock-piling of essential relief material at suitable locations is also important. Pre-contracting of relief supplied with agencies is important during pre-disaster phase.

In case of devastating disaster extreme weather conditions can be life threatening or when the period of stay in temporary shelters is likely to be long and uncertain, construction of site specific befitting the local environment, ecology and culture, immediate shelters with suitable sanitary facility will be undertaken to ensure a reasonable quality of life to the affected people. The DDMA in consultation with the SDMA will plan such shelters which are cost effective and as per the local needs with multi-use potential. Pre-identification of their availability, supply and testing in the local conditions will be done.

The relief supplies would pay attention to the needs of special categories such as pregnant or lactating mothers, infants, new-borns, adolescents, and aged people.

Owner Driven Construction

Reconstruction plans and designing of houses need to be participatory process involving the affected community, NGO, corporate sector and the Government. Having a clear cut policy on entitlement, criteria for IAY and land ownership, relocation, exchange of land will facilitate speedy reconstruction. After the planning process is over, while the owner driven construction is preferred option, participation of NGO, corporate sector and technical experts will be encouraged to ensure safe and better reconstruction. Reconstruction programme will be within the confines and the qualitative specifications laid down by the Government. In order to have acceptability for the safe and quality standards it will be better if the safe construction norms, designs and guidelines are finalised during normalcy so that community is well aware of them. Services of CBO, CSOs, and faith based organisation may be taken for this purpose to gain acceptance.

Reconstruction of Social Infrastructure

Essential services, social infrastructure and intermediate shelters/camps will be established in the shortest possible time. For permanent reconstruction, ideally, the work including the construction of houses must be completed within two to three years. State Government and Departments of State Government should create dedicated project teams to speed up the reconstruction process. Involvement of PRIs and ULBs for reconstruction at local level will be encouraged.

Socio-Economic Rehabilitation

Disasters destroy development and livelihood sources. In the post disaster situation there is great need to generate temporary livelihood options for the affected community. The relief and reconstruction programmes would be used to generate livelihood options for the needy. Ongoing or new programmes may be launched which may help the affected community to earn their livelihood. It would be ensured that such programmes result in the creation of assets, infrastructure, and amenities community and equally important is that such assets are hazard resistant, durable, and sustainable. Disasters may also end up in destroying the existing village or housing sites and re-settlement in the existing locations may no longer be possible. Possible sites for re-location of habitation would be identified.

Linking Recovery with Safe Development/Reconstruction – ‘Building back Better’

It will be ensured that the post disaster development/reconstruction does not end up in re-building the existing vulnerability. The reconstruction phase would be utilised to incorporate the building codes, safe construction practices, and zoning regulations. Contingency plans for reconstruction in highly disaster prone areas would be drawn out during the period of normalcy, which may include architectural and structural designs in consultation with the various stakeholders. Emphasis will be laid on plugging the gaps in the social and economic infrastructure and infirmities in the backward and forward linkages. Efforts will be made to support and enhance the viability of livelihood systems, education, health care facilities, care of the elderly, women and children, etc. Other aspects warranting attention will be roads, housing, drinking water sources, provision for sanitary facilities, availability of credit, supply of agricultural inputs, up gradation of technologies in the on-farm and off-farm activities, storage, processing, marketing, etc.

Chapter – 8

Linking with Development Plan

The Disaster Management Act mandated us to take measures for prevention/mitigation of disasters and to ensure that appropriate preparedness measures for integration of disaster management into development plans and projects are taken and further allocation of funds for prevention, mitigation, preparedness for disaster and capacity building are also made available. Since disaster management is not a function of DM department alone but of all departments hence mitigation concern must be addressed by the respective departments in all aspects of development. The issue of DRR integration is also contained in the National Policy on Disaster Management, 2009.

A. Introduction – Disaster and Development

Natural disaster risk is intimately connected to processes of human development. Disasters put development at risk. At the same time, the development choices made by individuals, communities and nations can generate new disaster risk. But this need not be the case. Human development can also contribute to a serious reduction in disaster risk. The destruction of infrastructure and the erosion of livelihoods are direct outcomes of disaster. But disaster losses interact with and can also aggravate other financial, political, health and environmental shocks. Such disaster losses may setback social investments aiming to ameliorate poverty and hunger, provide access to education, health services, safe housing, drinking water and sanitation or to protect the environment as well as the economic investments that provide employment and income.

How can development increase disaster risk?

There are many examples of the drive for economic growth and social improvement generating new disaster risks. Rapid and unplanned urbanisation is an example. The growth of informal settlements and inner city slums, whether fuelled by international migration or internal migration from smaller urban settlements or the countryside, has led to the growth of unstable living environments. These settlements are often located in ravines, or steep slopes, along flood plains, sinking areas or adjacent to noxious or dangerous industrial or transport facilities. Rural livelihoods are put at risk by the local impacts of global climate change or environmental degradation. Coping capacity for some people has been undermined by the need to compete in a globalising economy, which at present rewards productive specialisation and intensification over diversity and sustainability.

Can development planning incorporate disaster risk?

The frequency with which our country and state experience natural disaster should certainly place disaster risk at the forefront of development planners' minds. This agenda differentiates from two types of disaster risk management. *Prospective disaster risk management* should be integrated into sustainable development planning. Development programmes and projects need to be reviewed for their potential to reduce or aggravate vulnerability and hazard. *Compensatory disaster risk management* (such as disaster preparedness and response) stands alongside development planning and is focused on the amelioration of existing vulnerability and reduction of natural hazard that has accumulated through past development pathways. Compensatory policy is necessary to reduce contemporary risk, but prospective policy is required for medium – to long-term disaster risk reduction.

B. The Legal Context

The DM Act mandated the 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 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 Plan and for incorporation of measures suggesting as to how mitigation shall be integrated into development plans and projects. The Act states that the DMPs shall prescribe “the manner in which the mitigation measures shall be integrated with the development plans and projects”. The DMPs 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 DMP and as is assigned to the department or agency concerned.

C. Mainstreaming DRR into Development

Mainstreaming has three purposes:-

- 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
- 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: social, physical, economic and environment.
- 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 and to reduce future disaster risk.

Mainstreaming DRR into Development Sectors

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: ‘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 and 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 institutionalizing 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 conceptualization 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 and vulnerability, and ensuring that the schemes have addressed these concerns and included specific provisions for mitigating such disaster concerns; and
- 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.

D. Approaches for mainstreaming

There are three suggested approaches of mainstreaming disaster management into the development process and disaster management plans-

1. Structural Measures
2. Non Structural Measures
3. Disaster Mitigation Projects

Based on the suggested approaches the specific action would involve:-

- a. Adopting a Sectorial approach and identification of Key sectors for mainstreaming.
- b. Within each sector, key programmes/projects would have to be identified.
- c. This has to be followed by identifying the entry points within the programmes/projects for integration.
- d. It would also involve work at the policy and planning level be it national, state and district level.
- e. It would also need a close coordination with State Planning Commission and Finance Department for promoting DRR into all development programmes and involve working with different departments to mainstream DRR into the Departmental Plans and policies.
- f. Advocacy would have to be done for allocation of dedicated budget for DRR within the Departmental plans.
- g. Further appropriate guidelines for different sectors would have to be development and for it to be effective and sustainable it has DRR would have to be ultimately integrated to the development plans of various departments at the district and sub-district levels.

E. Illustrations of Mainstreaming DRR into ongoing Flagship Programmes

More specifically, as mentioned in the agenda 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:-

Sl. No.	Name of The Programme	Department/ Sector	Proposed Strategies for DRR Integration into the Flagship Programmes
1.	Indira Awas Yojana	Rural Development	<ul style="list-style-type: none"> i. Inclusion of such measures like application of Hazard resistant design in construction of IAY houses, appropriate sitting of IAY housing in guideline of IAY ii. 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. iii. Capacity Building of Rural masons on safe construction. iv. Capacity Building of PRIs. v. Community Awareness. vi. Capacity Building Programmes for DRDA officials on Disaster Risk Reduction issues.
2.	Mahatma Gandhi National Employment Guarantee scheme	Rural Development	<ul style="list-style-type: none"> i. Utilisation of MGNREGA funds to reduce the vulnerability of Panchayat vis a vis natural hazards such as landslide, drought, forest fire, cloud burst, flash floods, earthquake etc. ii. Giving priority to those works which reduce the vulnerability of area over the works which enhances the vulnerability of the area to natural hazards. iii. Identified works are available which take into account the hazard profile and offer continuous employment opportunities in the event of disasters to ensure livelihood security in the event of disasters. iv. Works which reduce disaster risk are given priority in plans- such as local mitigation works etc. v. Any other implement able suggestion within the ambit of the scheme.
3.	Pradhan Mantri Gram Sadak Yojana	PWD	<ul style="list-style-type: none"> i. The Master Plan for rural roads, the district rural road plan and identification of core network under the planning process of this scheme should, which the overall guidelines of its preparation, explicitly address the disaster risk reduction concerns and accord priority to connect the vulnerable habitations. ii. The technical guidelines should explicitly provide for suitable protection and inclusion of disaster risk concerns explicitly - while provision of cross drainage, slope stabilization, protection works are already included, in multi-hazard and especially flood and landslide prone areas fair weather roads need to be upgraded on a priority basis. iii. The maintenance guidelines are modified to ensure that in case of disasters these roads get provision for restoration to ensure all weather connectivity.

District Disaster Management Authority, Chamba (HP)

4.	Sarva Siksha Abhiyaan	Education	<ul style="list-style-type: none"> i. Development of a Policy paper of school safety. ii. Introducing school safety as a part of the guidelines of SSA which is currently focusing on inclusive development. iii. Developing model structurally safe designs for schools. iv. Introducing School Safety in the Teacher's Training Curriculum. v. Training of Rural Engineers appointed under SSA Scheme as well as the SSA State Coordinators. vi. Training of masons in rural areas. vii. Construction of Technology Demonstration Units. viii. Community Awareness.
5.	Jawahar Lal Nehru Urban Renewal Mission	Urban Develop- ment	<ul style="list-style-type: none"> i. 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. ii. Emphasis on disaster risk audit at the stage of preparation of detail project reports. iii. 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). iv. Inclusion of disaster management as a function of the Urban Local Bodies and allocate resources. v. Inclusion of Disaster Resistant features in the houses being constructed under the BSUP component as well as promote development of safe habitat. vi. Inclusion of strategies for disaster management in the City Development Plans. vii. Training and Capacity Building Programmes for municipal officers on disaster risk reduction.
6.	Rajiv Awas Yojana	Urban Develop- ment	<ul style="list-style-type: none"> i. Since Rajiv Awas Yojana is focusing on developing slum free cities and Capacity Building and Community Mobilization 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. The 30 cities selected on a plot basis can be targeted to initiate community based disaster preparedness activities. ii. Also the Housing Programmes to be implemented in these selected cities can ensure incorporation of hazard resistant features and safe sitting.
7.	National Rural Health Mission	Health and family welfare	<ul style="list-style-type: none"> i. Ensure that the village Health Plan and the District health plan explicitly address the disaster risk reduction concerns in the vulnerable habitations and the vulnerable districts and the disaster management plan as per DM Act 2005 takes links itself to the District and village Health plans. ii. Provide training to the ASHA workers on disaster health preparedness and response.

			iii. Strengthening of Disease Health Surveillance System in rural areas.
			iv. Ensuring structural safety of the CHC/PHC and other health care service delivery centres in rural areas.
			v. Training of doctors and hospital staffs on mass casualty management and emergency medicine.
			vi. 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.

F. Mainstreaming DRR into Development Planning – Approaches

Disasters are basically unresolved problem of development. Development can increase vulnerability. Development can reduce vulnerability. The outcome rests on developmental choices. The seeds of disasters are often sown in development patterns: poor land use planning, environmental management and lack of regulatory mechanisms. It is due to this reason that despite having almost similar exposures disaster has greater impact on humans in developing or low developed countries than the developed countries. Therefore, disaster risk can best be addressed through integrating into the developmental planning, programmes and processes.

Mapping of hazards, identification of elements at risk and exposure data assist in quantifying risk. Thereafter risk reduction initiatives can be taken. Mainstreaming DRR is a prerequisite for safe and sustainable development. Mainstreaming as a term is used to describe the consideration of DRR elements in national and regional decision making process (Policy, planning and budgeting etc.). DRR integration leads to addition of specific measures to the development plans, programmes and strategies. Some of the key sector where mainstreaming/integration of DRR can be done with illustrations is as under:-

a) Public Infrastructure:-

- i) Incorporate disaster risk impact assessment as a part of the planning process before the construction starts.
- ii) Site analysis and risk sensitive land-use planning (either avoid development in hazard prone areas or adopt treatment and mitigation measures)
- iii) Strengthen compliance to the various provisions of the codes – set up hazard safety cell for advice and monitoring
- iv) Disaster resistant technologies mandatory in case of all construction using public/corporate funds.
- v) Training and capacity building of the department and functionaries.

b) Housing – Rural and Urban

- i) Application of hazard resistant designs
- ii) Prepare construction guidelines for rural areas, Nagar Panchayats and Municipal Councils.
- iii) Amendment of Building bye-laws, Zoning regulations and Development Control Regulations.
- iv) Strengthening the enforcement of techno-legal and managerial regime.
- v) Training of masons, engineers, architects, contractors, promoter and builders.

- vi) Sensitization of the banking and financial institutions.
- vii) Promotion of disaster insurance in housing sector.
- viii) Having a housing reconstruction policy.

c) Health Sector

- i) Ensure hospitals and health facilities are not located in hazard-prone areas.
- ii) Analyse the internal and external vulnerabilities of existing health care facilities during emergencies.
- iii) Retrofitting of the critical hospitals.
- iv) Prepare and implement hospital preparedness plan.
- v) Training of doctors on mass casualty management, trauma care and emergency medicine.
- vi) Training of health workers on emergency preparedness and response.
- vii) Strengthening of disease surveillance system.

d) MGNREGA – Scope of work – Some illustrations

- i) Water conservation and water harvesting;
- ii) Drought proofing, including forestation and tree plantation;
- iii) Irrigation canals, including micro and minor irrigation works;
- iv) Plantation and horticulture;
- v) Renovation of traditional water bodies, including de-silting of tanks;
- vi) Land development;
- vii) Flood-control and protection works, including drainage in water logged areas; and
- viii) Rural connectivity to provide all weather access.

e) Indira Awas Yojana

- i) Study IAY housing typology and develop hazard resistant model design (taking into consideration of available local materials and culture).
- ii) Training of DRDA officials and engineers.
- iii) Awareness generation among villagers and PRIs members and community mobilization campaign.
- iv) Construction of sample IAY units for promoting the technology.
- v) Training of Masons and community members on hazard resistant technology.

Chapter - 9

Government Organisations-NGO and IAG Coordination

Institutional and Legal Framework

The DM Act 2005 recognises that sometimes the development patterns that do not recognise disaster risk and vulnerability in the specific geographic areas may induce disasters. The proactive approach in the DM Act 2005 to address disaster risk and vulnerability through pre-disaster preparedness and mitigation activities also envisions accountability and multi stakeholder participation, including coordination of the activities of the NGOs at various levels. Sections 30 (2) (xix) of the Act mandate the DDMA for collaboration with stakeholder agencies including NGOs for the purpose of improving the effectiveness of DM. Similarly the Act mandates NGOs to act in an equitable and non-discriminatory manner for the purpose of assisting or protecting the disaster affected communities or for providing relief to the affected communities or while dealing with any effects of threatening disaster situations and has fixed the responsibility to monitor this on DDMA's side section 34 (1). The above provisions ensure that the concerned DM interventions being addressed are supported and facilitated by the civil society organisations working at the grass roots and also takes care of the ground realities.

Section 30 (2) (xix) of the Act stipulates that the DDMA shall "advise, assist and coordinate the activities of the Departments of the Government at the district level, statutory bodies and other governmental and non-governmental organisations in the district engaged in the disaster management" and Section 24 (1) lays down that the DDMA shall "ensure that the non-governmental organisations carry out their activities in an equitable and non-discriminatory manner". The Act also directs the State Government under Section 38 (2) (a) to coordinate "actions of different departments of the Government of the State, the State Authority, District Authorities, local authority and other non-governmental organisations".

Sections 35 and 38 specifically emphasise the coordination of actions with NGOs. The National Policy on Disaster Management (NPDM) also states the national vision for community mobilisation and participation in DM and aims to provide momentum and sustenance through the collective efforts of all government agencies and NGOs. There is emphasis on community based disaster management, including last mile integration of the policy, plans and execution and early warning dissemination. Promoting a productive partnership with NGOs is a prominent thrust area in the NPDM.

There is a large scope for improving the engagement of NGOs in DM and on efficiently utilising their unique advantages and core competencies by strengthening humanitarian coalitions, alliances and NGO networks. There is also need to strengthen public awareness, capacity building and knowledge management through CBOs and NGOs. Institutional mechanisms for the advocacy and engagement of NGOs with government agencies on DM concerns require to be strengthened. Replication and scaling up of community level good practices has to be promoted.

Advantages of Involving NGOs

- i. NGOs can play a very important role in mobilising communities and in linking PRIs/ULBs with corporate sector entities for initiating DRR related activities.
- ii. The strong linkages which NGOs 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.
- iii. 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.
 - iv. 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 programmes, schemes and projects to create the required synergy in transforming the lives of at-risk communities.

Actions to be taken by the DDMA

- i. Developing a database of NGOs, CBOs and Faith Based Organisations at all levels working in the field of disaster management and emergency response and other others focusing on geographic outreach and thematic capacities of the organisations.
- ii. Developing the capacity of identified NGOs, CBOs and organisations in disaster management and emergency response.
- iii. Constitution of Inter-Agency Group (IAG) for the district with an objective to:-
 - Promote and institutionalise unified response strategy in humanitarian crisis.
 - Mainstreaming the emergency preparedness as in integrated development strategy.
 - Systematise the emergency response mechanism.
 - Bringing in the culture of “working together” in emergencies and normalcy.
 - Engagement in activities that will build the capacities of stakeholders and local communities to cope with calamities.
- iv. Development of Criteria for membership of IAG: Any of the following criteria is proposed to become a member of the District IAG:-
 - District Level agencies working in emergency response and preparedness for minimum of five years.
 - International and national funding agencies supporting emergency preparedness and community led risk reduction initiatives for a minimum period of three years.
 - Academic and /or research institutions actively involved on disaster related knowledge management and practices.

Membership claim may be scrutinised by a committee of the District IAG for authentication of the prospective member organisation.

Action Points

No.	Issues	Action Points
1.	Geographic spread of NGOs	Develop a database of NGOs at all levels working on disaster management focusing on geographic outreach and thematic capacities of the organisations. (Action: DDMA with the help of NGOs)
2.	Volume of support provided by NGOs	Compile statistics on quantum of support provided by NGOs at all levels, both international and national. (Action: DDMA)
4.	Coordination	Establishing inter agency mechanisms for coordination and networking activities (information and knowledge management, training and capacity building, collaborative advocacy, quality and accountability) at all levels. (Action: DDMA)
5.	Accessibility	Establish protocols for cooperation and ensure access to the affected areas with support from government agencies at respective levels like NDRF and SDRF that have good logistics base to reach inaccessible areas. (Action: DDMA, NGOs, CBOs)
6.	Hazard and vulnerability based planning	Conduct community centric hazard and vulnerability analysis at all levels, and develop disaster management plans in accordance. (Action: DDMA, NGOs)
7.	Community participation	Ensure community participation in assessment, planning, implementation and monitoring of activities at all levels. (Action: DDMA, NGOs, CBOs)
8.	Mainstreaming of Disability Issues in DM	Support the most vulnerable groups through mitigation activities as well as disaster preparedness and response, with a particular focus on the special needs of the Persons with Disabilities (PWDs). (Action: DDMA, NGOs)
9.	Gender Mainstreaming	Make women's as well as men's concerns and experiences an integral dimension in the design, implementation, monitoring and evaluation of policies and programs such that inequalities between men and women are not perpetuated through the routine operations of DM. (Action: DDMA)
10.	Focus on most vulnerable rather than only on epicentre	National level: Advocate with all actors to reach out to gap areas State level: Coordinate among actors to identify gap Areas District and Local level: Ensure targeting with equity and outreach to all excluded areas. (Action: District NGO Task Forces in DM)
11.	Rural-urban diversity	Develop the capacities of NGOs or specialised civil society agencies at all levels to manage urban as well as rural disasters and accordingly make investments. (Action: DDMA)

12.	Adherence to standards	National level: Develop minimum standards for India State level: Develop minimum standards for the state District and Local level: Develop capacities for adherence to minimum standards through collective and coordinated efforts of all stakeholders (Action: DDMA, NGOs, CBOs)
13.	Transparency and accountability	Develop an agreed framework of accountability for all levels and mechanisms to bring in transparency. (Action: DDMA)
14.	Do No Harm	Advocacy at all levels on Do No Harm through disaster response and development interventions. (Action: District NGO Task Forces in DM)
15.	Exit strategy	Ensure that the NGO programmes have an exit strategy to link with long term recovery/rehab/development programs of other NGOs or the government. (Action: District NGO Task Forces in DM)

(Source: NDMA Guidelines on the Role of NGOs in Disaster Management)

Coordination of Actions of Other Actors

Disasters affect all aspect of human life and all aspects of development. Therefore, Disaster Management is a multi-agency function. It involves actions by all departments, organisation and agencies. In short, it involves all departments of the State Government, Central Government, Armed Forces, civil society and commercial organisation (NGOS, CBOs, Faith Based Organisation, Traders Organisations, and Corporate Sector), international organisations working in the field of disaster response, UN Agencies etc. It is therefore, important that roles and responsibilities of each stakeholder is laid down during normal time and coordination mechanism worked out so that the same works during emergencies. It is must that regular meetings with all the stakeholders is held at least once in six months or a year. And all stakeholders are also associated in the mock drills to test their preparedness and clarity of roles and responsibility.

Chapter – 10

Financial Mechanism

With change of paradigm shift in DM from the relief-centric to proactive approach of prevention, mitigation, capacity building, preparedness, response, evacuation, rescue, relief, rehabilitation and reconstruction, effort would be made to mainstream and integrate disaster risk reduction and emergency response in development process, plans and programmes of the Government at all levels. This would be done by involving all the stakeholders – Government organisations, research and academic institutions, private sector, industries, civil society organisation and community. DDMA will ensure mainstreaming of disaster risk reduction in the developmental agenda of all existing and new developmental programmes and projects which shall incorporate disaster resilient specifications in design and construction. Due weightage will be given to these factors while allocating resources. Project, which help in reducing the existing vulnerability of the area would be given preference over projects which are likely to enhance it.

Disaster Response and Mitigation Funds

District Disaster Response Funds and District Disaster Mitigation funds would be created at the District Level as mandated in the Act (Section 48). The disaster response funds at the district level would be applied 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. The mitigation funds shall be applied by the DDMA for the purpose of mitigation as per the HP DM Rules, 2011.

Responsibilities of the State Departments and Agencies

All State Government Departments, Boards, Corporations, PRIs and ULBS will prepare their DM plans 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. The guidelines issued by the NDMA vis a vis various disasters may be consulted while preparing mitigation projects.

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.

Chapter - 11

Knowledge Management

There is a need to create a network of knowledge institutions in the field of DM, to share their experiences and knowledge. The DDMA would forge ties with knowledge institutions such as NITs, IITs, CBRI, SASE, ICIMOD, GSI, CWC, IMD, Wadia Institute of Himalayan Geology Dehradun, etc., and UN Agencies and other national and international agencies dealing with emergency response will be done to utilise their experience and knowledge for DM in the district.

In acknowledgment of the need for a knowledge sharing platform on DM, and to facilitate interaction and dialogue with related areas of expertise, the DDMA website within the district website would be created. It will connect all Government Departments, statutory agencies, research organisations/institutions and humanitarian organisations to share collectively and individually their knowledge and technical expertise. ICT would be utilised to disseminate knowledge to the stakeholder so that they can benefit from it.

Documentation of Best Practices

The indigenous technical knowledge would be documented and promoted. And in the immediate aftermath of any disaster or incident, field studies will be carried out, with the help of experts wherever needed, as an institutional measure. These studies will concentrate on identifying gaps in the existing prevention and mitigation measures and also evaluate the status of preparedness and response. Similarly, the lessons of past disasters will also be compiled and documented. The recovery and reconstruction process will also be analysed for further refining the DM processes and training needs.

Chapter - 12

Monitoring and Evaluation

The following monitoring and evaluation procedure would be followed to make the plan functional and a living document:-

- a) The DDMA shall regularly review the implementation of the plan.
- b) In order to improve the plan the DDMA would check the efficacy of the plan after any major disaster/emergency in the district and see what did work and what did not work and make amendments to the plan accordingly.
- c) As per Sub Section (4) of Section 31 of the Disaster Management Act, 2005 the plan would be reviewed and updated annually and the year in which the plan has been reviewed would be clearly mentioned in shape of header in each page of the plan.
- d) Resource inventory of the district fed into the IDRN would be regularly updated and appended to the plan.
- e) Names and contact details of the officers/officials who are the nodal officers or the in-charge of resources to be updated on regular basis.
- f) A soft copy of the plan would always be kept in the DDMA website for reference by all concerned.
- g) A Copy of the plan would be sent to all the stakeholder departments, agencies and organisations so that they know their role and responsibilities and they are also prepare their own plans.
- h) Regular Mock Drills should be conducted to test the efficacy of the plan and check the level of preparedness of various departments and other stakeholders.
- i) Regular training and orientation of the officers/officials responsible to implement the plan should be done so that it becomes and useful document to the district administration.
- j) Regular interaction and meetings with the CPMFs and Army or any other central government agency would be done by the DDMA should that there is no problem of coordination during disasters. The representatives of these organisations should be invited as expert for the DDMA meeting. A copy of the DDMP should also be shared with them.
- k) The DEOC would assist the DDMA in keeping the plan in updated form and collecting, collating and processing the information.
- l) The DDMP would be comprehensively reviewed every year latest by March and incorporating feedback from the departments and field officers.

Annexures

Annexure -A

Telephone Directory of District Officials			
Name & Designation	Phone (0)	Residence	Mobile Number
Smt. M. Sudha Devi, IAS, DC, Chamba	224847	225380	097111-59755, 88947-35555
Sh. I.S. Bhardwaj, R.C. Pangi	01897-242221	242220	94180-70555, 94181-81036
Sh. Subh Karan Singh, ADM, Chamba	222540	220488	94182-04690
Sh. Laxmikant Sharma, ADM Bharmour	01895-225506	225505	94181-14071, 98166-14071
Smt. Ramaya Chauhan, AC to DC Chamba	222408	220172	94180-77786
Sh. Varinder Sharma, Distt. Revenue Officer	222518	222518	94180-24679, 94182-62155
SDM's			
Sh. Krishan Chand, SDM Chamba	222278	222281	94592-18995
Dr. Richa Verma, IAS, SDM Dalhousie	242122	242195	9418069685
Dr. K.L.Sharma, SDM Salooni	01896-233122		94180-10479
Dr. Jintender Kumar, SDM Bharmour Addl. Charge ADM Bharmour	01895-225027	225527	98575-04087 86278-57939
Sh. Sanjay Dhiman, SDM Churah at Tissa	01896-227033	227034	98055-92001, 98163-87781
Sh. Amit Mehra, SDM Bhattiyat	266455	266477	94595-76007
Sh. Karam Singh Chaudhary, SDM Pangi	01897-242222	242401	94180-65396
Tehsildars			
Sh. Aman Kumar Rana, Tehsildar Chamba	222268	222268	94181-28681
Sh. Anil Bhardwaj Tehsildar Dalhousie	240516	240516	98163-01571
Tehsildar, Tissa, vacant	01896-227026	227026	
Sh.Ajay Prashar, Tehsildar Salooni.	01896-233232	233232	94189-08900
Sh. Amar Singh, Tehsildar Bharmour	01895-225055	225055	94180-57419
Sh. Shamsher Singh, Tehsildar Bhattiyat	266322	266322	94184-22204
Sh. Jalam Singh, Tehsildar-cum NT Pangi	01897-242244	242244	89882-15401
Sh. Harbans Lal, Teh. Election	222761	94187	98163-72230
Sh. P. Chand Ajad, Tehsildar Recovery			98162-47800

District Disaster Management Authority, Chamba (HP)

Naib Tehsildars			
Sh. Dilo Ram NT Salooni			98166-62135
Sh. Manphool Singh, NT Bhalei	01896-236500		98572-06757
Sh. Jagdish Lal ,NT Sihunta	01899-265582	265582	98056-18970
Sh. Gian Chand, N.T. Holi	01895-232253	232253	98164-55596
Sh. Kewal Krishan, NT Bharmour			98164-53100
Sh. Naryaan Singh, NT Chowari			98056-17013
Sh.Prakash Singh, NT Tissa			94180-02986
Sh. Roshan Lal, NT, Chamba			94189-91466
Sh. Mahinder Singh N.T. Dalhousie			94182-48244
Mr. Haider Ali, N.T. RRO Chamba			94180-04785
Sh. Bal Krishan, N.T. Dharwala			94187-12072
BOO's Chamba District			
Mohan Lal Sharma, BOO Chamba	222267	8894438383	94182-23456
Sh. Saleem Khan BOO Mehta	238052	238052	94180-44009, 86288-44109
Smt. Sushma Kumari, BOO Bhattiyat	266324	266324	94180-37303
Sh. Yoginder Kumar,BOO Salooni	01896-233224	233224	94180-22253
Sh. Ramesh Kumar BOO Tissa	01896-227022	227022	98052-80216
Vacant- BOO Bharmour	01895-225039	225039	98055-87014
Sh. Anil Kumar, BOO Pangi	01897-242224	242224	98160-34378, 94187-34378

District Disaster Management Authority, Chamba (HP)

Name of Head of Offices				
Name	Designation	Phone	Residence	Mobile No.
Dr. D.K. Chaudhary	S.P.	222242	222741	9418067672
Sh.D.R. Kaushal	C. F.	222237	222312	9418017661
Er. R. K. Sood	Dy. Chief Eng. -S.E. PWD	240606	240630	9418111090
ER.J.S. Sodhi	S.E. IPH	222581	222582	9418457400
	S.E.Electricity	240628	240935	
Sh.Shakti Chand Patiyal	AETC	222332	222563	9418094789
Sh. Rakesh Kumar	DFO	222239	222261	9418192457
Sh. Kripa Shankar	DFO(WI)	222639	224767	9418443600
Er.Madan Minhas	XEN, PWD	222229	222731	9418064162
Er.T.K.Sharma	XEN, IPH	222410	222413	9418010523
Miss Bhuvneshwari	land Acquisition Officer	220163		9418014221
Sh. Desh Raj Jaryal	Distt. Tourism Dev. Officer	224002		9418131959
Sh. Sanjeet Singh	POD.R.D.A	222516	225296	9418071143
Dr. Ashok Gupta	CMO	223010	222325	9418002166
	Distt.Ayurvedic Officer	222669		
Sh. Arvind Mohan	Distt. Treasury Officer	222282	223147	9418086862
Sh. Mohan Singh	DFSC	222401		9418037244
Sh. Aseem Sood	DWO	222295		9418191444
Sh. Ravinder Verma	DPRO- 98164-99915	224743	224280	9418521112
Sh. Vijay Chaudhary	GM, DIC	222257	222341	9418417171
Sh. Sudesh Dhiman	DYSO	224403		9418717827
Sh.Varinder S. Arya	DPO (ICDS)	220307		9418063793
Sh. Kuldeep Sharma	Commandant H.G.	222280	222456	9418452310
Sh. Ramesh Chand	Station Fire Officer	222290	225115	9418516807
Sh. P.S. Chambyal	Distt. Employment Officer Additional	222209 -		9418290010
Addl. Charge AC to DC	D. D. Sainik Board	222357	222531	
Sh.Varinder Partap Gupta	DIA-cum-DIO	224189	-	8894156733
Sh. Suresh Rana	DLO	222752	-	8263983509
Dr. Shiv Kumar	Dy. Director Agriculture	222206	-	9418451278
Sh. Subhash Chaudhary	PDATMA	224140	-	9418010034
Sh. B.R.Thakur	D.O. Horticulture	222339	220549	8894217715
Sh. Vinod Kumar	DPO (Pig.)	226166		9418304937
Sh. Ram Singh Dhomas	Coordinator NYK, EO, MC	222329	-	9418010117
Dr. Suresh Kumar Bedi	D.O. Animal Husbandry, OM, ST/SC Corp.	222317	-	9418491821
Er.S.K.Dhiman	AE Env./ Pollution Board	220326	-	9418006310

District Disaster Management Authority, Chamba (HP)

Sh. Ramesh Sharma	AM Civil Supply, Curator Museum	220572	220570	9418073500
Sh. Tek Chand	Audit Officer-cum-ARCS	222238		
	DPO (Panc.)	222204		
Sh. Kapil Kumar	PO Himurja	225349	-	9418084525
	RTO	224131		
Sh. Anup Rana	Dy.DM-cum-RM, HRTC	222250	222215	9418000535
Sh. Surinder Pathania	D.O. Elem. Edu.	222231		9805559214
Sh. Vijay Singh Thakur	D.O. Sec. Edu.	222211		9418061629
Sh. M.I. Sharma	XEN, Electricity	222429	222430	9418066710
Sh. Ram Pal Sharma	DFO Mid Himalayan	266424	266521	9418120497
	Chowari			
	D.M. Forest Corp.	225085		
Sh. Suresh Thakur	Mining Officer, Chamba	223943		9418439966
Sh. Naval Kumar	Asstt. Director Fisheries	223801	9816086746	9418218746
Sh. Harjinder Singh	Asstt. Town Planner	224775	9857571559	9990383439
	PO Watershed (DWDA)	224036		
Sh. P.S.Chambyal	Labour Officer	223233		9418290010
Sh. Jagdish Kumar	Distt. Stastical Officer	222301		9418331417

Annexure B

Senior Medical Officers of the District

S.No	Name	Designation	Current Office	Service book at (estb.office)	Phone	E-mail id
1	Ashok Gupta	Chief Medical Officer	CMO office Chamba	Chamba, Chief Medical officer	9418002166	cmochambahp@yahoo.com
2	Yukti Dhar Sharma	MoH	Chamba, Chief Medical Officer	Chamba, Chief Medical Officer	9418105406	ydsca@rediffmail.com
BMO						
3	Man Singh	Block Medical Officer	Pukhari, Block Medical Officer	Chamba, Chief Medical Officer (CMO)	9418134994	payal.mansingh@gmail.com
4	Kapil Sharma	Block Medical Officer	Tissa (Jassourgarh) Block Medical officer	Chamba, Chief Medical Officer (CMO)	9418077755	bmotissa@gmail.com
5	Balbir Kumar	Block Medical officer	Choori, Block medical Officer	Choori, Block medical Officer	9418466534	drbalbir58@gmail.com
6	Mohindr Singh Harian	Block Medical officer	Killar, block Medical Officer	Killar, block Medical Officer	9459776776	bmokillar@gmail.com
BMO Specialist						
7	Ram Kamal	Block Medical officer (Specialist)	Chamba, regional hospital (RH)(Matri)	Chamba, Chief Medical Officer (CMO)	9418069485	ahirramkamal@gmail.com
8	Vishal Mahajan	Block Medical officer	Chamba, regional hospital (RH)(Matri)	Chamba, Chief Medical Officer (CMO)	9418017173	NA
9	Bipin Kumar Thakur	Block Medical officer	Dalhousie, Civil Hospital (CH)(Matri)	Chamba, Chief Medical Officer (CMO)	9418036503	bipinthakur@yahoo.com
10	Narinder Kumar Surya	Block Medical officer	Chamba, regional hospital (RH)(Matri)	Chamba, Chief Medical Officer (CMO)	9418080676	NA
11	Vinod Kumar Sharma	Block Medical officer	Chamba, regional hospital (RH)(Matri)	Chamba, Chief Medical Officer (CMO)	9418833288	drsharmavinod5@gmail.com

Community Health Centres

District	S.No.	Particulars of HI CHC	CD Block	Health Block	Constituenc y	Urban/Rural	Sanctioned Beds	IP beds
Chamba	1	CHC Sahoo	Chamba	Pukhri	Chamba	Rural	6	5
	2	CHC Kihar	Salooni	Kihar	Banikhet	Rural	20	6
	3	CHC Salooni	Salooni	Kihar	Banikhet	Rural	20	3
	4	CHC Choori	Mehla	Choori	Bharmour	Rural	30	12
	5	CHC Bharmour	Bharmour	Bharmour	Bharmour	Rural	30	30
	6	CHC Holi	Bharmour	Bharmour	Bharmour	Rural	6	6
	7	CHC Killar	Killar	Killar Pangi	Bharmour	Rural	10	30
	8	CHC Bathree	Bhattiyat	Samote	Dalhousie	Rural	6	6
								98

List of Hospitals (Specialized hospitals)

District	S.No.	Particulars of HI ZH/RH etc.	CD Block	Health Block	constituency	Area Urban/Rural	Sanctioned Beds	IP beds
Chamba	1	RH Chamba	Chamba	Chamba	Chamba	Urban	200	200
	2	General Hospital Chowari	Bhattiyat	Samote	Bhattiyat	Urban	50	50
	3	CH Dalhousie	Bhattiyat	Samote	Dalhousie	Urban	20	20
	4	CH Tissa	Tissa	Tissa	Churah	Rural	50	50
	5	T.B. Hospital	Chamba	Chamba	Chamba	Urban	50	50
232	6	Leprosy Hospital	Chamba	Chamba	Chamba	Rural	30	30
								400

List of Hospitals in Chamba District (all)							
S.No.	Particulars of HI	CD Block	Health Block	constituency	Urban/Rural	Sanctioned	IP Beds
1	PHC Pukhri	Chamba	Pukhri	Churah	Rural	6	4
2	PHC Chaned	Chamba	Pukhri	Chamba	Rural	6	6
3	PHC Rajnagar	Chamba	Pukhri	Churah	Rural	6	4
4	PHC Jadera	Chamba	Pukhri	Chamba	Rural	-	-
5	PHC Sakti Debra	Chamba	Pukhri	Churah	Rural	-	-
6	PHC Kohlari	Chamba	Pukhri	Chamba	Rural	-	-
7	PHC Dradha	Chamba	Pukhri	Chamba	Rural	-	-
8	PI IC Samote	Bhattiyat	Samote	Bhattiyat	Rural	6	16(10 Bed donated)
9	PHC Sihunta	Bhattiyat	Samote	Bhattiyat	Rural	6	3
10	PI IC Kakira	Bhattiyat	Samote	Bhattiyat	Rural	6	6
11	PHC Bagdhar	Bhattiyat	Samote	Dalhousie	Rural	-	-
12	PHC Challari(Sadal)	Bhattiyat	Samote	Bhattiyat	Rural	-	-
13	PHC Hunera	Bhattiyat	Samote	Bhattiyat	Rural	-	-
14	PHC Morthu	Bhattiyat	Samote	Bhattiyat	Rural	-	-
15	PHCTikari	Bhattiyat	Samote	Bhattiyat	Rural	-	-
16	PHC Manuhta	Bhattiyat	Samote	Bhattiyat	Rural	-	-
17	PHC Motla	Bhattiyat	Samote	Bhattiyat	Rural	-	-
18	PHC Banikhet	Bhattiyat	Samote	Dalhousie	Rural	6	3
19	PHC Jassourgarh	Tissa	Tissa	Churah	Rural	6	-
20	PI-IC Jhajha Kothi	Tissa	Tissa	Churah	Rural	6	6
21	PHC Boondcri	Tissa	Tissa	Churah	Rural	6	-
22	PHC Kalhel	Tissa	Tissa	Churah	Rural	6	0
23	PHC Nakror	Tissa	Tissa	Churah	Rural	6	0
24	PHC Tungala	Kihar	Kihar	Churah	Rural	Newly Notified	
25	PI-IC	Tissa	Tissa	Churah	Rural	-	-

DDMP: Chamba

District Disaster Management Authority, Chamba (HP)

26	PHC Salwan	Salooni	Kihar	Dalhousie	Rural	-	0
27	PHC Brangal	Salooni	Kihar	Dalhousie	Rural	-	0
28	PHC Sundla	Salooni	Kihar	Dalhousie	Rural	-	0
29	PHC Diur	Salooni	Kihar	Dalhousie	Rural	6	6
30	PHC Bhanad	Salooni	Kihar	Dalhousie	Rural	-	-
31	PHC Dandi	Salooni	Kihar	Dalhousie	Rural	-	-
32	PHC Wangal	Salooni	Kihar	Dalhousie	Rural	-	-
33	PHC Baggi	Salooni	Kihar	Dalhousie	Rural	-	-
34	PHC Mehla	Mehla	Choori	Bharmour	Rural	6	3
35	PHC Chattrari	Mehla	Choori	Bharmour	Rural	-	-
36	PHC Dhulara	Mehla	Choori	Bharmour	Rural	-	-
37	PHC Garola	Bharmour	Bharmour	Bharmour	Rural	6	6
38	PHC Mandha	Bharmour	Bharmour	Bharmour	Rural	-	-

Annexure C

IMPORTANT CONTACT DETAILS FOR DISASTER RESPONSE

DISASTER MANAGEMENT DIVISION, MINISTRY OF HOME AFFAIRS

(For reporting of grave disaster and for requisitioning of Army, Air force and NDRF)

Ministry of Home Affairs (as on 29 April 2015)

SECRETARIES

NAME / DESIGNATION	ROOM NO	OFFICE	EPABX	RESIDENCE	E-Mail
Shri L.C.Goyal HOME SECRETARY	113	23092989 23093031 23093003 (Fax)	215	24673397	hshso@nic.in
Shri Sunil Kumar Dhawan Principal Staff Officer To HS	113-A	23092989 23093031	254	25055632	-
Shri P. M. Muralidharen PPS To HS	113-A	23092989 23093031	215	-	-
Smt. Sneh Lata Kumar Secretary (BM)	124	23092440 23092717 (Fax)	369	-	secybm@nic.in
Shri S. Gurumoorthy PPS To Secy.(BM)	122	23092440	369	-	-

SPECIAL SECRETARIES

NAME / DESIGNATION	ROOM NO	OFFICE	EPABX	RESIDENCE	E-Mail
Shri Ashok Prasad Spl. Secy.(IS)	195	23092601	267	-	sois- mha@nic.in

NATIONAL DISASTER MANAGEMENT AUTHORITY**(For reporting of grave emergencies and request for specialized response as on 29 April 2015)****MEMBER SECRETARY**

Name	Office	Fax	Mob.	E.mail id
Shri R K Jain, IAS, Member Secretary	011-26701710	011-26701716		secretary@ndma.gov.in
Sh. S K Gulati, PPS	011-26701711, 011-26701713	011-26701716		

MEMBERS

Name	Office	Fax	Mob.	E.mail id
Lt Gen (Retd) N C Marwah, PVSM, AVSM, Member	011- 26701775	011- 26701783		marwahnc.ndma@nic.in
Smt Seetha Mahesh, PS to Member	011- 26701721	011- 26701783		seetham.ndma@nic.in
Dr. D N Sharma, Member	011- 26701738	011- 26701767		
Shri Vinod Kumar Soni PA to Member	011- 26701761	011- 26701767		
Shri Kamal Kishore, Member	011- 26701740	011- 26701754		
Shri Om Parkash Sharma PS to Member	011- 26701751	011- 26701754	09711498606	

JOINT SECRETARIES

Name	Office	Fax	Mob.	E.mail id
Smt. Neelkamal Darbari, IAS, JS (Admin & Capacity Building and Training) & JS (Policy & Plans)	011- 26701817	011- 26701717		jsadm@ndma.gov.in
M.Mushtaq, PPS	011- 26701867			
Shri A.K.Sanghi,ITS JS (Mitigation)	011- 26701718	011- 26701864		mitigation@ndma.gov.in
Smt. Nirmala, PPS	011- 26701720			
Maj Gen Anurag Gupta, Advisor (Ops & Comn)	011- 26701886	011- 26701742	8527892258	advopscomn@ndma.gov.in

National Disaster Response Force (NDRF) as on 29 April 2015

Name	Designation	Address	Telephone	Fax	Email
Shri O.P. Singh (IPS)	Director General	Directorate General , NDRF , Sector-1 R K Puram,New Delhi -66	011-26712851 011-26161442	011- 26715303	dg.ndrf@nic.in
Shri Sandeep Rai Rathore (IPS)	Inspector General	-- Do --	011-26160252	011- 26105912	ig.ndrf@nic.in
Shri Venugopal V.	FA NDRF & CD	-- Do --	011-26160366	011- 26105912	vgv11@rediffmail.com
Shri.J.K.S.Rawat	Deputy Inspector General (ADM)	-- Do --	011-26105910	011- 26105912	dig.ndrf@nic.in
Shri. S.S Guleria	Deputy Inspector General (Ops & Trg), Deputy Inspector General (East /North East Sector)	--Do--	011-26169214	011- 26105912	dig.es.ndrf@nic.in
Shri Randeep Kumar Rana	Deputy Inspector General (Proc & Comn), Deputy Inspector General (Central Sector)	--Do--	011-26166559	-	dig.ns.ndrf@nic.in randeep1576@gmail.com
Shri. S.P. Selvan	Deputy Inspector General (South Sector)	--Do--	-	-	dig.ss.ndrf@nic.in

Sh.Jaideep Singh	Commandant	7th Bn NDRF, Bibiwala Road, Bhatinda (Punjab) Pin 151001	0164- 2246193	0164- 2246570	09417802032	comdt.27thbn@itbp.gov.in, 7thbnndrfbathinda@gmail.com
Sh. P.K.Srivastava	Commandant	8th Bn NDRF, Kamla Nehru Nagar, Ghaziabad (UP) Pin - 201002	0120- 2766013	0120- 2766618	09968610014	eighthndrf@yahoo.com, ndrf.108@gmail.com

SNOW & AVALANCHE STUDY ESTABLISHMENT (CHANDIGARH) (DRDO) (0172)**(For snow avalanche early warning and related issues)**

Name of Officer/Designation and Location of Deployment	Tel(Office)	Tel(Residence)	Mobile No.	Email id
Jt. Dir.	2699804-806	2705990	09872083177	2699802
T.O(B)			09417049754	

GEOLOGICAL SURVEY OF INDIA (For landslide related issues)

Name of Officer/Designation and Location of Deployment	Tel(Office)	Tel(Residence)	Mobile No.	Email id
Director Geological Survey of India Plot No 3 Dakshin Marg Sector 33B Chandigarh - 160020	0172- 2622529 0172- 2621945 (Fax)	0172-2661002		gsichd@sanc harnet.in

INDIAN METEOROLOGICAL DEPARTMENT (SHIMLA)**(For weather related early warning and data)**

Name of Officer/Designation and Location of Deployment	Tel(Office)	Tel(Residence)	Mobile No.	Email id
Director	0177-2626211	0177-2626490	9816127668	mm_sandhu@yahoo.co.in
Asstt Meteorologist	0177-2624976	0177-2652408	9418277093	
Caretaker (VOR)	0177-2624976		9418119123	harminder.dutta@imd.gov.in

CENTRAL WATER COMMISSION (SHIMLA) (For floods/flash floods and early warning thereof)

Name of Officer/Designation and Location of Deployment	Tel(Office)	Tel(Residence)	Mobile No.
Director (M&A) CWC, Block 10, First Floor Commercial Complex, Kasumpti Shimla 171009	0177-2624036 0177-2624224 (Fax)	0177-2625307	
Ex, Engineer, Snow Hydrology Divn CWC, Block 9, First Floor	0177-26230260 0177-2623026 (Fax)	0177-2628247	

District Disaster Management Authority, Chamba (HP)

Commercial Complex, Kasumpti Shimla 171009			
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ARMY HQR (EXCHANGE NOS-23010131/23018197)

(For requisition of army during disasters)

Name of Officer/Designation and Location of Deployment	Tel(Office)	Tel(Residence)	Mobile No.	Email id
DGMO	23011506 E-33170 Fax 23011506	23011506 E-33172		
ADGMO (A)	23011611 E-33174 Fax 23011617	24615208 E-35251		
ADGMO (B)	23014891 E-33176 Fax 23011617	26142269 E-39124		
Dir MO - 6	23018034 E-33220 Fax 23011617		9818106439	
GSO-I MO - 6	23019739 E-33221 Fax 23011617		E-39823 9810431696	
DirOL - 2	23335218 23018530 E-35221	23339055		

ARMY TRAINING COMMAND, SHIMLA

(For Army assistance)

Name	Designation	Contact No.	Address
Army Exchange		0177 2804590 to 2804592	Shimla - 3

AIR HQR (EXCHANGE NO-23010231)

(For requisition of Air force in disasters)

Name of Officer/Designation and Location of Deployment	Tel(Office)	Tel(Residence)	Mobile No.	Email id
ACAS (Ops)	23014424 23010231/7528 Fax 23017627	24672974	9871213393	
PD Ops (Off) (T&H)	23110231/7559 23016354 Fax 23016354	24642195	9871097909	
Dir Ops (T)	23010231/7545 2305857	23098030		
Dir Ops (H)	23010231/7551 Fax 23016354	25674906		
JD Ops (LS)	23010231/7546 Fax 23016354		9818220586	
JD Ops (H)	13010231/7552 Fax 23792973		9868468583	

CENTRAL CRISIS GROUP

(National Level)

(For industrial and chemical disasters)

Name of Officer/Designation and Location of Deployment	Tel(Office)	Tel(Residence)	Mobile No.	Email id
Secretary, Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex, Lodi Road, New Delhi-110003.	011-24361896 011-24360721 011-24360721 (Fax)	011-26883988		Vijay.sharma@nic.in
Joint Secretary, Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex, Lodi Road, New Delhi-110003.	011-24360634 011-24363577 (Fax)	0177-26192110	09871374660	

All India Radio

(For broadcasting services)

Designation	Contact No.	Address
Station Director	0177 2801899 (Office); Residence - 2831281 Fax 0177 2801899; email - airshimla@yahoo.com	Ambedkar Chowk, Shimla - 4
Programme Executive	0177 2563038 - O; 0177 2831748	As Above

HQ, CE (P) DEEPAK,

(For Boarder Roads)

Designation	Contact No.	Address
Chief Engineer	0177 2830986 (Office); Residence - 2831850	Minto Court, Shimla - 4
-	0177 2633602 - O; 0177 2831748	As Above

INDO-TIBETAN BORDER POLICE, TARADEV, SHIMLA - 10

(For Requisition and Deployment in Disasters)

Designation	Contact No.	Address
DIG	0177 2830601 (O); 2830602 (Res) Email - dighpitbp@sancharnet.in	Taradevi, Shimla - 10
Staff Officer ADM to DIG	0177 2831010 (O), 2830604	As Above

BHARAT SANCHAR NIGAM LIMITED, HP CIRCLE SHIMLA - 10

(For communication related issues)

Designation	Contact No.	Address
Chief General Manager	0177 2620220 (O); 2625325 (Fax)	SDA Complex, Kasumpti
General Manager, Mobiles	0177 2673999 (O), 2673923 (Fax)	As Above
General Manager, Telecom	0177 2800666 (O); 2800777 (Fax)	

INDIAN OIL CORPORATION

(For POL and LPG)

Designation	Contact No.	Address
Divisional Manager Sales	0177 2625768 (O); 2621706 2623158 (Fax)	Block No. 21, SDA Complex, Shimla.
Manager, LPG	0177 2623133 (O), 2671350 (R)	As Above
Deputy Manager Sales	0177 2625363 (O)	As Above

CENTRAL PUBLIC WORKS DEPARTMENT

(For road clearance, machinery and manpower)

Designation	Contact No.	Address
SE	0177 2657531 (O); 2804696 (R), Cell - 9418004466 2652476 (Fax); email - sescshimla@yaoo.com	CPWD, Kennedy Cottage, Shimla - 4
XEN Planning	0177 2658131 (O), Cell - 09318050506	As Above
XEN	0177 2652830 (O), 2652412 (R)	As Above

Equipment/ Machinery with (Home Guards)

The Himachal Pradesh home guards too have been putting their concentrated efforts to fight any eventuality in the form of disaster, They too have submitted their inventory list with the administration, which includes searchlights, extension ladders, first aid boxes, crowbars, blankets etc.,

In the event of Disaster, it is to be ascertained that to lives and properties could be kept at minimum by administering the feasible measures and for the very purpose is this Disaster management plan.

Annexure - D

Flow Chart for Disposal of Dead Bodies at District Level

1. Activate the DM Plan
2. Nodal Officer in the incident Response System will activate all other stakeholders associated with Disposal of the Dead.
3. Establish an information Centre at the site of Disaster/District HQ.
4. Inform all other Stake-holders, both in government and Non-Governmental sector, including the elected, Panchayati Raj functionaries and the community.
5. Activate search and Rescue teams of Fire & Emergency Services, Police, SDRF, Civil Defence, NDRF and NGOs for the retrieval of the injured and the dead.
6. The injured will get the priority for First Aid and evacuation to hospital.
7. Prepare a record of details of the bodies retrieved in the Dead Body Inventory Record Register, allocated individual Identification Number, photographed, and then Dead Body Identification Form initiated.
8. Associate relatives and community members for the identification of the bodies.
9. Hand over the identified bodies to the relatives or the community, and if necessary after cross-matching Dead Body Identification Form with that of the Missing Person Form, for the last rites as per local, cultural and religious denomination.
10. Unidentified or unclaimed dead bodies/body parts shall be transported to the mortuaries for proper preservation and storage at the designated sites.
11. Consult relatives, legal and forensic experts for positive identification.
12. Final disposal of unidentified bodies/body parts shall be done by District authorities after applying all the possible means of identification as per the legal provisions.
13. The bodies of foreign nationals shall be properly preserved either by embalming or chemical methods and then placed in body bags or in coffins with proper labelling. Handing over and transportation of such bodies shall take place through the Ministry of Extern Affairs, in consultation with the Consular offices of the concerned countries and other actors such as International Committee of the Red Cross, if necessary and possible.

Annexure - E

Guidelines for Disposal of Animal Carcasses

1. Guidelines for Burial

- 1.1. Burial shall be performed in the most remote area possible.
- 1.2. Burial areas shall be located a minimum of 300 feet down gradient from wells, springs and other water sources.
- 1.3. 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.
- 1.4. The bottom of the pit or trench should be minimum 4 to 6 feet above the water table.
- 1.5. 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.
- 1.6. 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.
- 1.7. 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.
- 1.8. Burial areas shall be inspected regularly and any subsidence or cavities filled.

2. Guidelines for Composting

- 2.1 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.
- 2.2 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.

- 2.3 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.
- 2.4 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.
- 2.5 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.
- 2.6 Let it sit for 4 to 6 months, then check to see if carcass is fully degraded.
- 2.7 Reuse the composted material for carcass compost pile, or remove large bones and land apply.
- 2.8 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.

Reference: USDA Natural Resource Conservation Service, Arkansas Livestock and Poultry Commission, University of Arkansas.

Flow Chart for Disposal of Animal Carcasses at District Level

- a. Activate the DM Plan.
- b. Nodal Officer in the Incident Response System will activate all other stakeholders associated with the disposal of Animal Carcasses.
- c. Establish an Information Centre at the site of Disaster/District HQ.
- d. Inform all other Stake-holders, both in government and Non-Governmental sector, including the elected, Panchayati Raj functionaries and the community.
- e. Activate Animal Carcass Retrieval teams for the recovery and retrieval of the injured livestock and the animal carcasses.

- f. Injured livestock will get the priority for First Aid and evacuation to hospital.
- g. Prepare a record of details of the animal carcasses retrieved.
- h. Associate owners of the livestock, or their relatives and community members for the identification of the animal carcasses.
- i. Hand over the identified animal carcasses to the owners for disposal at the selected site.
- j. All unidentified animal carcasses will be photographed preferably before transportation for disposal.
- k. Unidentified or unclaimed animal carcasses shall be transported to the designated site for disposal by District authorities as per the Disaster Plan.

Annexure – F

DISTRICT DISASTER MANAGEMENT AUTHORITY CHAMBA, HP.

Emergency Support Functions (ESFs) Plan at District Level

In the aftermath of an emergency situation wherein District Administration's overall coordination is needed the command, control and coordination will be carried out under the ESFs Plan. District EOC shall activate the ESFs and the concerned Department/Agency of each ESFs shall identify requirements in consultation with their counterparts in affected districts, mobilize and deploy resources to the affected areas of the district. The District EOC shall maintain a close link with the State EOC.

ESFs shall be responsible for the following:

1. The designated authorities for each of ESF shall constitute quick response teams and assign the specific task to each of the member.
2. The designated authorities for each of the ESF shall identify and earmark the resources i.e. Manpower and materials to be mobilized during the crisis.
3. An inventory of all the resources with details shall be maintained by each of the designated authority for each of the ESF.
4. The designated authority for each of the ESF will also enter into pre-contracts for supply of resources, both goods and services to meet the emergency requirements.
5. The designated authority for each of the ESF will be delegated with adequate administrative, legal and financial powers for undertaking the tasks assigned to them.
6. **Primary and Secondary Agencies**
The designated primary agency, acting as the State agency shall be assisted by one or more support agencies (secondary agencies) and shall be responsible for managing the activities of the ESF and assisting the district in the rescue and relief activities and ensuring that the mission is accomplished. The primary and secondary agencies have the authority to execute response operations to directly support the needs of the affected districts.

Agency for each Emergency Support Functions & Roles to be performed

ESF No.	ESF	Primary Agency	Secondary Agency	Responsibilities of Primary Agency	Activities for Response	Role of Secondary Agency
1.	Communication	BSNL	Police Units of Armed Forces in the area	Coordination of national actions to assure the provision of telecommunication support the state and district; Coordinate the requirement of temporary telecommunication in the affected areas.	Responsible for coordination of national actions to assure the provision of telecommunication support the state and district response elements; Coordinate the requirement of temporary telecommunication in the affected areas.	Make available police wireless network at the affected locations; Coordinate for the other networks available such as Ham Radios or HPSEB network etc.;; The units of armed forces in the area would provide communication network on the request of the competent authority.
2	Public Health	Department of Health and Family Welfare (CMO/MS ZH)	Department of Ayurveda (DAMO)	To coordinate, direct and integrate State level response; Direct activation of medical personnel, supplies and equipment; Coordinate the evacuation of patients; Provide human services under the Deptt. of health;	Provide systematic approach to patient care; Perform medical evaluation and treatment as needed; Maintain patient tracking system to keep record of all patients treated;	To perform the same functions as assigned to the primary agency; Provide manpower to the primary agency wherever available and needed; Make available its resources to the primary agency wherever needed and available.

District Disaster Management Authority, Chamba (HP)

				<p>To prepare and keep ready Mobile Hospitals and stock;</p> <p>To network with private health service providers;</p> <p>To provide for mass decontamination;</p> <p>Check stocks of equipment and drugs.</p>	<p>Mobilization of the private health services providers for emergency response.</p> <p>In the event of CNBR disaster to provide for mass decontamination of the affected population;</p> <p>Maintain record of dead and arrange for their post mortem.</p>	
3.	Sanitation/ Sewerage Disposal	Urban Development and Rural Development	Irrigation and Public Health	<p>Make arrangement for proposal disposal of waste in their respective areas;</p> <p>Arrange adequate material and manpower to maintain cleanliness and hygiene.</p>	<p>Ensure cleanliness and hygiene in their respective areas;</p> <p>To arrange for the disposal of unclaimed bodies and keeping record thereof;</p> <p>Hygiene promotion with the availability of mobile toilets;</p> <p>To dispose of the carcass.</p>	<p>Repair the sewer leakages immediately;</p> <p>Provide bleaching powder to the primary agencies to check maintain sanitation.</p>
4.	Power	HPSEB Ltd. (SE/XEN)	Himurja	Provide and coordinate State support until the local	Support to Local Administration;	Make arrangement for and to provide the alternative sources

District Disaster Management Authority, Chamba (HP)

				<p>authorities are prepared to handle all power related problems;</p> <p>Identify requirements of external equipment required such as DG sets etc;</p> <p>Assess damage for national assistance.</p>	<p>Review the total extent of damage to the power supply installations by a reconnaissance survey;</p> <p>To provide alternative means of power supply for emergency purposes;</p> <p>Dispatch emergency repair teams equipped with tools, tents and food;</p> <p>Hire casual labour for the clearing of damaged poles etc.</p>	<p>of lighting and heating to the affected populations and for the relief camps.</p>
5.	Transport	Department of Transport (RTO)	HRTC, Civil Aviation. (RM, HRTC, DTDO)	<p>Overall coordination of the requirement of transport;</p> <p>Make an inventory of vehicles available for various purposes;</p> <p>Coordinate and implement emergency related response and recovery functions, search and rescue and damage assessment.</p>	<p>Coordinate arrangement of vehicles for transportation of relief supplies from helipads/airports to the designated places;</p> <p>Coordinate arrangement of vehicles for transportation of SAR related activities.</p>	<p>Make available its fleet for the purpose of SAR, transportation of supplies, victims etc;</p> <p>Act as stocking place for fuel for emergency operations;</p> <p>Making available cranes to the Distt. Administration;</p> <p>To coordinate for helicopter services etc. required for transportation of injured, SAR</p>

District Disaster Management Authority, Chamba (HP)

						team, relief and emergency supplies.
6.	Search and Rescue	Civil Defence, Home Guards, Fire and Emergency Services (Commandant HG)	SDRF, Armed and Para military forces, Police, Red Cross, VOs, Volunteers and 108.	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.	GIS is used to make an estimate of the damage area and the deployment of the SAR team in the area according to the priority; Discharge all ambulatory patients for the first aid which has the least danger to health and others transported to safer areas.	108 and Red Cross to make available ambulances as per requirement; SDRF, VOs and Volunteers to assist the primary agency in SAR; Armed and para military forces to provide assistance to civil authorities on demand; Police to arrange for the transportation and post-mortem of the dead.
7.	Public Works and Engineering	HP PWD (SE/XEN)	CPWD, National Highways Authority of India, MES, BRO	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	Establish a priority list of roads which will be opened first; Constructing major temporary shelters; Connecting locations of transit/relief camps;	Making machinery and manpower available to the PWD and to keep national highways and other facilities in functional state.

District Disaster Management Authority, Chamba (HP)

				<ul style="list-style-type: none"> • Towing vehicles • Earth moving equipment • Cranes etc. <p>Construct temporary roads;</p> <p>Keep national and other main highways clear from disaster effects such as debris etc.;</p> <p>Networking with private services providers for supply of earth moving equipment etc.</p>	<p>Adequate road signs should be installed to guide and assist the relief work;</p> <p>Clearing the roads connecting helipads and airports;</p> <p>Restoring the helipads and making them functional;</p> <p>Rope in the services of private service providers and secondary services if the department is unable to bear the load of work.</p>	
8.	Information and Communication	District Collectorate (AC/ADM)	Department of IT/NIC (DIO, NIC)	<p>Operate a Disaster Welfare Information (DWI) System to collect, receive, and report and status of victims and assist family reunification;</p> <p>Apply GIS to speed other facilities of relief and search and rescue;</p>	<p>Documentation of response/relief and recovery measures;</p> <p>Situation reports to be prepared and completed every 3-4 hours.</p>	Render necessary assistance in terms of resources, expertise to the primary agency in performing the assigned task.

District Disaster Management Authority, Chamba (HP)

				<p>Enable local authorities to establish contact with the state authorities;</p> <p>Coordinate planning procedures between district, the state and the centre;</p> <p>Provide ready formats for all reporting procedures as a standby.</p>		
9.	Relief Supplies	Collectorate (AC/ADM)	<p>Department of Food and Civil Supplies (DFSC, AM CSC)</p>	<p>To collect, process and disseminate information about an actual or potential disaster situation to facilitate the overall activities of all responders in providing assistance to an affected area in consultation;</p> <p>Coordinate activities involved with the emergency provisions;</p> <p>Temporary shelters;</p> <p>Emergency mass feeding;</p>	<p>Support to Local Administration;</p> <p>Allocate and specify type of requirements depending on need;</p> <p>Organize donation (material) for easy distribution before entering disaster site.</p>	<p>To assist the primary agency in arranging and supplying relief supplies;</p> <p>To assist the primary agency in running the relief camps.</p>

District Disaster Management Authority, Chamba (HP)

				<p>To coordinate bulk distribution of emergency supplies;</p> <p>To provide logistical and resource support to local entities;</p> <p>In some instances, services also may be provided to disaster workers;</p> <p>To coordinate damage assessment and post disaster needs assessment.</p>		
10.	Food & Supplies	Department of Food and Public Distribution (DFSC)	Department of Cooperation (ARCS)	<p>Requirement of food and clothing for affected population;</p> <p>Control the quality and quantity of food, clothing and basic medicines;</p> <p>Ensure the timely distribution of food and clothing to the people;</p>	<p>Make emergency food and clothing supplies available to population;</p> <p>Ensure the provision of specific nutrients and supplementary diet for the lactating, pregnant women and infants.</p>	Ensuring the distribution of food supplies to the affected population through the PDS network etc.

District Disaster Management Authority, Chamba (HP)

				Ensure that all food that is distributed is fit for human consumption.		
11.	Drinking water	Department of I & PH (SE/XEN)	Department of Urban Development (Secretary SADA)	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.	To assist the primary agency wherever ULB is associated in the distribution of potable water.
12.	Shelter	Collectorate (AC/ADM)	HIMUDA, HP PWD, UD and Panchayati Raj	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;	Support to Local Administration; 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.	HIMUDA and HP PWD would assist the primary agency in establishing temporary shelters of larger dimensions; Department of Panchayati Raj through local Panchayats would assist the primary agency in establishing shelters of smaller dimensions.

District Disaster Management Authority, Chamba (HP)

				<p>Identifying the population which can be provided with support in their own place and need not be shifted reallocated;</p> <p>Locate relief camps close to open traffic and transport links.</p>		
13.	Media	Department of Public Relations (DPRO)	Local DD and AIR	<p>To Provide and collect reliable information on the status of the disaster and disaster victims for effective coordination of relief work at state level;</p> <p>Not to intrude on the privacy of individuals and families while collecting information;</p> <p>Coordinate with DOCs at the airport and railways for required information for international and national relief workers;</p> <p>Acquire accurate scientific information from the</p>	<p>Use and place geographical Information to guide people towards relief operation;</p> <p>Use appropriate means of disseminating information to victims of affected area;</p> <p>Curb the spread of rumours;</p> <p>Disseminate instructions to all stakeholders.</p>	To assist the primary agency in discharge of its role.

District Disaster Management Authority, Chamba (HP)

				<p>ministry of Science and Technology;</p> <p>Coordinate with all TV and radio networks to send news flashes for specific needs of Donation;</p> <p>Respect the socio-cultural and emotional state of the disaster victims while collecting information for dissemination.</p>		
14.	Help lines	Collectorate (AC/ADM)	Department of Public Relations	<p>To receive distress calls from the affected people and coordinate with the control room;</p> <p>To facilitate the optimization of donations received in kind;</p> <p>Co-ordinate, collect, process, report and display essential elements of information and to facilitate support for planning efforts in response operations;</p>	<p>One of the most critical needs will be having a simplified way of identifying and tracking victims and providing assistance;</p> <p>Identify locations for setting up transit and relief camps, feeding centres and setting up of the Help lines at the nodal points in the state and providing the people the information about the numbers.</p>	<p>To assist the primary agency in performing its job effectively and provide its manpower and resources for the purpose.</p>

District Disaster Management Authority, Chamba (HP)

				<p>Co-ordinate pre-planned and event-specific aerial reconnaissance operations to assess the overall disaster situation;</p> <p>Pre-positioning assessment teams headed by the State coordinating officer and deployment of other advance elements;</p> <p>Emergency clearing of debris to enable reconnaissance of the damaged areas and passage of emergency personnel and equipment for life saving property protection and health and safety.</p>		
15.	Animal Care	Department of Animal Husbandry (AD AH)	Department of Panchayati Raj (DPO)	<p>Treatment of animals;</p> <p>Provision of vaccination;</p> <p>Disposal of dead animals.</p>	<p>To arrange for timely care and treatment of animals in distress;</p> <p>Removal of dead animals to avoid outbreak of epidemics.</p>	To assist the primary agency in performing its role.
16.	Law and Order	Police (SP)	Home Guards (Commandant Home Guards)	Having sound communication and security	To maintain law and order;	To assist the primary agency by making available manpower.

District Disaster Management Authority, Chamba (HP)

				<p>plan in place to coordinate law and order issues;</p> <p>Training to security personnel in handling disaster situations and issues related to them.</p>	<p>To take measure against looting and rioting;</p> <p>To ensure the safety and security of relief workers and material;</p> <p>To take specific measure for the protection of weaker and vulnerable sections of the society;</p> <p>To provide safety and security at relief camps and temporary shelters.</p>	
17.	Removal of trees and fuel wood	Forest (DFO)	Forest Corporation (AM FC)	<p>Removal of fallen trees;</p> <p>To provide fuel wood for the relief camps and public;</p> <p>Have adequate storage of fuel wood and make arrangement for distribution thereof;</p> <p>To provide fuel wood for cremation.</p>	<p>Arrange for timely removal of trees obstructing the movement of traffic;</p> <p>Arrange for timely removal of tress which have become dangerous;</p> <p>Make arrangement for fuel wood for the relief camps and for general public;</p> <p>Provide fuel wood for mass cremation etc.</p>	To support and supplement the efforts of the primary agency.

Annexure - G

**STANDARD OPERATING
PROCEDURES**

FOR PERFORMING ESF

BY

VARIOUS DEPARTMENTS

**OPERATING PROCEDURE GUIDELINES
FOR
FOREST DEPARTMENT**

Planning Assumptions

- There is no substitute for maintaining standards of services and regular maintenance during normal times. This affects the response of the department to any disaster situation.
- The department is required adopt appropriate measures to ensure that community participates substantially.
- For effective preparedness, the department must have a disaster response plan or disaster response procedures clearly defined in order to avoid confusion, improve efficiency in cost and time.
- Orientation and training for disaster response plan and procedures accompanied by simulated exercise will keep the department prepared for such eventualities. Special skills required during emergency operations need to be imparted to the officials and the staff. Select personnel can be deputed for training as “NODAL OFFICER – FOREST” at district level.

Action Plan Objective in a Disaster Situation

- Forest protection

Activities on Receipt of Warning or Activation of District DMAP (DDMAP)

- Within the affected district all available personnel will be made available to the District Disaster Manager. If more personnel are required, then out of station officer or those on leave may be recalled.
- All personnel required for Disaster Management should work under the overall supervision and guidance of District Disaster Manager.
- Establish communications with District control room and your departmental offices within the division.
- Appoint one officer as “NODAL OFFICER – Forest” at district level.
- Review and update precautionary measures and procedures and review with staff the precautions that have been taken to protect equipment and the post-disaster procedures to be followed.
- Fill departmental vehicles with fuel and park them in a protected area.
- Check available stocks of equipment and materials which are likely to be most needed after disaster.
- Provide information to all concerned, about disasters, likely damages, and information about ways to protect the same.
- All valuable equipment and instruments should be packed in protective covering and stored in room the most damage-proof.
- Establish work schedules to ensure that the adequate staff are available

Relief and Rehabilitation

- Assess the extent of damage to forests, nurseries and storage facilities and the requirements to salvage or replantation
- Establish contact with remote sensing department to assess damage
- Afforestation measures should be coordinated with DRDA to ensure employment assurance to disaster hit people, with Soil Conservation Officer to ensure stabilization of slopes and district control room.
- Ensure that the adequate conditions through cleaning operations are maintained to avoid water-logging and salinity in low lying areas.
- A pests and disease monitoring system should be developed to ensure that a full picture of risks is maintained.
- Plan for emergency accommodations for forest staff from outside the area.
- Information formats and monitoring checklists should be used for programme monitoring and development and for reporting to DCR. This is in addition to existing reporting system in the department.
- Establishment of a public information centre with a means of communication, to assist in providing an organized source of information. The department is responsible for keeping the community informed of its potential and limitations in disaster situations.
- The NGOs and other relief organizations should be aware of the resources of the department.
- Ensure availability of fuel and fodder for disaster effected people.

**OPERATING PROCEDURE GUIDELINES
FOR POLICE DEPARTMENT**

Planning Assumptions

- For effective preparedness the need is for the disaster response procedures to be clearly defined.
- Orientation and training for disaster response plan and procedures accompanied by simulated exercises will keep the department prepared for such eventualities. Special skills required during emergency operations need to be imparted to the officials and the staff. Select personnel can be deputed for training as “NODAL OFFICER – Police” at the district level.

NORMAL TIME ACTIVITY

- Assess preparedness level and report the same as per the format to District Control Room every six months
- Maintain a list of disaster prone areas in the district
- Organise training on hazardous chemicals for police officers to facilitate handling of road accidents involving hazardous materials
- Designate an area, within police station to be used as public information centre

Action Plan Objective in a Disaster Situation

- Maintain Law and order

Activities on Receipt of Warning or Activation of DDMAP

- Within the district, all available personnel will be made available to the District Disaster Manager. If more personnel are required, then out of station officers or those on leave may be recalled.
- All personnel required for disaster management should work under the overall supervision and guidance of District Disaster Manager.
- Establish radio communications (and assist in precautionary evacuation activities) with
 - State Emergency Operations Centre
 - District control room
 - Departmental offices
- All district level officials of the department would be asked to report to the DDM.
- Appoint one officer as “Officer-in-Charge – Police” at the district level
- The DDM shall provide “Officer-in-Charge - Police” or the field staff as the need be, with all needed authorizations with respect to
 - Recruiting casual labourers.
 - Procuring locally needed emergency tools and equipment and needed materials.
 - Expending funds for emergency needs.
- The “Officer-in-Charge - Police” will ensure that all field staff and other officers submit the necessary reports and statement of expenditure in a format as required by DDM

District Disaster Management Authority, Chamba (HP)

- Provide guards as needed for supply depots such as cooperative food stores and distribution centres.
- Identify anti-social elements and take necessary precautionary measures for confidence building.

Evacuation

- All evacuations will be ordered only by the DC, SP, and Fire Brigade.
- For appropriate security and law and order, evacuation should be undertaken with assistance from community leaders.
- All evacuations should be reported to DC or District Superintendent of Police immediately.

Relief and Rehabilitation

- Immediately after the disaster, dispatch officers to systematically identify and assist people and communities in life threatening situations.
- Help identify the seriously injured people, and assist the community in organizing emergency transport of seriously injured to medical treatment centres.
- Ensure that the police stations are functioning immediately after the disaster at all required locations, as may be requested by the district control room, and that staff are available for the variety of needs that will be presented.
- Assist and encourage the community in road-clearing operations.
- Identify roads to be made one-way, to be blocked, alternate routes, overall traffic management and patrolling on all highways, and other access roads to disaster site.
- Provide Security in transit and relief camps, affected villages, hospitals and medical centres and identify areas to be cordoned off.
- Transport carrying transit passengers (that is, passengers traveling through buses and passing through the district), should be diverted away from the disaster area.
- Provide security arrangements for visiting VVIPs and VIPs.
- Assist district authorities to take necessary action against hoarders, black marketers and those found manipulating relief material.
- In conjunction with other government offices, activate a public information centre to:
 - Respond to personal inquiries about the safety of relatives in the affected areas
 - Compile statistics about affected communities, deaths, complaints and needs
 - Respond to the many specific needs that will be presented
 - Serve as a rumour control centre
 - Reassure the public
- Make officers available to inquire into and record deaths, as there is not likely to be time nor personnel available, to carry out standard post-mortem procedures.
- Monitor the needs and welfare of people sheltered in relief camps.
- Coordinate with military service personnel in the area.

**OPERATING PROCEDURE GUIDELINES
FOR HEALTH DEPARTMENT**

- There is no substitute for maintaining standards of services and regular maintenance during normal times. This affects the response of the department to any disaster situation.
- For effective preparedness, the department must have disaster response procedures clearly defined in order to avoid confusion, improve efficiency in cost and time.
- Orientation and training for disaster response plan and procedures, accompanied by simulated exercises, will keep the department prepared for such eventualities. Special skills required during disaster situations need to be imparted to the officials and the staff.
- Select personnel can be deputed for training as “NODAL OFFICER”.

ACTION PLAN OBJECTIVE IN A DISASTER SITUATION

- Providing efficient and quick treatment
- Preventing outbreak of epidemics.

ACTIVITIES ON RECEIPT OF WARNING OR ACTIVATION OF DDMAP

- Within the affected district all available personnel will be made available to the District Disaster Manager. If more personnel are required, then out of station officers or those on leave may be recalled.
- All personnel required for disaster management should work under the overall supervision and guidance of District Disaster Manager.
- Ensure that personnel working within the district come under the direction and control of the DDM.
- Appoint one person as “NODAL OFFICER”.
- Review and update precautionary measures and procedures, and review with staff, the precautions that have been taken to protect equipment and the post-disaster procedures to be followed.
- Stock emergency medical equipment which may be required after a disaster.
- Determine type of injuries/illnesses expected and drugs and other medical items required, and accordingly ensure that extra supplies of medical items be obtained quickly.
- Provide information to all hospital staff about the disasters, likely damages and effects, and information about ways to protect life, equipment and property.
- Discharge all ambulatory patients whose release does not pose a health risk to them. If possible, they should be transported to their home areas.
- Non-ambulatory patients should be relocated to the safest areas within the hospital. The safest rooms are likely to be:
 - On Ground Floor
 - Rooms in the centre of the building away from windows
 - Rooms with concrete ceilings.
- Equipment supplies such as candles, matches, lanterns and extra clothing should be provide for the comfort of the patients.

- Surgical packs should be assembled and sterilized. A large enough number should be sterilized to last four to five days. The sterilized surgical packs must be stored in protective cabinets to ensure that they do not get wet. Covering the stock with polythene is recommended as an added safety measure.
- All valuable instruments, such as surgical tools, ophthalmoscopes, portable sterilizers, CGS, dental equipment, etc., should be packed in protective coverings and store rooms considered to be the most damage-proof.
- Protect all immovable equipment, such as x-ray machines, by covering them with tarpaulins or polythene.
- All electrical equipment should be unplugged when disaster warning is received.
- Check the emergency electrical generator to ensure that it is operational and that a buffer stock of fuel exists. If an emergency generator is not available at the hospital, arrange for one on loan.
- All fracture equipment should be readied.
- If surgery is to be performed following the disaster, arrange for emergency supplies of anaesthetic gases.
- Check stocks of equipment and drugs which are likely to be most needed after the disaster. These can be categorized generally as:
 - Drug used in treatment of cuts and fractures, such as tetanus toxoid, analgesics and antibiotics.
 - Drugs used for the treatment of diarrhoea, water-borne diseases and flu (including oral rehydrating supplies).
 - Drugs required to treat burns and fight infections.
 - Drugs needed for de-toxication including breathing equipment.
- Assess the level of medical supplies in stock, including :
 - Fissure materials
 - Surgical dressings
 - Splints
 - Plaster rolls
 - Disposable needles and syringes
 - Local antiseptics.
- Prepare an area of the hospital for receiving large number of casualties.
- Develop emergency admission procedures (With adequate record keeping).
- Orient field staff with DDMAP, standards of services, procedures including tagging.
- Hospital administrators should
 - Establish work schedules to ensure that adequate staff are available for in-patient needs.
 - Organise in-house emergency medical teams to ensure that adequate staff are available at all times to handle emergency casualties.
 - Set up teams of doctors, nurses and dressers for visiting disaster sites.

RELIEF AND REHABILITATION

- Transport should be arranged for the transfer of seriously injured patients from villages and peripheral hospitals to general hospitals. If roads are blocked, a method should be established to request helicopter transport.
- Establish health facility and treatment centres at disaster sites.

- The provision of medical services should be coordinated by the CMO with district control room.
- Procedures should be clarified between
 - Peripheral hospitals
 - Private hospitals
 - Blood banks
 - General hospitals and
 - Health services established at transit camps, relief camps and affected villages.
- Maintain check posts and surveillance at Transport depots and all entry and exit points from the affected area, especially during the threat or existence of an epidemic.
- An injury and disease monitoring system should be developed to ensure that a full picture of health risks is maintained.
- Monitoring should be carried out for epidemics, water and food quality and disposal of waste in transit and relief camps, feedings centres and affected villages.
- Plan for emergency accommodations for auxiliary staff from outside the area.
- Information formats and monitoring checklists should be used for programme monitoring and development and for reporting to Emergency Operations Center. This is in addition to existing reporting system in the department.
- Seek security arrangements from district police authorities to keep curious persons from entering hospital area and to protect staff from hostile actions.
- Establishment of a public information centre with a means of communication to assist in providing an organized source of information. The hospital is responsible for keeping the community informed of its potential and limitations in disaster situations.
- The Local Police, rescue groups, and ambulance teams should be aware of the resources of each hospital.

STANDARDS OF SERVICE

Tagging

Tagging is the process of prioritizing transfer of injured, based on first hand assessment of the medical officer on the disaster site. It is based on the medical criterion of chance of survival. Decision is made regarding cases which can wait for treatment, these which should be taken to more appropriate medical units, and these which have no chances of surviving. The grouping is based on the benefit that the casualties can expect to derive from medical care, not on the seriousness of the injuries.

Whenever possible, the identification of patients should be accomplished concurrently with triage. This is done by attaching a tag to each patient, usually color-coded to indicate a given degree of injury and the priority for evacuation.

Red Tag

This tag signifies that the patient has a first priority for evacuation. Red-tagged patients need immediate care and fall into one of the following categories:

- 1 Breathing problems that cannot be treated at the site.
- 2 Cardiac arrest (witnessed).
- 3 Appreciable loss of blood (more than a litre).
- 4 Loss of consciousness.

- 5 Thoracic perforations or deep abdominal injuries.
- 6 Certain serious fractures:
 - a. Pelvis
 - b. Thorax
 - c. Fractures of cervical vertebrae
 - d. Fractures or dislocations in which no pulse can be detected below the site of the fracture or dislocation
 - e. Severe concussion.
 - f. Burns (Complicated by injury to the air passages)

Green Tag

This tag identifies those patients who receive second priority for evacuation. Such patients need care, but the injuries are not life-threatening. They fall into the following categories:

1. Second-degree burns covering more than 30 per cent of the body.
2. Third-degree burns covering 10 percent of the body.
3. Burns complicated by major lesions to soft tissue or minor fractures.
4. Third -degree burns involving such critical areas as hands, factor face but with no breathing problems present.
5. Moderate loss of blood *(500-1000cc)
6. Dorsal lesions, with or without injury to the spinal column.
7. Conscious patients with significant craniocerebral damage (serious enough to cause a subdural hematoma or mental confusion). Such patients will show one of the following signs:
 - a. Secretion of spinal fluid through ear or nose
 - b. Rapid increase in systolic pressure
 - c. Projective vomiting
 - d. Change in respiratory frequency
 - e. Pulse below 60ppm
 - f. Swelling or bruising beneath the eyes
 - g. Anisocoric pupils
 - h. Collapse
 - i. Weak or no motor response
 - j. Weak reaction to sensory stimulation (Profound stupor)

Yellow Tag

Used on patients who are given third priority for evacuation and who fall into the following categories:

1. Minor Lesions
2. Minor fractures (fingers, teeth, etc).
3. Other minor lesions, abrasions, contusions.
4. Minor burns:
 - Second-degree burns covering less than 15% of the body
 - Third degree burns covering less than 2% of the body surface
 - First-degree burns covering less than 20% of the body, excluding hands, feet, and face.

5. Fatal Injuries

- Second and third-degree with burns over more than 40 percent of the body with death seeming reasonably certain.
- Second and third-degree burns over more than 40% of the body with other major lesions, as well as major craniocerebral lesions etc.
- Cranial lesions with brain tissue exposed and the patient unconscious.
 - Cranio-cerebral lesions where the patient unconscious and has major fractures.
 - Lesions of the spinal column with absence of sensitivity and movement.
 - Patients over 60 years old with major lesions.

It should be noted that the line separating these patients from red-tag casualties is very tenuous. If there are any red-tag patients, this system will have to be followed. If there are none, the yellow-tag patients with apparently fatal injuries become red-tag candidates. The reason is simple: If there are many red-tag patients who apparently cannot be saved because of their injuries, the time spent on the dying wounded could be better spent on the patients with chance to survive.

Black Tag

Black tags are placed on the dead, i.e. casualties without a pulse or respiration who have remained in that condition for over 20 minutes, or whose injuries render resuscitation procedures impossible.

Evacuation Procedure under the following conditions

- 1) Casualties not trapped or buried. Evacuate in the following order:
 - a. Red-tag casualties.
 - b. Green-Tag casualties.
 - c. Yellow-Tag casualties.

- 2) Casualties not trapped or buried. Evacuate in the following order:
 - a. Red-tag casualties.
 - b. Green-Tag casualties.
 - c. Yellow-Tag casualties.
 - d. Black-tag casualties not trapped or buried.
 - e. Trapped black-tag casualties.

Vector Control Standards

Vector control programmes should be planned so as to cope with two distinct situations:

- The initial phase immediately following the disaster, when control work should concentrate on the destruction, by a physical or chemical process, of vermin on persons, their clothing, bedding and other belongings and on domestic animals. An emergency sanitation team should be available from the beginning for carrying out these disinfestations.
- The period after the disaster subsided, control work should be directed towards proper food, sanitation, safe disposals of wastes, including drainage, and general personal cleanliness.

Suggested Vector Surveillance Equipment and Supplies

- Collecting Bags
- Collecting forms
- Mouth or battery powered aspirators
- Tea strainer
- Flashlight and spare batteries
- Grease pencil
- Memo pad
- Sweep net
- Pencil
- Tweezers
- White enameled dipper
- Keys and other references
- Labels
- CDC light traps (Optional)
- Collecting vials
- Aedes aegypti Ovitrap (Optional)
- Bulb syringe or medicine dropper
- Fly grill
- Mirror

Suggested Rodent Surveillance Equipment and Supplies

- Teaching aids
- Transfer bags
- Plastic bags
- Vials
- Plastic cups
- Alcohol
- Rubber bands
- Forceps
- Scissors
- Insecticide dusting pan
- Snap traps
- Formaldehyde
- Live Traps
- Acute rodenticides
- Gloves
- Anti Coagulant rodenticides
- Flashlights and batteries.

Materials and equipment

In the absence of clear indication from field, a minimum kit comprising of the following materials and equipment should be carried by the advance party to the disaster site

District Disaster Management Authority, Chamba (HP)

1. Equipment for paediatric intravenous use	36
2. Tensiometers for children and adults	12
3. Assorted ferrules Boxes	2
4. Tracheal cannulae	36
5. Set of laryngoscopes for infants, children And adults	1 each
6. Endotracheal tubes, No. 7 Murphy	36
7. Endotracheal tubes, No. 8	36
8. Nasogastric probes	36
9. Oxygen masks, for adults and children	2
10. Large scissors for cutting bandages	3
11. Plastic linings	60
12. Phonendoscopes	15

Sterilization Unit Supplies

1. Tracheotomy set	6
2. Thorachotomy set	6
3. Venous dissection set	6
4. Set for small sutures	12
5. Bottles for drainage of thorax	10
6. Hand scissors No. 4	6
7. Syringes (disposables) x 2cc	60
8. Syringes (disposables) x 10cc	90
9. Syringes (disposables) x 50cc	60

Ambulance Fleet

The ambulances will carry the following equipment:

1. Oxygen, Oxygen Mask, and manometer.
2. Stretchers and blankets
3. Emergency first aid kit
4. Suction equipment
5. Supplies for immobilizing fractures
6. Venoclysis equipment
7. Drugs for emergency use
8. Minimal equipment for resuscitation maneuvers

Each ambulance should be staffed by at least a physician, a nurse, a stretcher-bearer and a driver. The medical and paramedical personnel should be experienced in procedures for the management of patients in intensive care units.

Equipments and Supplies required for Vermin control for a population of 10,000

Power sprayers	2
Hand-pressured sprayers, capacity 20-30 litres	50
Dusters (hand-operated, plunger type)	50
Dusters (power-operated)	2
Space sprayer	1
Adequate supply of accessories and spare parts for the above equipment	

District Disaster Management Authority, Chamba (HP)

○ Insecticides:

DDT, technical powder	0.5 tons
DDT, 75% water wettable	1-2 tons
DDT, 10% powder	1 ton
Dieldrin, 0.625 – 1.25% emulsifiable concentrate or wettable power	100 Kg
Lindane, 0.5% emulsifiable concentrate or wettable power	100 Kg
Chlordane, 2% emulsifiable concentrate or wettable power	100 Kg
Malathion, 1% emulsifiable concentrate or wettable power	100 Kg
Dichlorvos emulsion	100 litres
Rodenticides, anticoagulant type (warfarin, etc.)	1-2 Kg
Rodent traps	100
Screen for fly control	10 rolls
Garbage cans, capacity 50-100 litres	300-500

a Quantity depends on availability and on distribution points*

OPERATING PROCEDURE GUIDELINES FOR IRRIGATION AND PUBLIC HEALTH DEPARTMENT

Planning Assumptions

- There is no substitute for maintaining standards of services and regular maintenance during normal times. This affects the response of the department to any disaster situation.
- Operating procedures for mobilizing community participation during various stages of disaster management. The department is required to adopt appropriate measures to ensure that community participates substantially.
- For effective preparedness, the department must have a disaster response plan or disaster response procedures clearly defined in order to avoid confusion, improve efficiency in cost and time.
- Orientation and training for disaster response plan and procedures accompanied by simulated exercise will keep the department prepared for such eventualities. Special skills required during emergency operations need to be imparted to the officials and the staff. Select personnel can be deputed for training as “NODAL OFFICER – Water supply” and “Officer-in-Charge – Water supply” at state and district level respectively.
- To the extent possible, preventive measures as recommended in the preparedness and mitigation document of DDMAP should be undertaken to improve departmental capacity to respond to a disaster.

Normal Time Activity

- Assess preparedness level and report the same as per the format to the District Control Room every six months.
- Identify flood prone rivers and areas and activate flood monitoring mechanisms.
- Mark water level gauges on rivers, dams, and reservoirs.
- Establish disaster management tool kits with at sub-divisional levels consisting of ropes, pulley blocks, jungle knives, shovels, cement in bags, concrete pans, gunny bags, cane baskets.

Action Plan Objective in a Disaster Situation

- Restoration of water supply to the affected area
- Monitor flood situation
- Monitor and protect irrigation infrastructure
- Restore damaged infrastructure

Activities on Receipt of Warning or Activation of DDMAP

- Within the affected district/sub-division all available personnel will be made available to the District Disaster Manager. If more personnel are required, then out of station officer or those on leave may be recalled.
- All personnel required for Disaster Management should work under the overall supervision and guidance of District Disaster Manager.

District Disaster Management Authority, Chamba (HP)

- Establish communications with Emergency operations Centre at State HQ, District Control Room and your departmental and field offices within the division.
- Appoint one officer as “Officer-in-Charge – Water Supply and Irrigation” at district level.
- Review and update precautionary measures and procedures and review with staff the precautions that have been taken to protect equipment and the post-disaster procedures to be followed.
- Fill departmental vehicles with fuel and park them in protected area.
- Make sure that the hospital storage tank is full and hospital is conserving water.
- Inform people to store an emergency supply of drinking water.
- Organize on the receipt of disaster warning continuous monitoring of
 - Wells
 - Intake structures
 - Pumping stations
 - Buildings above ground
 - Pumping mains
 - The treatment plant
 - Bunds of Dams
 - Irrigation Channels
- The inlet and outlet to tanks should be inspected to ensure that waterways are unobstructed by trees and vegetation.
- Any repairs/under construction activity should be well secured with sandbags, rock falls, etc.

Relief and Rehabilitation

- Carry out emergency repair of all damages to water supply system.
- Assist health authorities to identify appropriate source of potable water.
- Identify unacceptable water sources and take necessary precautions to ensure that no water is accessed from such sources, either by sealing such arrangements or by posting department guards.
- Arrange for alternate water supply and storage in all transit camps, feeding centres, relief camps, cattle camps, and also the affected areas, till normal water supply is restored.
- Ensure that potable water supply is restored as per the standards and procedures laid down in “Standards of Potable Water”.
- Continue round the clock inspection and repair of bunds of dams, irrigation channels, control gates and overflow channels.
- Continue round the clock inspection and repair of pumps, generators, motor equipment and station building.
- Plan for emergency accommodations from staff from outside the area.
- Report all activities to the head office.

On the recommendations of “NODAL OFFICER – “Water Supply”/ Deputy Commissioner/District **Control Room**

- Provide for sending additional support along with food, bedding, tents
- Send vehicles and any additional tools and equipment needed.

- Standby diesel pumps or generators should be installed in damage proof buildings.
- A standby water supply should be available in the event of damage.
- Establish procedures for emergency distribution of water if existing supply is disrupted.
- Make provisions to acquire tankers and establish other temporary means of distributing water on an emergency basis.
- Make provisions to acquire containers and storage tanks required for storing water on an emergency basis.
- Prepare plan for water distribution to all transit and relief camps, affected villages and cattle camps and ensure proper execution of these plans.
- A minimum level of stock should be maintained for emergencies, and should include extra lengths of pipe, connections, joints, hydrants and bleaching powder. Adequate tools should be on hand to carry out emergency repair.
- Make sure auxiliary generators and standby engines are in good working order.
- Acquire a buffer stock of fuel for the motors and store in a protected place.
- Establish emergency work gangs for immediate post-disaster repair.

Standards of Services Water Supply

Piped Water

- After any repair on the distribution system, the repaired main should be flushed and disinfected with a chlorine solution of 50 mg/litre for contact period of 24 hours, after which the main is emptied and flushed again with potable water.
- If the demand for water is urgent, or the repaired main cannot be isolated, the concentration of the disinfecting solution may be increased to 100mg/litre and the contact period reduced to 1 hour.
- At the end of disinfection operations, but before the main is put back into service, samples should be taken for bacteriological analysis and determination of chlorine residue.
- When a water treatment plant, pumping station, or distribution system is so badly damaged that operation cannot be restored for some time, other methods described in the following paragraphs must be used.

Private System (open well or tube)

- Water from these sources, with adequate chlorination as necessary, can be connected to a distribution system or hauled to points of consumption.

Springs and wells (non-private)

- Ground water originating from deep aquifers (such as is obtained from deep wells and certain springs) will be free from contamination if certain simple protective measures are taken.
- When springs are used as a source of water supply for disaster area, careful attention must be paid to geological formations. Limestone and certain rocks are liable to have holes and cracks, especially after earthquake that may lead to the contamination of ground water.

- A sanitary survey of the area surrounding a well site or spring is of utmost importance. This survey, which should be carried out by a qualified professional environmental health worker, should provide information on source of contamination, geological structures (with particular reference to overlying soil and rock formations) quality and quantity of ground water, direction of flow etc.
- The well selected as a source of water, should be at least 30m away from any potential source of contamination, and should be located higher than all such sources. The upper portion of the well must be protected by an external impervious casing, extending at least 3m below and 30cm above ground level. The casing should be surrounded by a concrete platform at least 1m wide, that slope to allow drainage away from the well; it should connect to the drain that will carry the spilled water away. The opening for drop pipes should be sealed to prevent outside water from entering the well. The rim of manholes should project at least 8cm above the surrounding surface, and the manhole cover must overlap this rim.
- Immediately after construction or repair, the well should be disinfected. First the casing and lining should be washed, and scrubbed with strong chlorine solution containing, 100mg of available chlorine per litre. A strong solution is then added to produce concentration of 50-100 mg/litre in the water stored in the well. After adequate agitation, the well water is left to stand for at least hours, and then pumped out. The well is then allowed to refill. When the residual chlorine of the water drops below 1 mg/litre the water may be used.
- Most of water is stated above applies also to the location and protection of springs. The following points may be added:
 - The collection installation should be so built as to prevent the entrance of light.
 - The overflow should be so located as to prevent the entrance of surface water at times of heavy rainfall.
 - The manhole cover and gates should be locked.
 - Before using the water, the collection chamber should be disinfected with a chlorine solution.
 - An area within a radius of 50m around the spring should be fenced off to prevent ground surface contamination.

Surface water

- Surface water should be used as source of water supply only as a last resort.
- Measures should be taken to protect the watershed from pollution by animals and people. As it is usually difficult to enforce control regulations, the point of intake for water supply should be located above any tributary carrying grossly contaminated water. The pump intake should be screened and placed so that it will not take in mud from the stream bed or floating debris. The device can be something extremely simple, such as perforated drum fixed in the middle of the stream.

Treatment

- Water should be tested for the presence of Escherichia coli and unsafe concentrations of nitrate as soon as possible. Detection of E. coil indicates contamination by human waste and therefore requires immediate protective and corrective measures.

- Monitoring of water quality should be restored or initiated immediately. During the disaster, daily determination of the chlorine residual in public water supply is sufficient.

Disinfection (Quarantine)

- Chlorine and chlorine-liberating compounds are the most common disinfectants. Chlorine compounds for water disinfection are usually available in three forms:
 - Chlorinated lime or bleaching powder, which has 20% by weight of available chlorine when fresh. Its strength should always be checked before use.
 - Calcium hypochlorite, a more stable compound sold under various proprietary names. This compound contains 70% by weight of available chlorine. If properly stored in tight container and in dark cool place, it preserves its chlorine contents for considerable period.
 - Sodium hypochlorite, usually sold as solution of approximately 5% strength under a variety of proprietary names. Its use in water disinfection is limited to small quantities and special circumstances.

Methods of chlorination

Gas chlorinator

- These machines draw chlorine gas from a cylinder containing liquid chlorine, mix it in water and inject into supply pipe. Mobile gas chlorinators are made for field use.

Hypochlorinators

- These are less heavy than gas chlorinator and more adaptable to emergency disinfection. Generally, they use a solution of calcium hypochlorite or chlorinated lime in water and discharge it into a water pipe or reservoir. They can be driven by electric motors or petrol engines and their output can be adjusted.
- Hypochlorinators are small and easy to install. They consist usually of a diaphragm pump and standard accessories, including one or more rubber-lined, solution tanks and a chlorine residual testing set. The usual strength of solution is 0.1% and it seldom rises above 0.5%

The Batch Method

- In the absence of the chlorinators, water is disinfected by batch method. This method is more likely to be used in emergencies. It involves applying a predetermined volume of chlorine solution of known strength to a fixed volume of water by means of some gravity arrangements. The strength of the batch solution should not be more than 0.65% of chlorine by weight as this is about the limit of solubility of chlorine at ordinary temperatures. For example 10g of ordinary bleaching powder (25% strength) dissolved in 5 litres of water gives a stock solution of 500mg/litre. For disinfection of drinking water, one volume of the stock solution added to 100 volumes of water gives a concentration of 5mg/litre. If after 30 minutes contact the chlorine residual is more than 0.5mg/litre this dosage could be reduced.
- After the necessary contact period, excess chlorine can be removed to improve the taste by such chemicals as sulphur dioxide, activated carbon, or sodium thiosulphate. The first two are suitable for permanent installations, whereas sodium thiosulphate is more

suitable for use in emergency chlorination. One tablet containing 0.5g of anhydrous sodium thiosulphate will remove 1mg/litre of chlorine from 500 litres of water.

Continuous Chlorination

- This method, in which porous containers of calcium hypochlorite or bleaching powder are immersed in water, is used mainly for wells and springs but is also applicable to other types of water supply. A free residual chlorine level of 0.7 mg/litre should be maintained in water, treated for emergency distribution. A slight taste and odour of chlorine after half an hour gives an indication that chlorination is adequate. In flooded areas where the water distribution system is still operating, higher chlorine residual should be maintained. Occasionally, an unpleasant taste develops from the reaction of chlorine with phenolic or the other organic compounds. This taste should be accepted, as it is an indication of safe disinfection.

Filtration-Disinfection

- In this method water is mixed with diatomaceous earth, then passed through the filter unit in which filtering partitions (septa) are installed. Mobile purification units using this process have been produced with capacities up to 50,000 litres per hour. They consist essentially of :
 - A centrifugal pump driven by a rope-started gasoline engine.
 - A filter (diatomic)
 - A hypochlorinator
 - A slurry feeder and an air compressor.
 - A pre-coat and recirculation tank.
 - A chlorine solution tank.
 - Hose adapters
 - Valves (pump suction, inlet, drain, outlet, flow control air release, etc) and
 - A tool box. Instructions in the manuals supplied with such units must be followed.

Physical Protection

- In disaster situation, physical protection of water supplies for use, is a major consideration. In addition to such barriers as walls and fences, guards may be necessary to prevent mobs from overrunning and damaging treatment units, pumping stations, tankers, distribution stations, and temporary collection facilities. Intake structures, wells and springs should also be protected against misuse. The character and extent of such protection will depend on the local situation.

Ice Supply

- Required ice should be supplied from a commercial manufacturing plant where it is made from safe water and where sanitary regulations are observed.
- It should be distributed in trucks designed for the purpose, equipped with tools for the safe handling of ice.
- After drinking water is secured within stricken areas, making water available for domestic use (such as leaning and washing) should be considered.

Coagulation-Disinfection

- Removal of the organic matter greatly lessens the amount of chlorine needed for disinfection. There are many factors that govern the coagulation process. These include:
 1. Hydrogen-ion concentration. The optimum pH value for coagulation is the value that the best floe formation and setting. The pH value of water changes when coagulants are used and has to be adjusted to its optimum value by addition of alkali or acids.
 2. Mixing. Coagulants must be thoroughly mixed with the water to give satisfactory results. This may be accomplished by (a) pump action, whereby the coagulant solution is added to the suction pipe of the pump and pump does the mixing; (b) the drip bottle method i.e. hanging a drip-bottle over the discharge pipe or hose of raw water that feeds the tank and letting the coagulant solution drip on to the water jet; or (c) dissolution, i.e. allowing the discharge of raw water to splash on to a basket containing solid coagulant.
 3. Coagulant dosage. The amount of the coagulant and chemicals required to adjust the pH value of water may be calculated when the pH and the type of alkalinity are known. However the optimum dosage for given water may be determined approximately using the jar test.

Coagulation-Filtration-Disinfection

- In this method filtration is added to the procedures described above. If temporary reservoir can be arranged, it is preferable to let the water settle before filtering it. In mobile purification units, however the water is filtered through a pressure filter without setting. They usually have a capacity of 4000-7000 litres per hour, and consist essentially of:
 - A centrifugal pump directly coupled to a gasoline engine.
 - A filter (pressure, rapid and filter)
 - A hypochlorinator
 - A chemical solution tank
(One for alum and one for soda ash)
 - A chlorine solution tank.
 - Hose adapters
 - Valves (pump suction, inlet, drain, outlet, flow control air release, etc) and
 - A tool box. Instructions in the manuals supplied with such units must be followed.

OPERATING PROCEDURE GUIDELINES FOR ANIMAL HUSBANDRY DEPARTMENT

Planning Assumptions

- There is no substitute for maintaining standards of services and regular maintenance during normal times. This affects the response of the department to any disaster situation.
- Operating procedures for mobilizing community participation during various stages of disaster management have been given in section on "Areas of Community Participation". The department is required to study these and adopt appropriate measures to ensure that community participates substantially.

District Disaster Management Authority, Chamba (HP)

- For effective preparedness, the department must have a disaster response plan or disaster response procedures clearly defined in order to avoid confusion, improve efficiency in cost and time.
- Orientation and training for disaster response plan and procedures accompanied by simulated exercise will keep the department prepared for such eventualities. Special skills required during emergency operations need to be imparted to the officials and the staff. Select personnel can be deputed for training as “NODAL OFFICER – Veterinary Services” at district level respectively.
- To the extent possible, preventive measures as recommended in the preparedness and mitigation document of DDMAP should be undertaken to improve departmental capacity to respond to a disaster.
- Hospital staff be aware of damage – proof hospital rooms/buildings.
- A standby generator be made available for every hospital
- At least one kerosene – powered refrigeration unit be made available for storage of drugs.
- Orientation and training for disaster response plan and procedures, accompanied by simulated exercise will keep the department prepared for such eventualities. Special skills required during disaster situation need to be imparted to the officials and the staff.
- To the extent possible, preventive measures as recommended in the preparedness and mitigation document of DMAP should be communicated to the community to prevent extensive loss of livestock.

Action Plan Objective in a Disaster Situation

- Treatment of injured cattle.
- Protection and care of abandoned/lost cattle.

Activities on Receipt of Warning or Activation of DDMAP

- Within the affected district all available personnel will be made available to the District Disaster Manager. If more personnel are required, then out of station officer or those on leave may be recalled.
- All personnel required for Disaster Management should work under the overall supervision and guidance of District Disaster Manager.
- Establish communications with
 - District control room
 - Veterinary aid centres and hospitals (including private practitioners) within the district.
- The Deputy Director, Veterinary Dept. will act as “Nodal Officer – Veterinary Services”.
- Review and update precautionary measures and procedures and review with staff the precautions that have been taken to protect equipment and the post-disaster procedures to be followed.
- Fill departmental vehicles with fuel and park them in protected area.
- Stock emergency medical equipment, which may require after disaster.

- Determine what injuries/illnesses may be expected, and what drugs and other medical items will be required, in addition to the requirements of setting up cattle camps, and accordingly ensure that extra supplies of medical items and materials be obtained quickly.
- Provide information to all staff of veterinary hospitals and centres about the disasters, likely damages and effects, and information about ways to protect life, equipment and property.
- Surgical packs should be assembled and sterilized.
- Arrange for emergency supply of anaesthetic drugs.
- Prepare an area of the hospital for receiving large number of injured livestock.
- Establish work schedules to ensure adequate staff are available round the clock.
- Set up teams for visiting disaster site.

Relief and Rehabilitation

- Organise transfer of injured livestock from village to veterinary aid centres wherever possible
- The provision of medical services should be coordinated by Nodal Officer-Veterinary Services with District Control Room, and cattle camps.
- Establish cattle camps and additional veterinary aid centres at disaster sites and designate an Officer-in-Charge for the camp.
- Estimate the requirement of water, fodder and animal feed, for cattle camps and organise the same.
- Ensure the adequate sanitary conditions though cleaning operations are maintained in order to avoid outbreak of any epidemic.
- An injury and disease monitoring system should be developed, to ensure that a full picture of risks is maintained.
- Plan for emergency accommodations for veterinary staff from outside the area.
- Information formats and monitoring checklists as given in Annexure should be used for programme monitoring and development and for reporting to Emergency Operations Centre. This is in addition to existing reporting system in the department.
- Establishment of public information centre with a means of communication, to assist in providing an organized source of information. The hospital is responsible for keeping the community informed of its potential and limitations, in disaster situations.
- The local police and rescue group should be aware of the resources of each veterinary aid centre and hospital.
- Provide information to all staff of veterinary hospital and centres about the disaster likely damages and effects, and information about ways to protect life, equipment and property.
- Surgical packs should be assembled and sterilized.
- Enough stock of surgical packs should be sterilized to last for four to five days.
- The sterilized packs must be stored in protective cabinets to ensure that they do not get wet. Covering the stock with polythene is recommended as an added safety measure.

- All valuable equipment and instruments should be packed in protective coverings and stored in room the most damage-proof.
- Check the emergency electrical generators, to ensure that it is operational, and that a buffer stock of fuel exists. If an emergency generator is not available at the hospital, arrange for one on loan.
- Arrange for emergency supplies anaesthetic drugs.
- Check stocks of equipment and drugs, which are likely to be most needed after disaster.
- Fill hospital storage tanks and encourage water savings. If no storage tank exists, water for drinking should be drawn in clean container and protected.
- Prepare an area of hospital for receiving large number of injured livestock.
- Develop emergency admission procedure (with adequate record keeping).
- Cattle camps and hospital administrator should
 - Establish work schedules to ensure that adequate staff are available
 - Set up teams of veterinary doctors, and assistants for visiting disaster sites.

Standards for Cattle Camps

1. The minimum number of cattle in the cattle camp should be about 100 and the maximum 500.
2. The cattle camp should be located at suitable sites, bearing in mind, the adequate supply of water and shade are most essential for wellbeing of the cattle.
3. Cattle sheds constructed should not exceed 20 sq. feet per animal. Suitable arrangements for water trough and manger(s) should be made.
4. The feeding centres for cattle should be located in such a manner that
 - There is adequate supply of drinking water
 - There is sufficient shade for cattle to rest during the afternoon
 - They are located as near the rail head as possible
 - They are conveniently located, not beyond a radius of 8 Km from the affected villages.

The cattle will require 6 Kg per cattle head per day of fodder, and 1 to 1½ Kg per cattle head per day, of the concentrate like Bago molasses.

Each cattle camp will have a minimum of one camp manager, two labourers and two sweepers.

Operating procedure guidelines for PWD department

Planning Assumptions

- There is no substitute for maintaining standards of services and regular maintenance during normal times. This affects the response of the department to any disaster situation.
- The department is required to adopt appropriate measures to ensure that the community participates substantially.
- For effective preparedness, the department must have a disaster response plan or disaster response procedures clearly defined in order to avoid confusion, improve efficiency in cost and time.

District Disaster Management Authority, Chamba (HP)

- Orientation and training for disaster response plan and procedures accompanied by simulated exercise will keep the department prepared for such eventualities. Special skills required during emergency operations need to be imparted to the officials and the staff. Select personnel can be deputed for training as “NODAL OFFICER – PWD” at district level respectively.
- To the extent possible, preventive measures as recommended in the preparedness and mitigation document of DDMAP should be undertaken to improve departmental capacity to respond to a disaster.

Action Plan Objective in a Disaster Situation

- Restoration of roads to their normal condition.
- Repair/reconstruction of public utilities and buildings.

Activities on Receipt of Warning or Activation of DDMAP

- Within the affected district all available personnel will be made available to the District Disaster Manager. If more personnel are required, then out of station officer or those on leave may be recalled.
- All personnel required for Disaster Management should work under the overall supervision and guidance of District Disaster Manager.
- Establish communications with District control room and your departmental offices within the division.
- All district level officials of the department would be asked to report to the Deputy Commissioner/DDM.
- Appoint one officer as “Nodal Officer - PWD” at district level.
- The “Nodal Officer - PWD” will be responsible for mobilizing staff and volunteers to clear the roads in his section, should a disaster strike.
- The “NODAL OFFICER – PWD” should be familiar with pre-disaster precautions and post disaster procedures for road clearing and for defining safe evacuation routes where necessary.
- All officers³ should be notified and should meet the staff to review emergency procedures.
- Review and update precautionary measures and procedures and review with staff the precautions that have been taken to protect equipment and the post-disaster procedures to be followed.
- Vehicles should be inspected, fuel tanks filled and batteries and electrical wiring covered as necessary.
- Extra transport vehicles should be dispatched from HQ and stationed at safe and strategic spots along routes likely to be effected.
- Heavy vehicles should be moved to areas likely to be damaged and secured in a safe place.
- Inspection of all roads, bridges, government buildings and structures must be done and structures which are endangered by the impending disaster identified.
- Emergency tool kits must be made available and should include
 - Crosscut saws
 - Axes

District Disaster Management Authority, Chamba (HP)

- Power chain saw
- Sharpening Files
- Chains and tightening wrenches
- Pulley block with chain and rope
- The designation of routes strategic to evacuation and relief should be identified and marked in close coordination with the DCR.
- Establish a priority listing of roads which will be opened first, the most important being roads to hospitals and main trunk routes.
- Give priority attention to urgent repair works in disaster affected areas.
- Identify locations for setting up transit and relief camps, feeding centres and quantity of construction materials required and inform the DCR accordingly.

Relief and Rehabilitation

- All works teams should be issued two-way communication **link**.
- Provide a work team carrying emergency tool kits, depending on the nature of the disaster, essential equipment such as
 - Towing vehicles
 - Earth moving equipment
 - Cranes etc.
- Each unit should mobilize a farm tractor with chain, cables and a buffer stock of fuel.
- Adequate road signs should be installed to guide and assists the drivers.
- Begin clearing roads. Assemble casual labour to work with experienced staff and divide into work gangs.
- Mobilise community assistance for road clearing by contacting community organizations.
- Undertake clearing of ditches, grass cutting, burning, removal of debris and the cutting of dangerous trees along the roadside in the affected area through maintenance engineer's staff.
- Undertake repair of all paved and unpaved road surfaces including edge metalling, potholes patching and any failure of surface, foundations in the affected areas by maintenance engineer's staff and keep monitoring their conditions.
- Undertake construction of temporary roads to serve as access to temporary transit and relief camps and medical facilities for disaster victims.
- As per the decision of the district control room, undertake construction of relief camps, feeding centres, medical facilities, cattle camps.
- An up-to-date report of all damages and repairs should be kept in the district office report book and communicate the same to the district control room.
- If possible, review of the extent of damage (by helicopter) should be arranged for the field Officer-in-Charge, in order to dispatch most efficiently road clearing crews, and determine the equipment needed.

STANDARDS FOR RELIEF CAMPS

Tent Camps

- The layout of the site should meet the following specifications.
 1. 3-4 hectares of land/1000 peoples
 2. Roads of 10 meters width
 3. Minimum distance between edge of roads and tents of 2 mts.
 4. Minimum distance between tents of 8 mts.
 5. Minimum floor area/tent of 3 square meters per person.
- Water distribution in camp sites consists of
 1. Minimum capacity of tanks of 200 litres
 2. Minimum capacity per capita of 15 litres/day
 3. Maximum distance of tanks from farthest tent of 100 meters.
- Solid waste disposal containers in tent camps should be
 1. Waterproof
 2. Insect-proof and
 3. Rodent-proof
 4. The waste should be covered tightly with a plastic or metallic lid
 5. The final disposal should be by incineration or by burial.
- The capacities of solid waste units should be, 1 litre/4-8 tents; or 50-100 litres/25-50 persons.
- Excreta and liquid waste should be disposed in bore-holed or deep trench latrines in tent camps. Specifications for these are:
 1. 30-50 meters from tents.
 2. 1 seat provided/10 persons
 3. Modified soakage pits should be used for waste water by replacing layers of earth and small pebbles with layers of straw, grass or small twigs. These needs to be removed on a daily basis and burned.

Buildings

Buildings used for accommodating disaster victims should provide the following:

1. Minimum floor area of 3.5 sq. meters/person
2. Minimum air space of 10 sq. meters/person
3. Minimum air space circulation of 30 cubic meters/person/hour and
4. There should be separate washing blocks for men and women.
5. Washing facilities to be provided are:
 - 1 hand basin/10 persons
 - 1 wash bench of 4-5 meters/100 persons and 1 shower head/50 persons in temperate climates
6. Toilet accommodation in buildings housing displaced persons, should meet these requirements:
 - 1 seat/25 women
 - 1 seat plus 1 urinal/35 men
 - Maximum distance from building of 50 meters.
7. Refuse containers are to be plastic or metallic and should have closed lids. To be provided are:
 - 1 container of 50-100 litres capacity/25-50 persons.

Operating procedure guidelines for HPSEB

Planning Assumptions

- There is no substitute for maintaining standards of services and regular maintenance during normal times. This affects the response of the department to any disaster situation.
- The department is required to adopt appropriate measures to ensure that community participates substantially.
- For effective preparedness, the department must have a disaster response plan or disaster response procedures clearly defined in order to avoid confusion, improve efficiency in cost and time.
- Orientation and training for disaster response plan and procedures accompanied by simulated exercise will keep the department prepared for such eventualities. Special skills required during emergency operations need to be imparted to the officials and the staff. Select personnel can be deputed for training as “NODAL OFFICER – Power Supply” at district level.
- To the extent possible, preventive measures as recommended in the preparedness and mitigation document of DDMAP, should be undertaken to improve departmental capacity to respond to a disaster.

Normal Time Activities

- Assess preparedness level and report the same as per format to District Control Room every six months.
- Establish at each sub-station a disaster management tool kit comprising cable cutters, pulley blocks, jungle knives, axes, crowbars, ropes, hacksaws and spanners. Tents for work crews should also be storage.

Action Plan Objective in a Disaster Situation

- Restore the power supply and ensure uninterrupted power to all vital installation, facilities and site.

Activities on Receipt of Warning or Activation of DDMAP

- Within the affected district all available personnel will be made available to the District Disaster Manager. If more personnel are required, then out of station officer or those on leave may be recalled.
- All personnel required for Disaster Management should work under the overall supervision and guidance of District Disaster Manager.
- Establish communications with District control room and your departmental offices within the division.
- All district level officials of the department would be asked to report to the Deputy Commissioner/DDM.
- Appoint one officer as “NODAL OFFICER – Power Supply” at district level.

District Disaster Management Authority, Chamba (HP)

- Review and update precautionary measures and procedures and review with staff the precautions that have been taken to protect equipment and the post-disaster procedures to be followed.
- Assist the state authorities to make arrangements for standby generators in the following public service offices from the time of receipt of alert warning
 - Hospitals
 - Water Supply Stations
 - Collectorate
 - Police stations
 - Telecommunications buildings
- Fill departmental vehicles with fuel and park them in a protected area.
- Check emergency tool kits, assembling any additional equipment needed.
- Immediately undertake inspection from the time of receipt of alert warning of
 - High tension lines
 - Towers
 - Substations
 - Transformers
 - Insulators
 - Poles and
 - Other equipment
- Review the total extent of the damage to power supply installations by reconnaissance flight, if possible.

On the recommendations of the Deputy Commissioner/District Control Room/ “Nodal Officer– Power Supply” of the department in the district

- Instruct district staff to disconnect the main electricity supply for the affected area.
- Dispatch emergency repair gangs equipped with food, bedding, tents, and tools.

Relief and Rehabilitation

- Hire casual labourers on an emergency basis for clearing of damaged poles and salvage of conductors and insulators.
- Begin repair/reconstruction
- Assist hospital in establishing emergency supply by assembling generators and other emergency equipment, if necessary.
- Establish temporary electricity supplies for other key public facilities, public water systems, etc.
- Establish temporary electricity supplies for transit camps, feeding centres, relief camps, district control room and on access roads to the same.
- Establish temporary electricity supplies for relief material godowns.
- Compile an itemized assessment of damage, from reports made by various electrical receiving centres and sub-centres.
- Report all activities to the head office.
- Plan for emergency accommodations for staff from outside the area.

On the recommendation of the Nodal Officer – Power Supply/Deputy Commissioner/District Control Room, at state level, HPSEB shall

- Send cables, poles, transformers and other needed equipment
- Send vehicles and any additional tools needed.
- Provide additional support as required.

OPERATING PROCEDURE GUIDELINES FOR AGRICULTURE DEPARTMENT

Planning Assumptions

- There is no substitute for maintaining standards of services and regular maintenance during normal times. This affects the response of the department to any disaster situation.
- The department is required to adopt appropriate measures to ensure that community participates substantially.
- For effective preparedness, the department must have a disaster response plan or disaster response procedures clearly defined in order to avoid confusion, improve efficiency in cost and time.
- Orientation and training for disaster response plan and procedures accompanied by simulated exercise will keep the department prepared for such eventualities. Special skills required during emergency operations need to be imparted to the officials and the staff. Select personnel can be deputed for training as “NODAL OFFICER – Agriculture” at district level.
- To the extent possible, preventive measures as recommended in the preparedness and mitigation document of DDMAP should be communicated to the community to prevent extensive loss of crops and plantations.

Action Plan Objective in a Disaster Situation

- Restore the agricultural operations (including soil conditions)
- Crop protection
- Restore agriculture produce market.

Activities on Receipt of Warning or Activation of DDMAP

- Within the affected district all available personnel will be made available to the District Disaster Manager. If more personnel are required, then out of station officer or those on leave may be recalled.
- All personnel required for Disaster Management should work under the overall supervision and guidance of District Disaster Manager.
- Establish communications with District control room and your departmental offices within the division.
- Appoint one officer as “NODAL OFFICER – Agriculture” at district level.
- Review and update precautionary measures and procedures and review with staff the precautions that have been taken to protect equipment and the post-disaster procedures to be followed.
- Fill departmental vehicles with fuel and park them in a protected area.
- Check available stocks of equipment and materials which are likely to be most needed after disaster.

- Stock agricultural equipment which may be required after disaster
- Determine what damage, pests or diseases may be expected, and what drugs and other insecticides items will be required, in addition to requirement of setting up extension terms for crop protection, and accordingly ensure that extra supplies and materials, be obtained quickly.
- Provide information to all concerned, about disasters, likely damages to crops and plantations, and information about ways to protect the same.
- All valuable equipment and instruments should be packed in protective covering and stored in room the most damage-proof.
- All electrical equipment should be unplugged when disaster warning is received.
- Extension officers should be assisted to
 - Establish work schedules to ensure that the adequate staff are available
 - Set up the teams of extension personnel and assistants for disaster sites.

Relief and Rehabilitation

- Assess the extent of damage to soil, crop, plantation, micro-irrigation systems and storage facilities and the requirements for replantation or salvaging
- Make extensive use of soil and water testing laboratories
- Provision of agricultural services should be coordinated with irrigation department, DRDA, District Control Room
- Estimate the requirement of
 1. Seeds
 2. Fertilizers
 3. Pesticides and labour
- Organise transport, storage and distribution of the above with adequate record keeping procedures
- Ensure that the adequate conditions through cleaning operations are maintained to avoid water-logging and salinity in the low lying areas.
- A pests and disease monitoring system should be developed to ensure that a full picture of risks is maintained.
- Plan for emergency accommodations for agriculture staff from outside the area.
- Information formats and monitoring checklists as given in section on “Information and Monitoring Tools” should be used for programme monitoring and development and for reporting to DCR. This is in addition to existing reporting system in the department.
- Establishment of a public information centre with a means of communication, to assist in providing an organized source of information. The department is responsible for keeping the community informed of its potential and limitations in disaster situations.
- The NGOs and other relief organizations should be aware of the resources of the department.
- Assist farmers to re-establish their contacts with agriculture produce market and ensure that appropriate prices to offer to them.

Annexure - H

First Information Report

Name of the District

Date of Report

1. Nature of Calamity
2. Date and Time of Occurrence
3. Number and Names of the areas affected
4. Population Affected
5. Number of Persons
 - a) Died
 - b) Missing
 - c) Injured
6. Animals
 - a) Affected
 - b) Lost
7. Crops Affected
8. Number of houses damaged
9. Damage to Public Property

Annexure - I

Rapid Assessment Format for Disaster Management Team

[Aim to determine immediate response of the locality]

Type of Disaster _____; Date _____; Time _____;

Team Member _____

1. Name of the location	
2. Administrative Unit and Division	
3. Geographical location	
4. Local Authorities interview (with name, address, designation)	
5. Estimated total population	
6. Worst affected areas/population - No of Blocks - G.P - Village	
7. Areas currently inaccessible	
8. Type of areas affected	
9. Distance from the District Head Quarters(Km)	
Accessibility of the areas	
10. Effect on population (a) Primary affected population - Children below 1 year - Children between 1 and 5 years old - Women - Pregnant and lactating women - Elderly (above 60) - Disabled (b) Death/Reports of starvation	Number

District Disaster Management Authority, Chamba (HP)

<p>(c) Orphans (d) Injured (e) Missing (f) Homeless - Number of people - Number of families (g) Displaced/Migrated (h) Evacuated (i) Destitute (j) Need of counselling for traumatized population</p>	<p>Yes/No</p>
<p>11. Building</p> <p>(a) Building collapsed/wasted away (b) Building partially collapsed/wasted away (c) Buildings with minor damages (buildings that can be retrofitted) (d) Number of schools affected - Gravity of the damages (e) Number of hospitals and Health Centres affected - Gravity of the damages (f) Number of Government buildings affected - Gravity of the damages (g) Any other building affected - Gravity of the damages</p>	<p>Number</p> <p>Scale 1 to 5 where 1 is no damages and 5 is completely destroyed</p>
<p>12. Infrastructure</p> <p>(a) Road Damaged/destroyed - Scale of the damage - Location - Km (b) Railways damaged - Location - Km - Is the railway still working (c) Bridges damaged/collapsed - Locality - Villages isolated (d) Damages to the Communication Network (e) Damages to the Electricity Network</p>	<p>Scale 1 to 5 where 1 is normal and 5 is completely destroyed/washed away</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No and scale of the damages Scale 1 to 5 where 1 is no damages and 5 is completely destroyed</p>

District Disaster Management Authority, Chamba (HP)

<p>(f) Damages to the Telecommunication Network</p>	
<p>13. Health Facilities</p> <p>(a) Infrastructure damaged</p> <ul style="list-style-type: none"> - Hospitals - Health Centers - Vaccination Centers <p>(b) Availability of Doctors</p> <ul style="list-style-type: none"> - In the area - In the district <p>(c) Availability of Paramedical staff</p> <ul style="list-style-type: none"> - In the area - In the district <p>(d) Local Staff affected</p> <ul style="list-style-type: none"> - Doctors - Paramedical Staff <p>(e) Conditions of equipment Specify which equipment</p> <p>(f) Availability of medicines/drugs</p> <ul style="list-style-type: none"> - Typology <p>(g) Availability of Vaccinations</p> <ul style="list-style-type: none"> - Typology <p>(h) Any immunization campaign was undertaken before the disaster</p> <p>(i) Possibility of diseases outbreak</p> <p>(j) Other health problems</p>	<p>Number Scale 1 to 5 where 1 is no damages and 5 is completely destroyed</p> <p>Number</p> <p>Number</p> <p>Number</p> <p>Scale 1 to 5 where 1 is no damages and 5 is completely destroyed</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>List</p>
<p>14. Water Sanitation</p> <p>(a) Availability of safe drinking water</p> <p>(b) Availability of sanitation facilities</p> <p>(c) Availability of Disinfectant</p> <ul style="list-style-type: none"> - Typology <p>(d) Damages to the Water/Sewage systems</p> <p>(e) Damages to the water supply system</p> <p>(f) Availability of portable water system</p> <p>(g) Agencies participating in WATSAN</p>	<p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Scale 1 to 5 where 1 is no damages and 5 is completely destroyed</p> <p>Yes/No</p> <p>List</p>
<p>15. Crops/Agriculture Damage</p> <p>(a) Crop Damaged</p> <ul style="list-style-type: none"> - Typology - % Of Hectare damaged - In Upland/medium/low 	

District Disaster Management Authority, Chamba (HP)

<ul style="list-style-type: none"> - Paddy or Non paddy - Irrigated or non-irrigated <p>(b) Normal and actual rainfall assessment</p> <p>(c) Livestock loss</p> <p>(d) Availability of Health services for livestock</p> <p>(e) Cattle feed/folder availability</p> <p>(f) Damage to agriculture infrastructure</p>	<p>Mm</p> <p>Number</p> <p>Yes/No</p> <p>Number</p> <p>Tonnes</p> <p>Scale 1 to 5 where 1 is no damages and 5 is completely destroyed</p>
<p>16. Food/Nutrition</p> <p>(a) Availability of food/stocks</p> <ul style="list-style-type: none"> (1) Family (2) Relief (3) PDS (4) Community Kitchen <p>(b) Expected duration of the food stock</p> <p>(c) Most affected groups</p> <ul style="list-style-type: none"> - Infant - Children - Pregnant and lactating mothers - Elderly <p>(d) Where are the different groups located?</p> <p>(e) Levels of malnutrition?</p> <p>(f) Type of food required</p> <p>(g) Total quantity/ration levels required</p> <p>(h) How is the food supply and nutrition situation likely to evolve in coming weeks/months?</p>	<p>Yes/No</p> <p>Kg</p> <p>Tonnes</p> <p>Tonnes</p> <p>Kg</p> <p>Days</p> <p>To be ticked</p> <p>Days</p> <p>To be ticked</p>
<p>1. 15.Secondary Threats</p> <ul style="list-style-type: none"> (a) Potentially hazardous sites (b) Existence of epidemics (c) Scarcity of Food (d) Scarcity of Water (e) Scarcity of Shelter (f) Scarcity of Clothes 	<p>List</p>

District Disaster Management Authority, Chamba (HP)

(g) Any other problem	
<p>16. Response</p> <p>(a) <u>Local:</u> Govt./NGOs/CSOs/Individuals Type of assistance</p> <p>(b) <u>National:</u> Govt./NGOs/CSOs Type of assistance</p> <p>(c) <u>International:</u> Govt./NGOs/CSOs Type of assistance</p>	<p>To be ticked Description</p> <p>To be ticked Description</p> <p>To be ticked Description</p>
<p>17. Logistic and Distribution system</p> <p>(a) Availability of Storage facilities</p> <p>(b) Means of transport available</p> <p>(c) Availability of Fuel</p> <p>(d) Are there any distribution criteria already in place</p> <p>Availability of Manpower</p>	<p>Yes/No</p> <p>List</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p>
<p>18. Priority of Needs</p> <p>Search and Rescue:</p> <p>(a) Need of Search and Rescue</p> <ul style="list-style-type: none"> - Locally available - Needed for neighbouring districts - Needed for neighbouring states (indicate from where) <p>(b) Need of transportation and equipment:</p> <ul style="list-style-type: none"> - Boats - Any other transportation(specify) - Special equipment(specify) - Heavy equipment(specify) <p>(c) Need of shelter</p> <ul style="list-style-type: none"> - Temporary - Permanents <p>Clothing:</p> <p>(a) Children Clothing</p> <p>(b) Adult Clothing</p> <p>(c) Winter Clothing</p> <p>(d) Blankets</p> <p>(e) Bed Sheets</p>	<p>Yes/No</p> <p>Estimated Quantity</p>

<p>1.1 Food item:</p> <ul style="list-style-type: none"> (a) Pulses (b) Grain (c) Baby Food (d) Specialised food (e) Cattle feeds/fodder <p>Water /sanitation:</p> <ul style="list-style-type: none"> (a) Portable water (b) Chlorine powder and disinfectant (c) Latrine (d) Soap (e) Detergent (f) Insecticides (g) Disinfestations of water body (h) Manpower for carcass disposal <p>1.2 Health:</p> <ul style="list-style-type: none"> (a) Medical staff (b) Medicines(specify) (c) IV fluid (d) ORS (e) Vitamin A (f) Vaccines (g) Mobile units(quantity to be specified) (h) Cold chain system <p>1.3 Education:</p> <ul style="list-style-type: none"> (a) Infrastructure temporary / permanent (b) Teachers (c) Teachers kits (d) Reading materials (e) Availability of mid-day meal <p>Crop/Agriculture</p> <ul style="list-style-type: none"> (a) Need of seeds (b) Fertilizer , Pesticide (c) Type of Seed required (d) Availability of local variety (e) Availability of resources <p>Infrastructure:</p>	<p>List</p> <p>Yes/No and specify location</p> <p>Yes/No and specify location</p>
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District Disaster Management Authority, Chamba (HP)

(a) Repair of roads (b) Repair of railways and bridges (c) Power Supply (d) Telecommunication (e) Equipments required for restoration (f) Manpower required	List Number of Man days
--	--------------------------------

- **Observation:**
- **Source of information:**
- **Site Visit:**
- **Interaction with affected population:**
- **Assessment Carried By:**

Annexure - J

Guidelines for Requisitioning of Armed Forces in Aid of Civil Administration

Procedure for Provision of Aid

1. The Armed Forces are conscious of not only their constitutional responsibility in-aid to civil authority, but also, more importantly, the aspirations and the hopes of the people. Although such assistance is part of their secondary role, once the Army steps in, personnel in uniform wholeheartedly immerse themselves in the tasks in accordance with the Army's credo - **SERVICE BEFORE SELF**.

2. Assistance during a disaster situation is to be provided by the Defence Services with the approval and on orders of the central government. In case, the request for aid is of an emergency nature, where government sanctions for assistance is not practicable, local military authorities when approached for assistance should provide the same. This will be reported immediately to respective Services Headquarters (Operations Directorate) and normal channels taken recourse to, as early as possible.

Requisition Procedure

3. Any state unable to cope with a major disaster situation on its own and having deployed all its resources will request Government of India for additional assistance. Ministry of Defence will direct respective service headquarters to take executive action on approved requests. The chief secretary of state may initiate a direct request for emergency assistance, for example, helicopter for aerial reconnaissance, or formation of local headquarter (Command/Area Headquarters) or naval base or air force station.

Coordination

4. The responsibility for coordination of disaster relief operations at various levels is as follows:

- a) Inter-service Coordination at Central Level: Cabinet secretariat (Military Wing). A case for co-opting a Tri Service RRF to cater for emergency situations within India and in the region is under consideration of COSC. This JCC would be responsible for coordination and directing all rescue/relief operations to ensure synergy of efforts of all three services in management of disasters.
- b) Service Headquarters
 - (i) Military Operations Directorate (MI-6) at Army Headquarters

- (ii) Director of Naval operations at Naval headquarters
- (iii) Directorate of Operations (Transport and Maritime) at Air Headquarters
- c) Command and Lower Formation Headquarters: Senior General Staff Officers (Operations)
- d) State Level: Service liaison officer deputed to form a part of Joint Control Centre.
- e) Local Level: Nominated Commander of troops and senior civil administrator in-charge of relief.

5. The Armed Forces may be called upon to provide the following types of assistance:

- a) Infrastructure for command and control for providing relief. This would entail provision of communications and technical manpower.
- b) Search rescue and relief operations at disaster sites.
- c) Provision of medical care at the incident site and evacuation of casualties.
- d) Logistics support for transportation of relief materials
- e) Setting up and running of relief camps
- f) Construction and repair of roads and bridges to enable relief teams/ material to reach affected areas.
- g) Repair, maintenance and running of essential services especially in the initial stages of disaster relief.
- h) Assist in evacuation of people to safer places before and after the disaster
- i) Coordinate provisioning of escorts for men, material and security of installations,
- j) Stage management and handling of International relief, if requested by the civil administration.

Disaster Relief Operation

6. Important aspects of policy for providing disaster relief are as under:

- a) Disaster relief tasks can be undertaken by local commanders. However, HQ Sub Area is to be informed at the first opportunity and then flow of information to be maintained till completion of the task.
- b) Effective and efficient disaster relief by the army while at task.
- c) Disaster relief tasks will be controlled and coordinated through Commanders of Static Headquarters while field units Commanders may move to disaster site for gaining first-hand knowledge and ensuring effective assistance.
- d) Once situation is under control of the civil administration, army aid should be promptly de-requisitioned.
- e) Adequate communication, both line and radio, will be ensured from Field Force to Command Headquarters.

Procedure to Requisition Army, and Air Force

7. It will be ensured by the local administration that all local resources including Home Guards, Police and others are fully utilised before assistance is sought from outside. The District Collector will assess the situation and project his requirements to the State Government. District Control Room will ensure that updated information is regularly communicated to the State Control Room, Defence Service establishments and other concerned agencies.
8. District Collector will apprise the State Government of additional requirements through State Control Room and Relief Commissioner of the State.
9. Additional assistance required for relief operations will be released to the District Collector from the state resources. If it is felt that the situation is beyond the control of state administration, the Relief commissioner will approach the Chief Secretary to get the aid from the Defence Services. Based on the final assessment, the Chief Secretary will project the requirement as under while approaching the Ministry of Defence, Government of India simultaneously for clearance of the aid:

Aid from Army: Headquarters Sub Area Commander, and Headquarters of Western Command Chandimandir.

Aid from Air Force: Sector Commander Sarsawa, Saharanpur (Contact Person: Wg. Cdr. Vineet Sharma – 07599342240; Fax No. 01331 – 244822), and Western Air Command Headquarters, Delhi.

Army authorities to be contacted for disaster relief are as under:

10. Co-Ordination between Civil and Army: For deployment of the Army along with civil agencies on disaster relief, co-ordination should be carried out by the district civil authorities and not by the departmental heads of the line departments like Police, Health & Family Welfare, PWD and PHED etc.
11. Overall Responsibility When Navy and Air Force are also being Employed: When Navy and Air Force are also involved in disaster relief along with the Army, the Army will remain overall responsible for the tasks unless specified otherwise.
13. Principles of Employment of Armed Forces
 - a) **Judicious Use of Armed Forces:** Assistance by Armed Forces should be requisitioned only when it becomes absolutely necessary and when the situation cannot be handled by the civil administration from within its resources. However, this does not imply that the response must be graduated. If the scale of disaster so dictates, all available resources must be requisitioned simultaneously.
 - b) **Immediate Response:** When natural and other calamities occur, the speed for rendering aid is of paramount importance. It is clear that, under such circumstances, prior sanction for assistance may not always be forthcoming. In such cases, when approached for assistance, the Army should provide the

same without delay. No separate Government approval for aid rendered in connection with assistance during natural disasters and other calamities is necessary.

- c) **Command of Troops:** Army units while operating under these circumstances continue to be under command of their own commanders, and assistance rendered is based on task basis.
- d) **No Menial Tasks:** While assigning tasks to troops, it must be rendered that they are not employed for menial tasks e.g. troops must not be utilised for disposal of dead bodies.
- e) **Requisition of Aid on Task Basis:** While requisitioning the Army, the assistance should not be asked for in terms of number of columns, engineers and medical teams. Instead, the- civil administration should spell out tasks, and leave it to army authorities to decide on the force level, equipment and methodologies to tackle the situation.
- f) **Regular Liaison and Co-ordination:** In order to ensure that optimum benefit is derived out of Armed Forces employment, regular liaison and coordination needs to be done at all levels and contingency plans made and disseminated to the lowest level of civil administration and the Army.
- g) **Advance Planning and Training:** Army formations located in areas prone to disaster must have detailed plans worked out to cater for all possible contingencies. Troops should be well briefed and kept ready to meet any contingency. Use of the Vulnerability Atlas where available must be made.
- h) **Integration of all Available Resources:** All available resources, equipment, accommodation and medical resources with civil administration, civil firms and NGOs need to be taken into account while evolving disaster relief plans. All the resources should be integrated to achieve optimum results. Assistance from outside agencies can be superimposed on the available resources.
- i) **Early De-requisitioning:** Soon after the situation in a disaster-affected area has been brought under control of the civil administration, Armed Forces should be de-requisitioned.

**REQUISITION FOR ARMY AID BY CIVIL AUTHORITIES
(NATURAL CALAMITIES)**

Reference No. : Calamities

1. From :
2. To :
3. For Information -
4. Date and time origination of demand -
5. Situation as at area _____ an
Heavy flood in area _____ due rising of rigor _____
civilians marooned. Own evacuation resources insufficient meet requirement. In view
continuous heavy, rains in upper regions, more areas may be affected marooning another
_____ civilians of _____ region.
6. **Type of extent of aid required for**
 - (i) Equipment and personal, to evacuate marooned civil.
 - (ii) Medical assistance for approximately _____ civilians.
 - (iii) Tentage for _____ families if available.
7. **Likely duration and period of aid required**
for _____ days with effect from _____
(Present situation permitting)
8. **Officer in charge Army aid to contact.**
9. **Name of civil Liaison Officer detailed.**
Mr. _____ (Telephone No.) _____
10. **Arrangement made by civil authorities to guide Army aid to place of operations.**
Mr. _____ will meet Army aid part at _____ on receipt of information
from Army authorities)
11. **Special Instructions.**
 - (i) School building at _____ being made available to house
personnel and also for medical arrangements.
 - (ii) Sufficient stocks of required medicines in the present contingency being made
available to treat effected civilians population.
 - (iii) Road Bridge at _____ is unserviceable.
12. Please acknowledge.

Signature

Office Seal

DE-REQUISITION OF ARMY AID (NATURAL CALAMITIES)

1. **Reference No.** **Date:**
2. **From** -
3. **To** -
4. **Information** -
5. Army aid requisitioned vide our reference No. _____ of _____ is hereby de-requisitioned with effect from _____ hrs on _____.
6. Please acknowledge.

Signature

Office Seal

Appointment

Annexure K

UNISDR Terminologies for Disaster Management

Acceptable risk

The level of potential losses that a society or community considers acceptable given existing social, economic, political, cultural, technical and environmental conditions.

Adaptation

The adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

Biological hazard

Process or phenomenon of organic origin or conveyed by biological vectors, including exposure to pathogenic micro-organisms, toxins and bioactive substances that may cause loss of life, injury, illness or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Comment: Examples of biological hazards include outbreaks of epidemic diseases, plant or animal contagion, insect or other animal plagues and infestations.

Building code

A set of ordinances or regulations and associated standards intended to control aspects of the design, construction, materials, alteration and occupancy of structures that are necessary to ensure human safety and welfare, including resistance to collapse and damage.

Capacity

The combination of all the strengths, attributes and resources available within a community, society or organization that can be used to achieve agreed goals.

Capacity Development

The process by which people, organizations and society systematically stimulate and develop their capacities over time to achieve social and economic goals, including through improvement of knowledge, skills, systems, and institutions.

Contingency planning

A management process that analyses specific potential events or emerging situations that might threaten society or the environment and establishes arrangements in advance to enable timely, effective and appropriate responses to such events and situations.

Coping capacity

The ability of people, organizations and systems, using available skills and resources, to face and manage adverse conditions, emergencies or disasters.

Critical facilities

The primary physical structures, technical facilities and systems which are socially, economically or operationally essential to the functioning of a society or community, both in routine circumstances and in the extreme circumstances of an emergency.

Disaster

A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources.

Disaster risk

The potential disaster losses, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period.

Disaster risk management

The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster.

Disaster risk reduction

The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.

Disaster risk reduction plan

A document prepared by an authority, sector, organization or enterprise that sets out goals and specific objectives for reducing disaster risks together with related actions to accomplish these objectives.

Early warning system

The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss.

El Niño-Southern Oscillation phenomenon

A complex interaction of the tropical Pacific Ocean and the global atmosphere that results in irregularly occurring episodes of changed ocean and weather patterns in many parts of the world, often with significant impacts over many months, such as altered marine habitats, rainfall changes, floods, droughts, and changes in storm patterns.

Emergency management

The organization and management of resources and responsibilities for addressing all aspects of emergencies, in particular preparedness, response and initial recovery steps.

Emergency services

The set of specialized agencies that have specific responsibilities and objectives in serving and protecting people and property in emergency situations.

Exposure

People, property, systems, or other elements present in hazard zones that are thereby subject to potential losses.

Geological hazard

Geological process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Greenhouse gases

Gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation of thermal infrared radiation emitted by the Earth's surface, the atmosphere itself, and by clouds.

Hazard

A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Land-use planning

The process undertaken by public authorities to identify, evaluate and decide on different options for the use of land, including consideration of long term economic, social and environmental objectives and the implications for different communities and interest groups, and the subsequent formulation and promulgation of plans that describe the permitted or acceptable uses.

Mitigation

The lessening or limitation of the adverse impacts of hazards and related disasters.

Natural hazard

Natural process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Preparedness

The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions.

Prevention

The outright avoidance of adverse impacts of hazards and related disasters.

Comment: Prevention (i.e. disaster prevention) expresses the concept and intention to completely avoid potential adverse impacts through action taken in advance. Examples include dams or embankments that eliminate flood risks, land-use regulations that do not permit any settlement in high risk zones, and seismic engineering designs that ensure the survival and function of a critical building in any likely earthquake. Very often the complete avoidance of losses is not feasible and the task transforms to that of mitigation. Partly for this reason, the terms prevention and mitigation are sometimes used interchangeably in casual use.

Public awareness

The extent of common knowledge about disaster risks, the factors that lead to disasters and the actions that can be taken individually and collectively to reduce exposure and vulnerability to hazards.

Recovery

The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors.

Resilience

The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.

Response

The provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.

Retrofitting

Reinforcement or upgrading of existing structures to become more resistant and resilient to the damaging effects of hazards.

Comment: Retrofitting requires consideration of the design and function of the structure, the stresses that the structure may be subject to from particular hazards or hazard scenarios, and the practicality and costs of different retrofitting options. Examples of retrofitting include adding bracing to stiffen walls, reinforcing pillars, adding steel ties between walls and roofs, installing shutters on windows, and improving the protection of important facilities and equipment.

Risk

The combination of the probability of an event and its negative consequences.

Comment: This definition closely follows the definition of the ISO/IEC Guide 73. The word “risk” has two distinctive connotations: in popular usage the emphasis is usually placed on the concept of chance or possibility, such as in “the risk of an accident”; whereas in technical settings the emphasis is usually placed on the consequences, in terms of “potential losses” for some particular cause, place and period. It can be noted that people do not necessarily share the same perceptions of the significance and underlying causes of different risks.

Risk assessment

A methodology to determine the nature and extent of risk by analysing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods and the environment on which they depend.

Sustainable development

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Comment: This definition coined by the 1987 Brundtland Commission is very succinct but it leaves unanswered many questions regarding the meaning of the word development and the social, economic and environmental processes involved. Disaster risk is associated with unsustainable elements of development such as environmental degradation, while conversely disaster risk reduction can contribute to the achievement of sustainable development, through reduced losses and improved development practices.

Vulnerability

The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard.

Comment: There are many aspects of vulnerability, arising from various physical, social, economic, and environmental factors. Examples may include poor design and construction of buildings, inadequate protection of assets, lack of public information and awareness, limited official recognition of risks and preparedness measures, and disregard for wise environmental management. Vulnerability varies significantly within a community and over time. This definition identifies vulnerability as a characteristic of the element of interest (community, system or asset) which is independent of its exposure. However, in common use the word is often used more broadly to include the element's exposure.



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