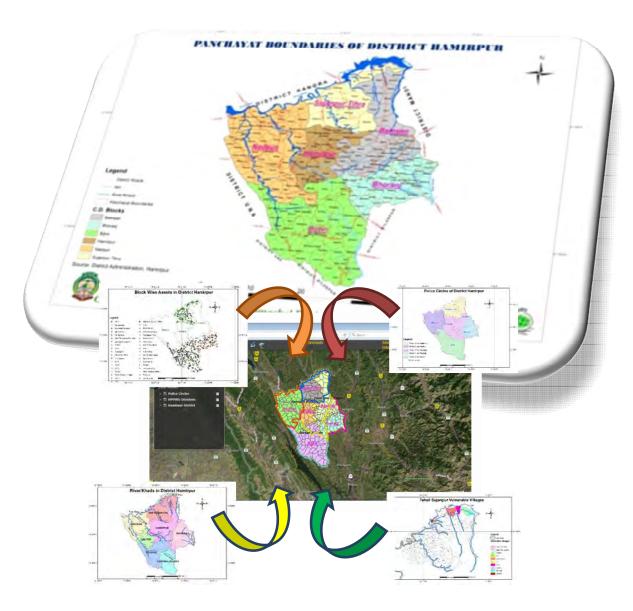
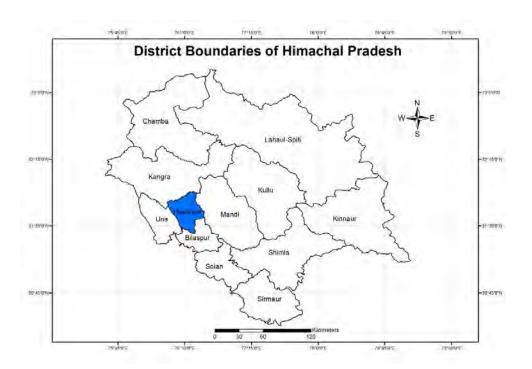
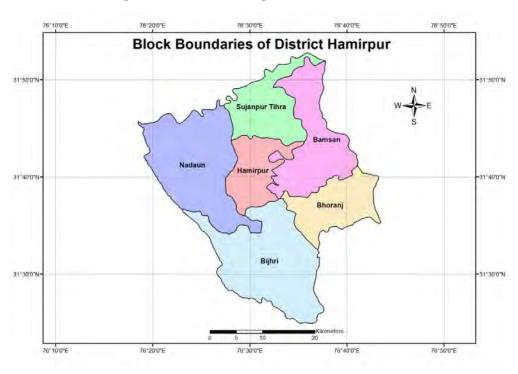
District Disaster Management Plan



District Hamirpur, Himachal Pradesh



Map 1: Location of Hamripur in Himachal Pradesh



Map 2: Block boundaries of Hamirpur

District Disaster Management Plan

Hamirpur

Overall Guidance - Shri Madan Chauhan (IAS)

Deputy Commissioner

Supervision - Mrs. Rupali Thakur, ADC

Coordination - Shri Bal Krishan Chaudhary, DRO

प्राक्कथन

21वीं सदी के प्रारम्भिक वर्षों में आपदा प्रबन्धन मुद्दा विश्व में मानवीय कुशलक्षेम से जुड़ी प्रमुख चिंता के रूप में सामने आया है। वर्तमान में ये अध्ययन का अमूर्त विषय नहीं रहा है अपितु इसका सरोकार हमारी भौतिक प्रकृति, हमारे मानसिक व शारीरिक स्वास्थ्य, संस्कृति , विकास के सरंक्षण व खुशहाली के अवसर तथा हमारे अस्तित्व से है।

आपदा संबन्धी खतरे को मुख्यतः प्राकृतिक व मानव कृत दो वर्गो में विभाजित किया जा सकता है।

,प्राकृतिक आपदा से हमारा तात्पर्य वायुमण्डल ,जलमण्डल, भूगर्भ (भूकम्प व ज्वालामुखी) में होने वाली ऐसी घटनाओं व प्रभावों से है जिनकी गंभीरता व आवृति मनुष्य तथा उसकी गतिविधियों तथा सरंचनाओं पर प्रतिकूल असर डालने की क्षमता रखती है। प्राकृतिक आपदाओं को रोका नहीं जा सकता है परन्तु कुशल प्रबंधन द्वारा इनके कुप्रभावों को कम किया जा सकता है।

तेजी से विकसित होती हुई तकनीक और आर्थिक प्रणाली द्वारा सुसज्जित हमारी आधुनिक सभ्यता अपनी गतिविधियों , दायित्वहीन प्रकृति दोहन तथा अनुत्तरदायी विकास द्वारा निरंतर आपदा संबन्धीर खतरे को बढ़ावा दे रही है। हमारे जैवमण्डल की जीवन को आधार देने वाली प्रणाली तेजी से नष्ट हो रही है। इसके फलस्वरूप उत्पन्न आपदाओं द्वारा न सिर्फ मानव जाति का भविष्य खतरे में पड़ गया है, बल्कि धरती पर समूचे जीवन का अस्तित्व भयंकर खतरे में है।

आपदा प्रबंन्धन योजना के निर्माण तथा कियान्वयन की पृष्ठभूमि में हमारा मुख्य उद्देश्य नागरिकों के जीवन संपत्ति तथा विकास के लामों का संरक्षण निहित है इस योजना के प्रचार व प्रसार द्वारा हम भी सुनिश्चित करेंगें कि आपदा से पूर्व , दौरान तथा पर्यन्त नागरिक किस प्रकार की सावधानियां ले सकते है तथा अपनी सुरक्षा हेत् वह कैसे व्यक्तिगत प्रयास कर सकते है।

आपदा संबन्धी तैयारी के लिए आवश्यक है कि सभी हितधारकों के बीच नेटवर्किंग हो। यद्यपि आपदा प्रबंधन में राजस्व विभाग की केन्द्रीय भूमिका है तथापि कोई भी एकल विभाग तब तक अपेक्षित परिणाम पाने में सफल नहीं होगा जब तक कि अन्य प्रत्येक विभाग अपनी—2 जिम्मेदारियों को सही प्रकार से समझते हुए गंभीरता से अपनी भूमिका का निर्वहन न करे। अतः निष्कर्षतः ये विश्वासपूर्वक कहा जा सकता है कि सफल आपदा प्रबन्धन के लिए सभी विभागों और हितधारकों के एकीकृत प्रयास आवश्यक है।

अन्त में तत्कालीन ई. अनुपम कुमार डडवाल तहसीलदार (रिकवरीं) व बलवान चन्द , उप मण्डल अधिकारी (ना०.) भोरंज को भी धन्यवाद करना चाहता हूं जिन्होने जिला आपदा प्रंबधन योजना के निर्माण हेतु सूचना संकलन, रूपलेखा निर्माण , लेखन और कंप्यूटरीकरण का श्रमसाध्य कार्य किया है।

> मदन चोहान (भा०प्र०से०) उपायुक्त हमीरपुर।

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Chapter-I

Introduction

1.1 National Vision

The national vision is to build a safer and disaster resilient India by developing a holistic, proactive, multi-disaster and technology driven strategy for DM. This will be achieved through a culture of prevention, mitigation and preparedness to reduce the impact of disasters on people. The entire process will centre stage the community and will be provided momentum and sustenance through the collective efforts of all government agencies supported by Non-Governmental Organizations (NGOs).

1.2 Purpose of District Disaster Management Plan

To respond promptly in a coordinated manner in a disaster like situation, it is mandatory to mitigate the potential impact of disasters in order to save lives of people and property in Hamirpur District.

1.3 Key Objectives

- The aim of the district plan is to ensure that the following components of Disaster Management (DM) are addressed to facilitate planning, preparedness, operational, coordination and community participation. Flowing from the national vision and the aforementioned approach, the objectives & guiding principles for the plan formulation are:
- Promoting a culture of prevention and preparedness by ensuring that DM receives the highest priority at all levels.
- Ensuring that community is the most important stakeholder in the DM process.
- Encouraging mitigation measures based on state-of-the-art technology and environmental sustainability.
- Mainstreaming DM concerns into the developmental planning process.
- Developing contemporary forecasting and early warning systems backed by responsive and fail-safe communications and Information Technology (IT) support.
- Promoting a productive partnership with the media to create awareness and contributing towards capacity development.
- Ensuring efficient response and relief with a caring approach towards the needs of the vulnerable sections of the society.
- Undertaking reconstruction as an opportunity to build disaster resilient structures and habitat.
- Undertaking recovery to bring back the community to a better and safer level than the pre-disaster stage

1.4 District Disaster Management Plan: An Approach

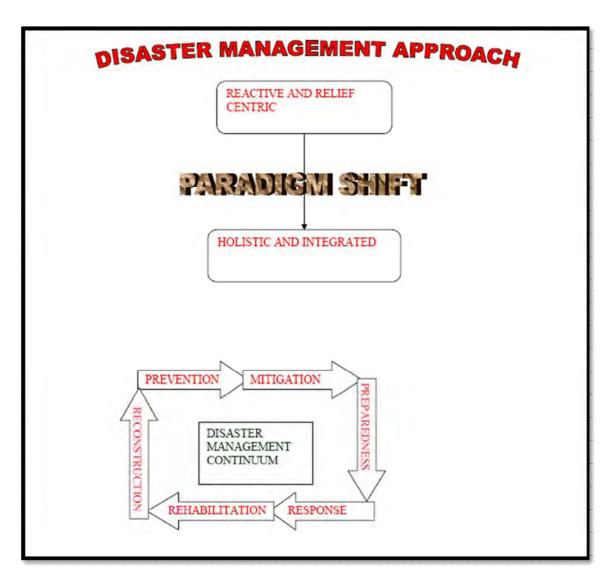


Figure 1: Disaster management holistic model

1.5 GOAL OF DISTRICT DISASTER MANAGEMENT PLAN



1.6 WHY MULTI HAZARD APPROACH???......

It is important to note that while the causes of emergencies vary greatly, the potential effects of emergencies do not. This means that the district can plan to deal with effects common to several hazards, rather than develop separate plans for each hazard. For example, earthquakes and floods, can force people from their homes. The district ADCinistration can develop a plan and an organization around the task, or function, of finding shelter and food for the displaced--with minor adjustments for the probable rapidity, duration, location, and intensity of different hazards based on the requirements. The district ADCinistration can do the same for other common tasks. In fact, a critical aspect of planning for the response to emergency situations is to identify all of these common tasks, or functions, that must be performed, assign responsibility for accomplishing each function, and ensure that tasked organizations have prepared SOPs that detail how they will carry out critical tasks associated with the larger function

1.7 PROBABLE HAZARDS IN DISTRICT:-

The state of Himachal Pradesh is susceptible to 25 types of hazard according to Himachal Pradesh state disaster management plan. Hamirpur district which is situated in lower Shivalik hills is vulnerable to 24 of them.

There are five types of hazard to which Hamirpur District is prone to

(A) Geologically related hazards

- Earth quake
- Land slide and fluid flow
- Dam failure

(B) Water and climate the related hazards

- Floods
- Hail storm
- Heat wave and cold wave
- Droughts
- Thunder and lightening
- Cloud burst

(C)Chemical industrial and nuclear hazards

- Chemical and industrial disaster
- Nuclear disaster

(D) Accident related hazards

- Forest Fire
- Urban Fire
- Major Building Collapse
- Serial Bomb Blast
- Festival related disasters
- Electrical Disasters and Fires
- Air, Road accidents
- Boat Capsizing
- Village Fire

(E) Biologically Related hazards

- Biological Disasters and Epidemics
- Pest Attacks
- Cattle Epidemics
- Food Poisoning

District Profile of Hamirpur

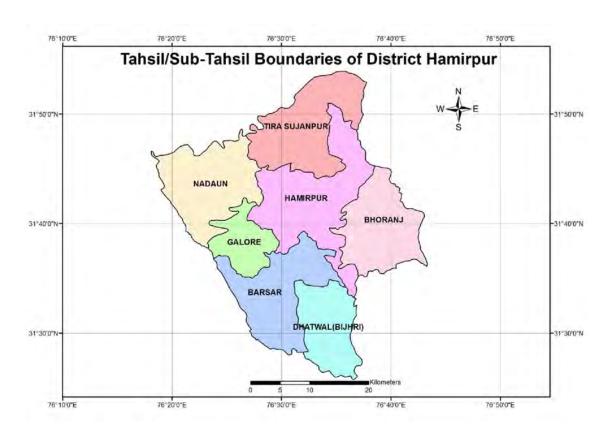
2.1 Administrative set-up

The district is located in the south-western part of the state and constitutes a part of Central Himachal Pradesh micro region. Presently district has five tehsils viz. Hamirpur, Barsar, Bhoranj, Nadaun and Tira Sujanpur and two sub-tehsils i.e. Dhatwal with headquarters at Bijhri and Galore.

The district is divided into four Revenue Sub-divisions namely Hamirpur, Barsar Nadaun and Bhoranj having their headquarters at the same place(Table 1). The Hamirpur sub-division is comprised of tehsil Hamirpur and Tira Sujanpur, Barsar sub-division comprises of Barsar tehsil and sub-tehsil Dhatwal. Whereas Nadaun sub-division has tehsil of Nadaun and sub-tehsil Galore, Bhoranj sub-division has single tehsil at Bhoranj.

Table 1 Detail of subdivisions, Tehsils, Subtehsils, Kango circles, Patwar circles in Hamirpur District

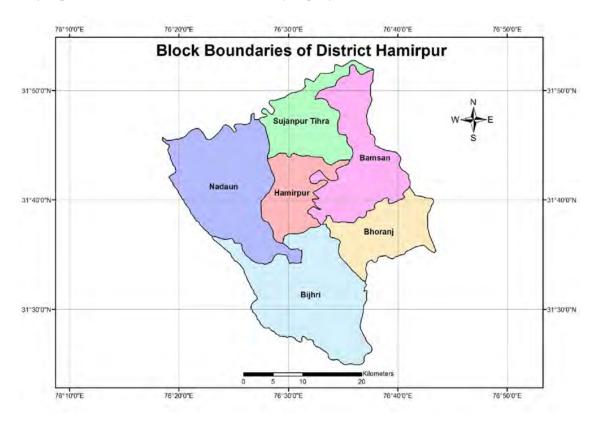
Subdivisions	Tehsil/Subtehsil	Kanungo Circles	Patwar circles
(1) Hamirpur	Hamirpur (Tehsil)	05	35
	Taunidevi	01	19
(2) Sujanpur	Sujanpur (Tehsil)	02	24
(3) Bhoranj	Bhoranj (Tehsil)	04	34
(4) Barsar	Barsar (Tehsil)	03	26
	Dhatwal (Subtehsil)	01	17
(5) Nadaun	Nadaun(Tehsil)	03	28
	Galore (Subtehsil)	01	15



Map 3: Tehsil map of Hamirpur

The district has further been divided into sevenTehsils for the purpose of development such as Hamirpur, Bijhri, Bhoranj, Nadaun and Tira Sujanpur and Bamson at Tauni Devi. (Map 3)

The district has further been divided into six Development Blocks for the purpose of development such as Hamirpur, Bijhri, Bhoranj, Nadaun and Tira Sujanpur and Bamson at Tauni Devi.(Map 4)

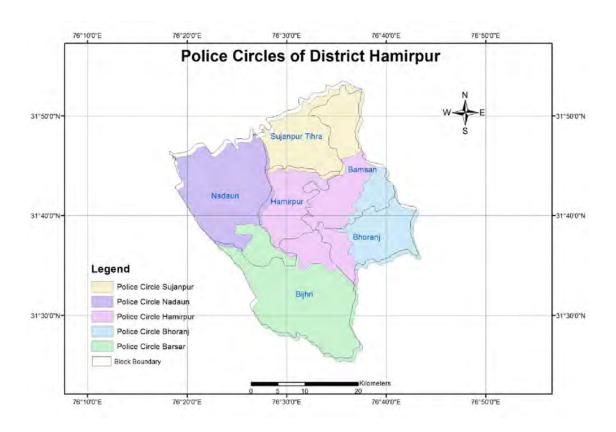


Map 4: Block map of Hamirpur

For Administrative purposes, the Deputy Commissioner is Administrative head of the district; he is responsible for general Administration and maintenance of law and order. He is assisted by one Additional District Magistrate (ADC) and an Assistant Commissioner and other District Officers. For Administrative convenience the district has been divided into four sub-divisions and each sub-division is headed by Sub-Divisional Officer (Civil). Each tehsil is under charge of Tehsildar while the in-charge of sub-tehsil is Naib-Tehsildar assisted by Office Kanungo.Besides this, Block Development Officer is posted in each community development block(Map 4) to supervise and co-ordinate the development works assigned to Gram Panchayats in rural areas.

The Head of the District Police force is Superintendent of Police, assisted by Additional Superintendent of Police and one Deputy Superintendent of Police. Each police station is headed by S.H.O. Every Department maintains its district office

headed by the senior officer to implement the developmental programmes and schemes pertaining to it.



Map 5: Police circles of Hamirpur

Towns and Villages: There are 4 towns in the district namely Tira Sujanpur (MC), Nadaun (NP), Hamirpur (MC) and Bhota (NP). The district has a total number of 1,672 villages and biggest tehsil in terms of villages is Nadaun having 453 villages. Bhoranj tehsil and Dhatwal sub-tehsil are entirely rural while other tehsils have one town each.

Demographic Profile of the Hamirpur District: Census 2011 data

An official Census 2011 detail of Hamirpur, a district of Himachal Pradesh has been released by Directorate of Census Operations in Himachal Pradesh.

Actual Population	454,768
Male	217,070

Female	237,698
D 11: 0 11	10 100/
Population Growth	10.19%
Area Sq. Km	1,118
Density/km	2 407
Proportion to Himachal Pradesh Population	6.62%
Sex Ratio (Per 1000)	1095
Child Sex Ratio (0-6 Age)	887
Average Literacy	88.15
Male Literacy	94.36
Female Literacy	82.62
Total Child Population (0-6 Age)	48,548
Male Population (0-6 Age)	25,722
Female Population (0-6 Age)	22,826
Literates	358,091
Male Literates	180,555
Female Literates	177,536
Child Proportion (0-6 Age)	10.68%
Boys Proportion (0-6 Age)	11.85%
Girls Proportion (0-6 Age)	9.60%

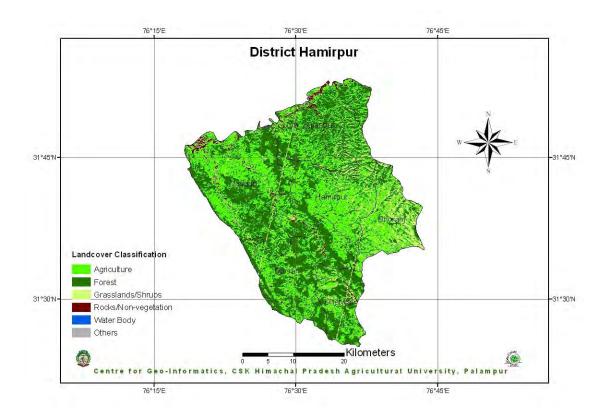
Physical features

The district is located in the south-western part of the state. It forms a part of central Himachal Pradesh and is situated predominantly in outer Himalaya or Shiwalik Zone. It lies between 31° 24′ 48″ and 31° 53′ 35″ North latitudes and 76° 17′ 50″ and 76° 43′ 42″ east longitudes and is separated from Kangra district by the Beas river in the north, Bakara and Sir Khads from Mandi District in the east while Una District falls in its west and Bilaspur District touches it in the south.

Physiographic

Physiographically the entire tract of this District is hilly and Covered by lower Himalayas known as Shiwalik range. The elevation of this District varies between 470 metres and 1,235 metres the mean sea level. The District has many low hill ranges which run north-west to south-east direction and of them Jajiar Jakh Dhar, Chaumukhi Dhar, Sola Singhi Dhar and Chabutra Dhar are prominent. Jhak Dhar runs in continuation of kali Dhar range in Kangra District. It enters in Hamirpur District near Nadaun and traverses it into south-eastern direction. The town of Hamirpur lies to the east of this range where country is undulating but in north and north-east bare and rugged hills. Deep

ravines with precipitous sides transforms the landscape into what has been described as an agitated sea suddenly arrested and fixed stones. The Chabutra hills have the same dip and strike as in the Jakh Dhar and are continued beyond the Beas to what is known as the Changar, a mass of rugged and broken hills. Sola Singhi Dhar is longest range of the tract and is known is known under various names such as Chintpurni and Jaswan Dhar in Una and by Sola Singhi Dhar in Hamirpur. Thus Dhar enters Hamirpur to the east of tappa Daruhi and traverses it in a south-easterly direction more or less parallel to the Jakh Dhar and terminated on the Satluj. Main Khads of this District are Bakar, Kunah, Man, Pung, Sukar and Sir Khads. Sukar Khad drains into Sir khad which ultimately merges in the Satluj river outside the District while all other khads drain into the Beas river. The valleys of these khads are almost flat and fertile. The District falls in the humid sub-tropical zone and mean annual rainfall varies between 1,000 to 1,400mm.



Map 6: Land cover map of Hamirpur

On the basis of physiography, climate, soil cover and geology the District is divided into 3 sub-micro regions as described below.

(i) Western Hamirpur Forested Shivalik:

This region spreads over the entire western Hamirpur District (except parts of Nadaun Tehsil). The region includes the whole of Barsar tehsil

excluding north-eastern corner, southern Nadaun tehsil, small pocket of south-western Tira Sujanpur tehsil and south-western part of Hamirpur tehsil (Map 1). It makes its limits with Beas basin in the north, Una District in the west, Bilaspur District in the south and eastern Hamirpur Shiwalik region in the east. In terms of area, this region is one of the biggest sub-micro regions of the district. This region has many low hills and fertile valleys with an altitude ranging from 518 metres to 1,112 metres above the mean sea level. According to village papers the area of the entire region comes to 483.70 sq. kms. The prominent Dhars falling in this region are Chaumukhi Dhar, Sola Singhi Dhar and Jajiar Jakh Dhar.

(ii) Eastern Hamirpur Shivalik:

The region is situated in the eastern Hamirpur embracing whole of Bhoranj tehsil, major parts of Hamirpur tehsil except north-eastern and south-western parts and small pockets of Barsar tehsil. It is surrounded by BeasBasin from north-west Hamirpur forested Shivalik from west, Bilaspur district from south and Mandi district from east. This region is most populous among all the three regions of the district.

The region is undualating and contains fertile valleys along the streams. The elevation of this region varies between 710 metres and 1,235 metres above the mean sea level. The total area of this region comes out to 318.76 sq.kms.

(iii) Beas Basin:

This region extends over northern Hamirpur district, covering whole of Tira Sujanpur tehsil except its north-western part, north-eastern fringe of Hamirpur tehsil and northern part of Nadaun tehsil. The northern boundary of this region is formed by Beas river which flows from east to westerly direction and separates it from Kangra district. In the east, Bakar khad makes its limit and separates it from Mandi district while in the south it is bounded by eastern Hamirpur Shivalik and western Hamirpur forested Shivalik regions. Masinh khad makes its western limit and separates it from Kangra district. The region is long in the east-west and narrow in width.

This region is characterized by low hills and fertile valleys with an altitude ranging from 470 metres to 1,078 metres above the mean sea level. The total area of this region comes to 300.12 sq. kms.

The geological structure of this district is mainly formed of Shivalik formations. In this district, upper reaches of Jajiar Jakh, Sola Singhi and Chaumukhi Dhars have fairly dense concentration of chir forests while thin vegetation cover is found in lower areas. In north-eastern and eastern parts of this district, scrub type of vegetation is found scattered here and there. The soil in general is brown and varies in texture from loamy sand to clay loam but under scientific analysis of the soils as classified by the N.B.S.S. and L.U.P.

(I.C.A.R) Nagpur, soils are mainly ochrepts-orthents (72) whereas ochrepts (70), orthents-ochrepts (58) and ochrepts-orthents-ustalfs (74) types of soils are found in the northern and eastern parts of this district.

Rivers and Catchment Areas:

The district is drained by a number of perennial and non-perennial streams which are tributaries of either river Beas or river Satluj. Bakar khad, Pung khad, Kunah khad and Mundkhar khad drain into Sir khad which ultimately merges with the river Satluj(Map 7).

The Beas River enters the valley of Nadaun in Hamirpur district from Kangra district. Here the Jaswan chain obstructs its further passage to south and the river flows in the north-west direction almost parallel to the strike of the hills at Murthalghat beyond Hajipur, the hills subside and the liberated water flows in an uninterrupted direction towards the plain. The region along the Beas River called the Beasbasin. This region is characterized by low hills and fertile valleys.

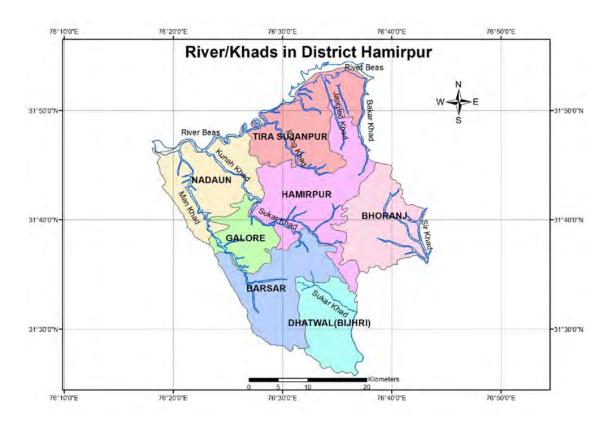
Kunah Khad: Kunah is the most important tributary of the Beas River in the district. Major tributaries of this khad are Sukar, Jhaniari, Gasota, Hathali and Sukrala Khads. These khads are perennial and have floods during rainy season.

Man Khad: Man Khad is another perennial tributary of Beas River which originates near Deotsidh and flows towards NNW, to join Beas River to the west of Nadaun. Important tributaries of this khad are Haretta, Bambloo and Matwara Khads.

Sukkar Khad: Sukkar and Sir Khads are the main khads joining the Sutlej River and Govind Sagar. These occupy the southernmost part of the district and flow towards south to directly fall into the Govind Sagar. These are ephemeral in the upper parts and become perennial in the lower parts.

Sir Khad: Sir Khad is another important khad, which is draining the eastern most part and flows towards east. This khad is ephemeral in upper catchment area and becomes perennial in lower parts.

Valleys of Man, Kunah and Pung khads contain dense concentration of villages.



Map 7: Drainage map of Hamirpur

Climate:

The district falls in the humid sub-tropical zone. The climate of the district has four broad seasons. The winter generally spread over from December to February. The period from March to June is summer. Hot and rainy season generally extends from July to September. October and November exhibit autumn. The temperature during the winter months is too cold. The district receives the plentiful rains during the monsoon period. During summer the days are extremely hot.

The maximum rainfall (Map 8) is observed in the district during July to August and minimum in the months of April and October. The hottest month is May and coldest month is January in the district. Maximum and minimum temperatures recorded in the district ranges from 20° to 40 °c.

Monthly Rainfall Data of Hamirpur District from 2004-2013

Units	Hamirpur(mm)
2004 Jan	140.60
2004 Feb	21.60
2004 March	0.000
2004 April	41.800
2004 May	47.000
2004 June	137.10

2004 July	303.600
2004 Aug	319.300
2004 Sept	98.300
2004 Oct	138.800
2004 Nov	3.100
2004 Dec	38.700
2005 Jan	70.200
2005 Feb	166.800
2005 March	74.400
2005 April	9.700
2005 May	23.000
2005 June	57.900
2005 July	407.600
2005 Aug	298.100
2005 Sept	141.700
2005 Oct	3.200
2005 Nov	0.000
2005 Dec	0.000
2006 Jan	57.200
2006 Feb	2.100
2006 March	99.700
2006 April	20.300
2006 May	112.000
2006 June	166.500
2006 July	482.900
2006 Aug	394.900
2006 Nag 2006 Sept	189.000
2006 Oct	31.700
2006 Nov	7.000
2006 Nov	28.000
2007 Jan	0.000
2007 San 2007 Feb	136.800
2007 March	163.100
2007 March 2007 April	41.200
2007 April 2007 May	33.100
2007 May 2007 June	129.700
	247.200
2007 July	
2007 Aug	548.500
2007 Sept	95.200
2007 Oct	2.100
2007 Nov	0.000
2007 Dec	19.700
2008 Jan	41.900
2008 Feb	46.800
2008 March	0.000
2008 April	47.900
2008 May	57.900
2008 June	359.100
2008 July	325.800
2008 Aug	396.100
2008 Sept	111.800
2008 Oct	30.400
2008 Nov	0.000

_	
2008 Dec	1.000
2009 Jan	17.300
2009 Feb	20.100
2009 March	26.900
2009 April	43.500
2009 May	49.100
2009 June	55.200
2009 July	330.500
2009 Aug	403.700
2009 Sept	196.300
2009 Oct	9.400
2009 Nov	10.800
2009 Dec	0.000
2010 Jan	11.800
2010 Feb	52.200
2010 March	5.800
2010 April	4.700
2010 May	38.200
2010 June	118.100
2010 July	325.100
2010 Aug	346.400
2010 Sept	250.200
2010 Oct	12.900
2010 Nov	13.300
2010 Dec	67.700
2011 Jan	31.300
2011 Feb	109.600
2011 March	35.700
2011 April	40.800
2011 May	70.300
2011 June	240.700
2011 July	223.00
2011 Aug	512.100
2011 Sept	138.400
2011 Oct	3.300
2011 Nov	0.000
2011 Dec	15.200
2012 Jan	132.00
2012 Feb	32.100
2012 March	25.500
2012 April	44.900
2012 May	1.300
2012 June	14.800
2012 July	374.600
2012 Aug	557.300
2012 Sept	235.700
2012 Oct	5.000
2012 Nov	4.000
2012 Dec	28.100
2013 Jan	45.100
2013 Feb	121.400
2013 March	80.300
2013 April	9.700

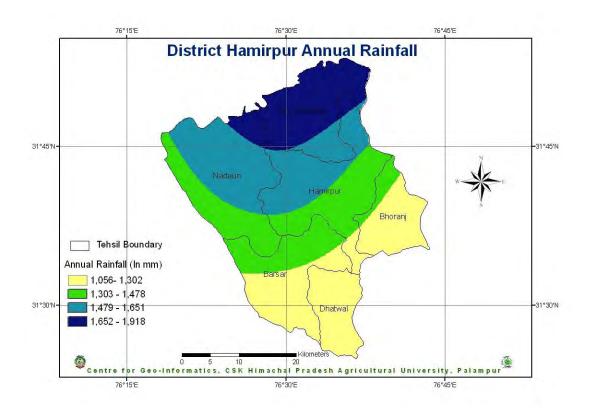
2013 May	13.900
2013 June	295.000
2013 July	441.400
2013 Aug	280.800
2013 Sept	73.400
2013 Oct	24.400
2013 Nov	12.800
2013 Dec	29.800

Source: IMD Govt. of India

Average annual rainfall data of Hamirpur District

Year	Average annual rainfall(mm)
2004	1289.9
2005	1252.6
2006	1591.3
2007	1416.6
2008	1414.6
2009	1179.2
2010	1247.1
2011	1420.4
2012	1455.3
2013	1428.0

Source: Meterological Department Govt of India



Map 8: Rainfall pattern map of Hamirpur

The climatic conditions prevailing in the district are very suitable for growing citrus crops, forestry and other economic resources.

Forests:

The forest plays a vital role in shaping the characteristic of an area. Besides, these also influence the economic and social life of the people considerably. The forest provides valuable timber, medicinal herbs, and raw materials for industries and also provides employment and plays a vital role in conserving the soil and ensure timely rains. As per state forest report of 1999, forest area in the District is 219 kms which constitutes 19.6 per cent of the total geographical area of the district. According to a revised forest survey done by H.G. Champion and S.K.Seth, the forests in this district have been classified in the following types:

(i) Slikhiwa Chil Pine Forests:

The chilis the dominant species and occurs in the zone ranging from 600 meters to 1.100 meters height. It generally form pure forest on the western and south-western slopes of the Jakh Dhar and in the Chabutra Dhar, the proportion of Chil is reduced and scrub of miscellaneous broad leaved species cover the ground. The majority of forests in Hamirpur District consist of Chil

forests. But these forests are very prone to fire causing much damage to their density.

(ii) Northern Dry Mixed Deciduous forests:

Khair is the predominant species. However, besides it other broad leaved species are also found. The altitudinal range is from 400 meters to 850 meters. The various species of plants and forests trees are found in the district such as Kikar, Ambla, Neem, Karal, Taur, Bil, Khair, Ber and Chil etc.

With the increase in human population there is pressure on the forests for timber. Firewood and fodder for cattle. Commercial exploitation of the forest is being done through H.P. State Forest Corporation. Besides, fodder yielding tree were introduced and the increasing requirement for fire wood and timber is being compensated by planting chil in government and private waste land. New Social Forestry Project, known as Social Forestry Umbrella Project, was taken up in the district from the year 1984-85. Under the project, private, community, government waste land and forest land are to be planted to bring more area under forest cover. Besides, plants are being distributed among the people at the subsidized rates for the plantation on farm land so that fuel, fodder and timber could be supplied to the people. During the year 1999-2000 the area under different types of forest cover in the district was 9,558.28 hectares under protected forests, unprotected forests 6,083.84 hectares and 6,214.12 hectares other type of forests under the management of forest department.

Fauna

The species of animals commonly found in the district are, namely, leopard (bagher), hare, wild boar (jangli soor), jackal, barking deer (kakkar), monkey and sambhar. Among the birds commonly found are namely chakor, crow, red jangle fowl (jangli murga), black partridge (kala titar), grey partridge (safed titar) and wood packer. Forests in the district are important source of fodder, fuel wood and timber.

Minerals and Mining

The rivers and khads of the district provide stones, bajri and sand used in construction of buildings and roads. There is good scope for stone crushing industry in the district.

Soil and Cropping Pattern

Soil in the district varies from sandy loam to clay. Agricultural operation in the district is carried out in two spells i.e. spring and autumn. The spring crops are called 'Ravi' and the autumn crops are known as 'Kharif'.

Land, Land use Pattern and Tenancy

First regular land settlement in Hamirpur tehsil, which part of Kangra district, took place in 1868. This was done by Sir James Loyal who later became

Financial Commissioner, Punjab. In this settlement the tenants were classified as occupancy and non-occupancy. Apart from this, there were 'Kismi' tenants known as 'Kismi' tenants of 'Mad Alf', 'Bey', Jeem Dal' depending on as to who supplies seeds and other where withal to till the land, also, whether the landlord constructs the hut for the tenants or not. These tenants were known by the name of 'Bsiku', 'Hal Chuk', 'Opahu', 'Basanu' etc. The 'Kismi' tenants could acquire occupancy rights through revenue courts under section 8 of Punjab Tenancy Act.

After the merger of erstwhile Kangra district in old Himachal, the people of merged area demanded that the tenants of merged area should have the same treatment as the tenants of old areas. Therefore, 'inter alia', one of the measures taken was that these 'Kismi' tenants were made occupancy tenants by amending section 5 of the Punjab Tenancy Act. Subsequently under the H.P. Tenancy and Land Reforms Act, 1972 these tenants got proprietary rights

The Himachal Pradesh Tenancy and Land Reforms Act gives a lot of safeguards to tenants. A land owner is duly bound to furnish receipt of rent. If tenant fails to pay rent and a decree is passed by a court for arrears, he can be discharged from it within 6 months. The tenancy can not be relinquished in favour of the owner. It can be relinquished in favour of the Government only. Even non-occupancy tenancies are inheritable. This was not the position previously when only occupancy tenancies were inheritable.

Agriculture

Agriculture is the main occupation of the people in the district. The agroclimatic conditions prevailing in the district are favorable for the growing of crops such as wheat, paddy, maize, oil seeds, potato, sugarcane etc. Ravi and Kharif are the two main crops in the district. The main rabi crops are namely wheat, barley, gram and oil seeds. The kharif crops are namely maize, paddy, oil seeds, pulses and potatoes. The land holdings of the farmers in the district are small and scattered. The farmers grow more than two crops in a year so as to get maximum production from the land. The crop rotations followed in this district are: 1. maize-toria-wheat 2.maize-potato and 3. maize-toria-wheat-Baisakh Moong. In addition to these rotations the farmers also follow paddy-wheat, maize-wheat rotations.

Hamirpur district falls under humid sub-tropical zone. The altitude of the district varies from 400 metres to 1,100 metres above mean sea level. The soils are young, shallow and sandy loam in texture. About 95 per cent of the total cultivated area in the district is rain fed. Hence the production of different crops depends entirely on rains. However, 70 per cent of the rain fall in the district is received during monsoon. Most of the water is drained away. It also creates problems of soil conservation. Some efforts have been made for water harvesting by constructing water storage like small irrigation tanks, ponds,

check dams etc. Besides, improved high yielding varieties of seeds of maize, paddy, wheat, mash and moong have been introduced in the district and fertilizers are made available to the cultivators. In addition to it, efforts are also being made to encourage the farmers for growing vegetables and improved varieties of seeds of vegetables like peas, radish, turnip, lady's finger, tomato etc.

Irrigation

To increase the crop production, the importance of irrigation is well established, adequate and timely supply of irrigation water to crops is essential in the agriculture production, particularly in areas where the rainfall is scanty and irregular. The growth in production is possible through multiple cropping, which in turn depends upon irrigation. The main sources of irrigation in the district are government's lift canals, government's tube wells and well etc. The percentage of net irrigated area is only 18.75 per cent of total net sown area during this period. The development of irrigation system is difficult as most of streams/khads flowing within the district are non-perennial and become dry during the summer season. The rivers/streams which have perpetual source of water have deep ravine and lifting of water for irrigation is costly.Out of the total 1784 hectares irrigated area, 1,670 hectares were irrigated more than once during year 2008-2009. The proportion of paddy area under irrigation was 41.25 per cent in 2008-2009. The percentage of area irrigated under wheat is 4.78 per cent and maize is 2.75 per cent in the district. About 28 per cent of area under vegetables is irrigated.

Horticulture

Horticulture is of great significance to the people of the state. It goes a long way in improving the economic conditions of the people. District Hamirpur falls in the sub-tropical zone of the state. As such apple, the main fruit crop of Himachal Pradesh, is not grown in the district. However, a variety of other fruits are being grown in the district. According Horticulture department area and production of different fruits for the year 2009-2010 was 2639.18 hectares and 2567.29 Tons in the district. The district has three progeny-cum-Demonstration Orchard at Bhumpal in Nadaun tehsil where pear, mango, kinnow are being grown for the benefit of the farmers and the necessary at Gagal is providing plants of Lime, Kinnow, Mango etc. to farmers at subsidized rates. Another progeny-cum-demonstration orchard is located in Badiana in Bhoranj tehsil. Since there is no established market of fruits in the district, the fruit growers themselves send their fruits to neighbouring state of Punjab. H.P.M.C. a state public undertaking is marking fresh fruits and vegetables, the unmarketable surplus and marketing the processed products. Fertilizers to the fruit growers are being supplied by the HIMFED organization through the agriculture services societies. All pesticides are supplied to the growers through the A.D.O. (Horticulture) posted in the Block. Besides, horticulture inputs are provided on subsidized rates to the farmers for the development of horticulture. In recent years mango has emerged as the important fruit crop. Litchi is also gaining importance in certain regions of the district.

Sericulture

Sericulture is an agro-based intensive industry. The climatic conditions are quite congenial for the subsidiary occupation to several poorer families. Sericulture has been give the status of priority industry and is ADCissible for all those facilities, which are being given to the priority industries in the Pradesh. The silk worm rearers are given silk seed and mulberry samplings at highly subsidized rates. Hamirpur district has six sericulture farms/centres at Nadaun, Kangoo, Ladraur, Bhareri, Jangal Berri and Bijhri. These farms/centres provide silk seed and mulberry samplings to farmers besides the technical guidance in rearing

Animal Husbandry

Livestock is the main wealth next to agriculture of rural population. Almost every household in rural areas invariable keeps a few cows, buffaloes, sheep and goats besides some rear pigs and keep poultry birds. Animals are kept for milk, meat and providing manure to the fields. The district has a large number of livestock. As per the livestock census of 2008 the total buffalos were 113946 and total domestic animals were 192965 (including buffalos) in the district.

Among the livestock, the proportion of buffaloes was 59.05 per cent of total livestock, 17.3 per cent of cows, 7.02 per cent sheep and 16.05 per cent of goats. The livestock of the district is dominated by the milch cattle which mainly provide milk for local consumption. The poultry farming is also becoming popular among the enterprising farmers recently. The total number of poultry birds was 40579 in 2003. Among the poultry birds, the proportion of chickens was 99.9 per cent, 0.01 per cent of ducks. For the prevention of common infectious diseases of livestock, veterinary aid is of great importance. During the year 2011 there were 138 veterinary institutions in the district. These institutions are providing veterinary aid for common ailment and also helping in prevention and control of contagious diseases. In order to improve the life standard of the people, vigorous efforts are being made to improve the production of milk. A milk is chilling plant at Jalari has been set up. The milk is collected through farmers and then sold in Hamirpur town. Efforts are being made through District Rural Development Agency Hamirpur to improve the breed of the livestock in the district. For the development of sheep and wool, Hamirpur district has the privilege to have the Government sheep breeding farm at Tal. This farm is making constant efforts to improve the wool quality of the sheep through the cross breeding. Dairy production is an integral part of the Animal Husbandry and aims at improving the economic conditions of farming community in the state. The Himachal Pradesh State Co-operative Milk Producers federation is implementing dairy development activities in the state by providing a remunerative outlet for the surplus milk to the rural milk producers residing in remote and for flung areas.

Fisheries

Hamirpur district has limited inland sources of water in the shape of river, rivulets, ponds and tanks. As already stated, Main River of the district is Beas, Which flows along the boundary of Kangra district and covers about 45 kms of length of running water in the district from Sachuhi to Chamukhas. Two rivulets namely Kunah khad (37 kms.) and Man khad (40kms.) are the main tributaries of the Beas. The fisheries of district Hamirpur comprises of natural fish fauna, inhabiting in the river and its two main tributaries and other streams, which are Tor Putitora (Mahaseer), Gulguli, Gid, Kalbans, Bam, Sal, Malhi, Singhara, Singhi, Kunhi and Mori.

The major schemes under fisheries in order to uplift the economic conditions of the people in the district relate to management and development of riverine fisheries and pond fisheries. These schemes aim at increasing the output of better quality of fish in the rural areas of the district. Besides trainings, subsidies are also being provided to the fishermen,

The local Panchayats also auction the panchayat ponds to the fishermen which earn revenue to them. During year 2009-2010, there were 343 registered fishermen in the district and they caught 255 metric tones of fish. With the efforts of the state government, the government of India has not only increased substantially the subsidy component being paid to the beneficiaries under the on going 'fish Farming Development Schemes' but also initiated number of new schemes.

Industries

There have been no large scale industrial units in the district due to lack of infrastructural facilities, resources and demand. An industrial estate has been set up at the distance of 2 kms from Hamirpur. Some of the unit has been established. These are M/s Verma Steel Fabricators, M/s Dev Raj Sewing Machine Assembling, M/s Jagdamba Association has set up resin and turpentine factory at Kahdru assisted by village and Khadi Board and P.V.C. shoes at Hamirpur.

The district has engineering college, polytechnic and ITI. A good number of skilled ex-serviceman are also available in the district. Under various programmes, incentives and subsidies are being provided to entrepreneurs to promote the industrial growth in the district. Financial assistance is being given to educated unemployed youths in this regard. Whatever industrial units have

been set up in the past are either servicing units such as atta chakki, cotton carding, oilseed crushing, automobile workshops and other mechanical workshops etc. Some smallscale establishments such as cottage type units undertaking production of gate, grills, agricultural implements, water tanks, furniture both steel and wooden, soap units, polythene sheet, dhoop making etc. have come up on the basis of demand. There are also some cottage type hosiery, knit wear, bakery and candles manufacturing units functioning in the district.

The State Handicraft Board runs a training and production centre and also procurement units in the district. The Board has shawl producing centers at Hamirpur and Dugna. A bamboo basket making centre is functioning at Bhalet and a carpet weaving centre at Ranghr in Tira Sujanpur tehsil. All the aforesaid units are quite small.

As per economic census conducted by the Department of Econmics & Statistce, Himachal Pradesh in the year 2005 the number of enterprises in the district was 23446. In rural area agriculture related are 11 and non-agricultural are 3473. In urban area agriculture related are 355 and non-agricultural are 19607.

While analyzing the distribution of non-agricultural enterprises by major activity groups, it is revealed that both in rural and urban areas retail trade, community, social, personal services and manufacturing were the most important activity groups followed by hotels and restaurants.

Health

There are one Hospital, one Civil Hospital, 5 CHC/Block Hospital (Sujanpur, Bhoranj, Barsar, Galore & Nadaun) 24 PHC with available bed capacity. Similarly there are 3 Ayurvedic Hospitrals & 69 Dispensaries in Hamirpur District.

Education

The literacy percentage in the Hamirpur district 84.53 % are per 2011 census which is higher than the national average. As per 2011 Census data the number of primary school 508, 118 Middle School , 96 High School, 75 Senior Secondary School , 1 Post graduate College, 5 College , 1 Polytechnic College, 1 Engineering College, 4 I.T.I College, 1 Sainik School & 1 Jawahar Navodaya Vidyalya .

Trade, Commerce and Banking

The district has no big trading centres. The trade and commerce in the district is by and large confined to the local requirements only. The main centres of whole sale business are Hamirpur, Nadaun, Bhota, Tira Sujanpur, Mehre, Bijhari, Bhoranj and Chakmoh. Almost all the major items of the daily

requirement are imported from the plains except few cereals like wheat and maize which are locally grown and marketed. Among the exports the main articles are fish, dhoop, citrus fruits, sub-tropical fruits like mango, papaya etc.

The banking services have a great role in economic growth. The district has adequate banking facilities, most of the banks are situated at district, tehsil and block headquarter. During the year 2013-2014, 133 branches of commercial banks were functioning in the district. The Punjab National Bank is the lead bank of the district.

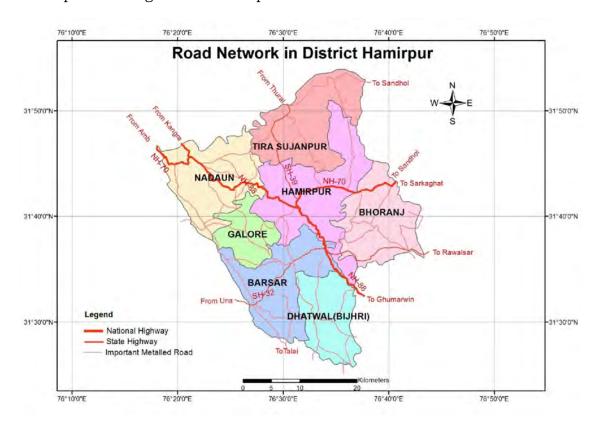
Table 2: Bank branches in Hamirpur

Sr. No.	Bank Group	No. Branches District	Deposit (Crores)	Advance	Debt- Deposit Ratio
1.	Punjab National bank	35	1799.16	292.86	16.28
2.	Allahabad bank	1	40.08	10.15	25.32
3.	BOI	1	9.13	2.60	28.48
4.	СВ	3	74.90	13.21	17.64
5.	СВІ	4	137.43	25.79	18.77
6.	OBC	2	96.32	17.80	18.48
7.	SBI	10	678.66	107.54	15.85
8.	SBP	8	437.60	83.15	19.00
9.	UCO	8	320.10	71.87	22.45
10.	UBI	1	8.97	1.80	20.07
11.	VB	1	10.27	2.58	25.12
12.	SYN	1	11.02	3.48	31.57
13.	CORP	1	10.17	5.19	51.03
14.	IDBI	1	13.85	2.28	16.46
15.	IOB	1	0.70	0.03	4.08
16.	Pb& Sindh	1	0.57	0.04	7.02
17.	HGB	7	40.25	15.40	38.26
18.	ALBB	4	4.94	17.97	100
19.	KCCB	40	1250.74	445.25	93.14
20.	HDFC	2	30.04	7.64	25.43
21.	ICICI	1	19.24	3.73	19.39
Total		133	4994.14	1130.36	22.63

Transport

Road transportation is the life of the economy of the district. In view of topographical constraints, road are the only means of transportation in the district. The district is neither linked with air nor with railway line. Therefore, the entire goods transportation is done by road in the district. The district has a good number of roads and it is connected by road to the outside areas. The goods transport is almost in the hands of private truck operators while in case

of passenger transport, the buses of various regions are mainly plied. Himachal Pradesh Road Transport Corporation, HRTC Hamirpur is plying a fleet of 107 buses. Punjab Roadways are also plying buses on various routes in the district. The district headquarters Hamirpur is linked with the state capital by a bus route. The main bus routes linking up the district with other states are, namely Hamirpur-Haridwar, Awahdevi-Delhi, Hamirpur-Amritsar, tira Sujanpur-Delhi, Hamirpur-Chandigarh and Hamirpur-Manali-Ladakh.



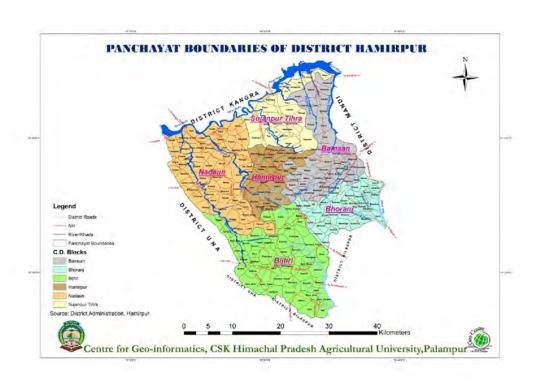
Map 9: Road network of Hamirpur

The state highways Nos. 32 & 39 and national highway nos. 70 & 88 pass through the district.

During the period 2008-09, total 5101 vehicles were registered in the district. The following statement shows the number and type of motor vehicles registered during year, 2008 & 2009.

Gram Panchavats

There is 229 Gram Panchayats (Table 3) in the district by the end of December, 2011. Each Gram Panchayat consists of one Pradhan, one Up-Pardhan and five members duly elected by voters of that Gram Panchayat. Number of members varies according to the population of Gram Panchayat.



Map 10: Panchayat map of Hamirpur

Table 3 Block wise number of panchayat

	District Hamirpur	
Sr. No.	Name of Block	No. of Panchayats
1.	Nadaun	58
2.	Sujanpur	20
3.	Hamirpur	24
4.	Bamson	46
5.	Bijhadi	48
6.	Bhoranj	33
Total	06	229

Hazard, Risk, Vulnerability and Capacity Analysis

3.1Hazards & Vulnerability In Hamirpur

Hamirpur district is situated at the elevation varies from 400 meters to 1232 meters having the configuration ranging from the almost flat-lands that border the portion of rivers Beas to the lofty heights of cliffs and precipitous slopes of hill-ranges. There are three principal ranges which run in a South-Easterly direction. It is situated at lower elevation and comparatively warmer but has some hilly ranges covered with Pine forests. It is located between Latitude 31 24'28"-31 53'35" north latitudes and 76 17'50" -76 43'42" east longitudes. It has a deeply dissected topography, complex geological structure and a rich temperate flora in the sub-tropical latitudes. Located in Shivalik region, Hamirpur is highly vulnerable to the natural disasters. Earthquakes, landslides, cloudbursts, flash floods; forest fires, avalanches etc have caused tremendous loss to the State. Besides loss of lives, these disasters also resulted into considerable loss to state exchequer.

Apart from the hazard prone geographical conditions, Hamirpur is also vulnerable due to the unplanned developments, rapid urbanization, and growth in the population and temporary settlements in urban areas. Difficult accessibility in the rural areas along with lack of awareness on disaster risk reduction and preparedness has also contributed to increase in risk of the District's population. As per the Vulnerability Atlas of India, in Himachal approximate 70percent houses are made of mud, un-burnt brick and stone wall and as Hamirpur is part of Himachal Pradesh, the condition is not different in this district. This is a sign of very high vulnerability, considering probability of Earth quake, Landslides, Flash flood and Cloud burst etc. Beas river flows through the northern part of and Satluj river flows through the southern part of district Hamirpur. Both of these two rivers namely Beas and Satluj are the famous rivers in Himachal Pradesh. The District has a total area of 1,118 sq. kms, forming 2.01 per cent of the total area of the state. It ranks 12th in area amongst the Districts of the state.

In the disaster prone map of the country, Himachal Pradesh has attained its position among first five states in respect of natural hazards, i.e., earthquakes, flash floods triggered by cloud burst, landslides, avalanches and forest fires, consequently Hamirpur as part of Himachal Pradesh can be categorized in the same category. Frequent droughts in summers are also falling in zone (IV) of seismic belt. These disasters have caused immense loss of property, natural wealth, and human lives. In addition to the natural causes, various manmade

activities have also added the multiplier effect and created the imbalance in overall ecology of the area. All these factors have combined to turn this state into a vulnerable state, affected by almost all the types of natural and manmade disasters.

A brief overview of all these hazards and their potential impact is documented in the following sections. The disasters, which generally occur in this district, are as under in (table 4)

Hazard Type	Level of Vulnerbility
Earthquake	High
Landslide	Low
Floods	Low
Forest Fire	High
Drought	Medium
Cloud Burst	Low

Table 4: Types of disasters in Hamirpur district

EARTHQUAKE

Earthquakes have several effects that can damage structures, disrupt infrastructure and even endanger our daily lives. Ground shaking is geographically the most common effect of earthquakes.

- **a.** Surface rupture may occur directly along the fault.
- **b**. Ground failure occurs when soil saturated with water, is on a slope, or is otherwise weak and cannot support structures or even itself, after being subjected to ground shaking.
- **c.** In addition to the nature of the earthquake and the site (such as the magnitude, duration, soils type), the characteristics of the structure, including its type, materials, design, quality of construction and maintenance will determine whether it can withstand the effects of a quake. It may be noted that buildings having walls properly secured and lain in cement, with sound foundations, suffer the least damage during earthquakes.
- **d.** There are other types of buildings, besides un-reinforced masonry ones, that do not withstand the impact of earthquakes. The most serious hazards, and also the most difficult policy issues, are posed by non-ductile concrete frame structures. "Soft-storey" buildings, those in which at least one storey often the ground floor has much less rigidity and strength than the rest of the structure, are significant hazards. Small, wood-frame residential buildings can resist ground shaking, especially if they are bolted to their foundations, and

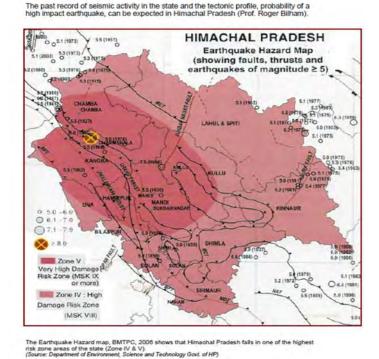
have strong first stories. Most deaths and injuries during earthquakes are caused by the failure of buildings and structures. The number of casualties also depends upon the time of occurrence of the earthquake.

e. The impact of earthquakes differs for urban and rural areas, primarily because of the nature of infrastructure, the quality of housing and occupational differences. In rural areas, it is primarily the housing and physical structures, including irrigation infrastructure, which may suffer extensive damage, without necessarily destroying crops. In the urban areas on the other hand, in addition to housing and physical infrastructures, it may also disturb the service infrastructure such as water supply, sewage, telephones, electricity, piped gas supply etc. which are essentially underground installations and hence exposed to direct impact.

Located on south western part of Himachal Pradesh, Hamirpur district lies in the hilly tract covered by the lower Himalayas in Shivalik range It is situated between 76 17'50" -76 43'42" east longitudes and 31 24'28"-31 53'35" north latitudes. Although it is a seismic prone area but in the recent past the district has not witnessed any major earth quake, minor tremors however have been occurring off and on.

In this district most of the houses are made of mud, un-burnt and stone brick wall, which can't resist the shaking of earthquake. In rural areas most of the construction is un- engineered construction, which is highly vulnerable to earthquakes. In urban areas the housed have been built in haphazard manner. The number of multistory buildings is rampantly increasing. All these factors are contributing in increase of risk.

The Hamirpur district is vulnerable to multi-hazards viz. earthquake, road accidents. Forest fires, urban fires, floods, landslides, hailstorms, dam burst, drought, but particularly **EARTHQUAKE**, as the district falls in the highest seismic risk zones of the country i.e. Zone V and IV. The 90.9 % area of the district is situated in Zone V (Map 11) and rest 9.1% of area falls in Zone IV.



Map 11: Earth quake hazard map of Hamirpur

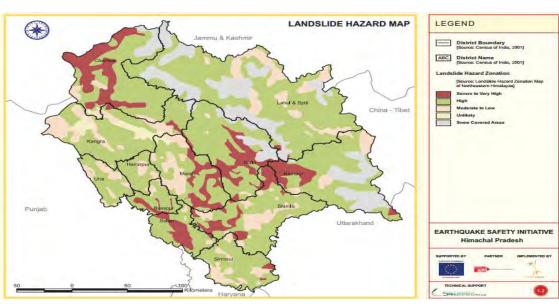
The Earthquake Hazard Map shows that 90.9 % area of the Hamirpur district is situated in Zone V and rest 9.1% of area falls in Zone IV.

Besides loss of lives, these disasters also resulted into considerable loss to state exchequer. Due to the unplanned developments, rapid urbanization, and growth in the population and temporary settlements in urban areas increases the risk of loss due to eathquake hazard. Difficult accessibility in the rural areas along with lack of awareness on disaster risk reduction and preparedness has also contributed to increase in risk of the District's population. As per the Vulnerability Atlas of India, in Himachal approximate 70 percent houses are made of mud, unburnt brick and stone wall and as Hamirpur is part of Himachal Pradesh, the condition is not different in this district increases the loss due to earthquake hazard.

LANDSLIDES, DEBRIS FLOW AND SUBSIDENCE

Hamirpur district is generally plain in area having some hills. Land slides generally happen during the rainy season damaging houses, human lives, cattle etc. and can lead to road blocks. To deal with this type of disaster the machineries and equipments at three HPPWD divisions can be put to use. The district ADCinistration is able to meet this type of situation with the help of HPPWD and villagers. Landslide is common hazard in Hamirpur, which causes risk to life and property. Damage of houses, roads, means of communication,

agricultural land, are some of the major consequences of landslides. The fragile nature of rocks forming the mountains, along with the climatic conditions and various anthropogenic activities has made the district vulnerable to the Landslides. The vulnerability of the geologically young, unstable and fragile rocks has increased many times in the recent past due to various unscientific developmental activities. Deforestation, unscientific road construction, terracing and water intensive agricultural practices, encroachment on steep hill slopes are the anthropogenic activities, which have increased the intensity and frequency of landslides. Man induced unplanned construction activities are very much responsible for landslides. Unscientific land use pattern is the major cause for the deteriorating situation. Experts point out that unplanned expansion of town is overloading and destabilising slopes. Overloaded slopes may initially cause minor landslides , but in later stage these could trigger larger landslide.



Map 12: Landslide hazard map of Hamirpur

Source: Himachal Pradesh Vulnerability Atlas

DROUGHT:

Drought is a period of time without substantial rainfall that persists from one year to the next. Drought is a normal part of virtually all climatic regions, including areas with high and low average rainfall. Drought is the consequence of anticipated natural precipitation reduction over an extended period of time, usually a season or more in length. Droughts can be classified as meteorological, hydrologic, agricultural, and socioeconomic. (Table) presents definitions for these different

types of drought. Droughts are one of the most complex of all natural hazards as it is difficult to determine their precise beginning or end. In addition, droughts can lead to other hazards such as extreme heat and wildfires. Their impact on wildlife and area farming is enormous, often killing crops, grazing land, edible plants and even in severe cases, trees. A secondary hazard to drought is wildfire because dying vegetation serves as a prime ignition source. Therefore, a heat wave combined with a drought is a very dangerous situation.

Drought is the major problem of the district. The sources of drinking water as well as *nalla* etc. dry-up during the months of summer, due to depleted ground water level and insufficient rainfall. This problem is being faced in Bamson, Bhoranj, Hamirpur, Bijhari and some parts of Nadaun and Sujanpur blocks. The district ADCinistration is combating this problem by deploying drinking water tankers, installation of deep water hand-pumps and reviving the traditional water sources.

Table 5: Drought classification table

<u> </u>	
Drought type	Definition
METEOROLOGICAL DROUGHT	The degree of dryness or departure of actual precipitation from an expected average or normal amount based on monthly, seasonal, or annual time scales.
HYDROLOGICAL DROUGHT	The effects of precipitation shortfalls on strean flows and reservoir, lake, and groundwater level
AGRICULTURAL DROUGHT	Soil moisture deficiencies relative to water demands of plant life, usually crops

Drought impacts (Table) large areas and crosses jurisdictional boundaries. All existing and future buildings, facilities and populations are exposed to this hazard and could potentially be impacted. However, drought impacts are mostly experienced in water shortages and crop/livestock losses on agricultural lands and typically have no impact on buildings. The economic impact of droughts can be significant as they produce a complex web of impacts that spans many sectors of the economy and reach well beyond the area experiencing physical drought. This complexity exists because water is integral to our ability to produce goods and provide services. If droughts extend over a number of years, the direct and indirect economic impact can be significant.

Table 6: Drought categories and impacts

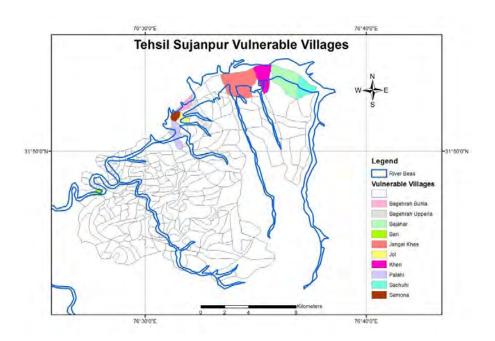
DESCRIPTION	POSSIBLE IMPACTS
Abnormally Dry	Going into drought: short-term dryness slowing planting, growth of crops or pastures; fire risk above average. Coming out of drought: some lingering wat deficits; pastures or crops not fully recovered.
Moderate Drought	Some damage to crops, pastures; fire risk high; streams, reservoirs, or wells low, some water shortages developing or imminent, voluntary water use restrictions requested
Severe Drought	Crop or pasture losses likely; fire risk very high; water shortages common; water restrictions impose
Extreme Drought	Major crop/pasture losses; extreme fire danger; widespread water shortages or restrictions
Exceptional Drought	Exceptional and widespread crop/pasture losses; exceptional fire risk; shortages of water in reservoir streams, and wells, creating water emergencies

FLOODS:

Although Hamirpur is a drought prone district, but flood like situation can arise during the rainy season. The river Beas flows in this district from Sujanpur to Nadaun and then enters the Kangra district. There are 5 big rivulets (small rivers have less water generally and very high in rainy seasons) namely Kunah, Seer, Maan, Sukkar, Chainth Khad flowing through different parts of the district. Never the less, major threat of floods remains from Beas River.

Table 7: Flash flood vulnerable villages

Name of River	Vulnerable	Area (Hact)	Houses	Population
	Villages			
Beas	 Sachuhi 	119	46	223
	2. Bajahar	370	54	256
	3. Kheri	266	200	874
	4. Jangal	560	294	1303
	5. Beri	58	119	533
	6. Baghera	161	273	1211
	7. Samona	87	50	237
	8. Plahi	55	29	132
	9. Jol	19	62	283
Sir, Sukker &				
Jahu				



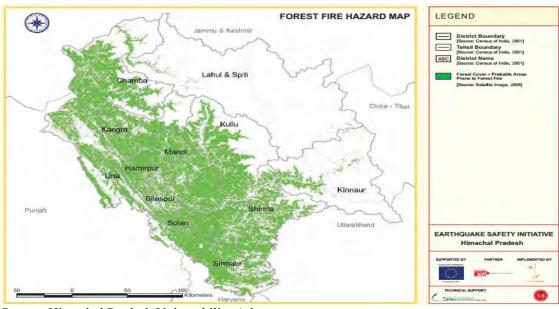
Map 13: Vulnerable villages for flash floods

There are 9 vulnerable villages inhabiting on the bank of the Beas River having 1127 Nos. of houses and about 5050 population. Whenever excess water is released by BBMB in River Beas early warning through wireless message is received and the message is conveyed to the public through revenue field staff/panchayat secretaries and Gram Panchayat functionaries. No major flood incident causing damage to human lives has been reported in the district. In any emergent situation the villagers of these 9 vulnerable villages can be evacuated and can be provided shelter in 13 Nos. primary/ middle schools which are situated in the vicinity of these villages. Medical help can be given through 11 Nos. of Govt. medicare centres present in the area.

FOREST FIRE AND URBAN, RURAL FIRE:

The kind of disaster happen normally in summer and mostly in the forest of the district 227.48 Sq. K.M. area of the district is forest which contains Chir & Khair types of tree in it. The leaves of the trees dry up in the month of April and May and these dry leaves catch fires. In more sensitive forest areas controlled fire is carried out by the Forest Department so as to avoid major forest fire. In District Hamirpur about 64 nos. of Forest Gaurds are deployed, who keep a close watch on fire incidents and in any eventuality they report to Fire Services. In peak summer season to keep a close vigil 59 Nos. of VAN RAKHA'S are deputed by the Forest Department. Occurrence of fire incidents in the house and cow sheds of the villagers and shops etc. are also

reported in the district. The major fire incident which occurred in the district was at Nadaun on 23rd July, 05 where a shop caught fire damaging property worth 10.00 lakhs; with the timely help Fire Brigade property worth 30.00 lakhs was saved.



Map 14: Forest Fire hazard map of Hamirpur

Source: Himachal Pradesh Vulnerability Atlas

Road Traffic Injuries and Deaths

In a 2005 report by the World Health Organization (WHO), injury was described as "one of the leading causes of mortality and morbidity worldwide." More specifically, road traffic injuries were identified as the second leading cause of death worldwide for people aged 5-14 years, the leading cause of death for those aged 15-29 years, and the third leading cause for people aged 30-44 years. What is particularly concerning about these statistics is the fact the 15-44 year-old age group also represents the most economically productive age group of any society

In light of increased motorization, industrialization, and rapid economic growth – it can be reasonably expected that the incidence of road traffic injuries will likewise increase. In 1996, WHO projected that injuries would be the first or second leading cause of healthy years of life lost worldwide by 2020 – an increase of 109% from 1990, surpassed only by cancer – and the fifth leading cause of death for all ages combined by 2030.

The consequences of these increases have the potential to overwhelm low- and middle-income countries (LMICs) in particular. As it stands now, in the case of

road traffic injuries, which account for one quarter of all injury-related deaths, LMICs suffer over 90% of the word's road fatalities while owning less than 50% of the world's registered vehicles. Furthermore, the majority of road traffic injury victims are not vehicle drivers, but rather pedestrians and vehicle passengers, implying a vulnerability to traffic-related injuries regardless of ownership. A clearer example of this disparity can be found in India, which has "1% of the motor vehicles in the world, but bears the burden of 6% of the global vehicular accidents."

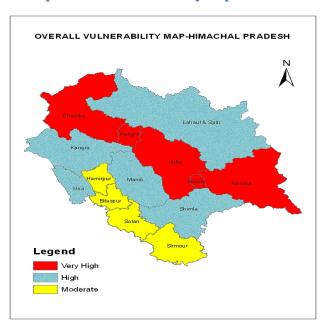
Nonetheless, the effects of injury go beyond fatalities alone; after all, not every injury results in death. Both temporary and permanent disability can have equally significant consequences on individuals, families, and their communities – loss of income due to disability can extend beyond the victim when family members have to leave work to stay at home and provide care for the victim, as well as subsequent losses in productivity within the local work force.

3.2 Risk Identification:

As previously seen in the previous section, the Hamirpur district is highly vulnerable to various natural disasters. This coupled with a multiple of other factors like limited awareness on disaster risk reduction and preparedness and improper planning have contributed to increase in risk to the people. It is certainly possible to reduce the potential impact of disasters by evolving appropriate preparedness, preventive and response plans. Risk identification and assessment constitutes the first step in developing the District plan. Every care has been taken to provide accurate information in the atlas to draw a realistic picture of the pertinent and latent risks. Any discrepancy present in the Atlas can be attributed to limited access to the available data. This document can be further refined by adding more information from the available resources and taking into account the dynamic nature of risks.

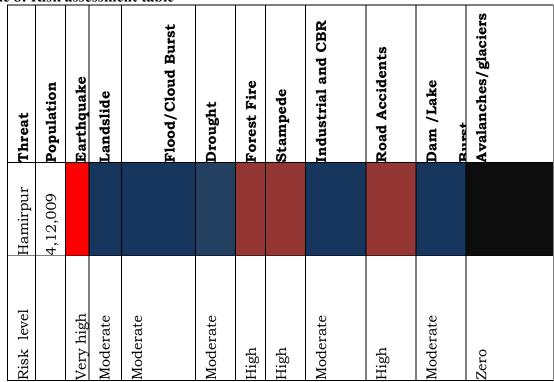
3.3 Overall Vulnerability of District Hamirpur:

Overall Vulnerability of district Hamirpur on the basis of above analysis and according to the figure that compiled below by the H.P state cuncil of science & Technology shows that Hamirpur district to be moderately vulnerable to hazard suspetability.



Map 15: Overall Vunerability Map

Table 8: Risk assessment table



3.4 History of Disasters and Hazard Profile of Hamirpur District

1. Seismic Hazard Profile of Hamirpur

Hamirpur was the part of KANGRA district until 1st September 1971.

Date	Locations affected	Magnitude Intensity	Damage
4th April, 1905	Hamirpur, Kangra	Magnitude 8.0	Approx. 19,800 people died

Table 9: Districts of Himachal Pradesh with Seismic Intensities

Sr. No.	Name of District	Seismic Zones	Intensity MSK IX or	MSK VIII % area
			more % Area	
1.	Kangra	V/IV	98.6	1.4
2.	Mandi	V/IV	97.4	2.6
3.	Hamirpur	V/IV	90.9	9.1
4.	Chamba	V/IV	63.2	36.8
5.	Kullu	V/IV	53.1	46.9
6.	Una	V/IV	37.0	63.0
7.	Bilaspur	V/IV	25.3	74.7
8.	Solan	V/IV	2.4	97.6
9.	Lahaul & Spiti	V/IV	1.1	98.9
10.	Bilaspur	V/IV		100
11.	Shimla	V/IV		100
12.	Sirmour	V/IV		100

2. Landslide Vulnerable areas in Hamirpur (in square kilometres)

Severe to very high	0
High	851
Moderate to low	204
Unlikely	45
Total area(Approx.)	1100

The regions around the Kakker Sub division, 3.0 to 3/300 kms near village Palahi Sujanpur Bagehra Sandhol road, and 17 to 18 kms near village Bajahar Sujanpur Bagehra Sandhol road and 3.0 to 3/800 km area near village Bereda kakker Sachuhi road are identified as the sliding prone areas of Hamirpur.

As per BMTPC, Landslide Hazard Zonation Atlas of India, a total of 851 sq. km of Hamirpur district fall under high landslide vulnerable area, 204 sq. km area fall

under moderate to low lanslide vulnerable area out of total area of about 1100 sq kms.

3. Flood Hazard of the District Hamirpur

On 13th Aug, night due to heavy rainfall causing flood in Sear Khadd, due to this Jahu Valley Bridge broke down and in this incident 3 local people of hamirpur district washed away and lost their lives.

4. Road traffic injuries and deaths

The highly mountainous terrain of district also results in many road accidents. With the increasing number of vehicles the cases of road accidents are also increasing. The history of road accidents is given in the following table:

Table 10: Road traffic injuries and deaths in Hamirpur

Year	Incidents	No. of deaths	Injured	Vehicles involved
2005	176	45	252	249
2006	148	27	317	189
2007	146	27	251	164
2008	134	27	226	172
2009	143	38	210	197
2010	159	27	270	226
2011	126	31	220	165
2012	128	35	334	168
2013	151	54	209	211
2014upto 31.07.2014	90	15	287	125

Institutional Mechanism

4.1 Institutional Mechanism:

PREMISE

The District ADCinistration has principal responsibility for natural, technological, human induced and biological emergency preparedness, response, relief and rehabilitation, yet other departments has also shared responsibility with respect to any grave or imminent danger which can cause loss to life and property.

Disasters could, individually or in combination, cause a grave emergency condition in any area of the district. It can differ in scope and intensity, from a small local incident with minimal damage to a multi-district disaster with extensive loss of life and collateral damage.

The actions of prevention, preparedness, mitigation and response and recovery operations are conducted by the District ADCinistration. Local authorities will exhaust their resources, and then use resources of other support agencies volunteer groups, the private sector, community, and/or neighboring districts.

State assistance will supplement District ADCinistration efforts, if it is clearly demonstrated that it is beyond the local capability to fend the disaster situation.

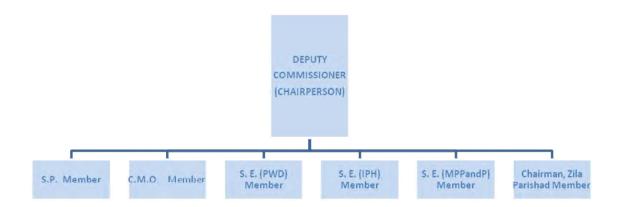
District Disaster Management Authority

The District Disaster Management Authority (DDMA) will act as the district planning; coordinating and monitoring body in accordance with the guidelines lay down by the State Authority.

As per **Section 25 of the DM Act 05, A DDMA** for Hamirpur district has also been constituted, consisting of the following members:

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

DDMA



The roles and responsibilities of the DDMA

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 nongovernmental organisations, setup, 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. 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 centres 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 as or 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. An effective disaster management strategy must be supported by a quick decision making process which will include the issues related to warning, conduct evacuation and rescue & relief operations in the event of a disaster. This requires a core team of senior decisionmaker shaving ADCinistrative control over the key resource organisations. Therefore, it is utmost need to constitute a DCG (District Crisis Group) with District Deputy Commissioner as its leader. The organisational structure for disaster management in the district has been proposed here, which recommends the District Magistrate as the nodal officer for control and co-ordination of emergency activities.

DISTRICT DISASTER MANAGEMENT AUTHORITY

This authority has been constituted under **section 25 (1) of the Disaster Management Act 2005** under the chairmanship of District collector i.e. Deputy Commissioner with the following officers as its members:-

- 1) Superintendent of Police
- 2) Chief Medical Officer
- 3) Superintending Engineer (PWD)
- 4) Superintending Engineer (IPH)

- 5) Superintending Engineer (MPP &Power)
- 6) Chairperson Zila Parishad
- 7) Additional District Collector/Additional Deputy Commissioner (Protocol) as Chief Executive Officer of the Authority.

POWERS AND FUNCTIONS OF DISTRICT AUTHORITY

As per **section 30 of the Disaster management Act 2005**, this authority has been vested with the following powers and functions:-

- 1) It shall act as the planning, coordinating and implementing body in the district for disaster management and take all measures for disaster management in the district as per the guidelines in the National/state Disaster management plans
- 2) To prepare the District Disaster management Plan of the district and its periodic review and update.
- 3) To identify the areas vulnerable to the different hazards in the district and measures for its prevention, mitigation thereof by the different departments and the local authorities at the district level.
- 4) Give direction to the different departments and the local authorities to take measures for prevention and mitigation of the disasters in the district.
- 5) Monitor the implementation of the disaster management plans prepared by the departments at the district level.

District Disaster Management Advisory Committee

District level Disaster Management Advisory Committee(s) has been appointed by the District Disaster Management Authority (DDMA) to take advice on various subject specific fields within the overall context of disaster management.

Sl No Appointment/Name Designation in the Committee

- 1. Deputy Commissioner, Chairman
- 2. Chairman ZP, Co-Chairman
- 3. Superintendent of Police, Member
- 4. Additional DM, Member Secretary
- 5. District Revenue Officer, Member
- 6. SDM, Hamirpur, Member
- 7. Chief Medical Officer, Member
- 8. Superintending Engineer PWD, Member
- 9. Superintending Engineer I&PH, Member
- 10. Superintending Engineer HPSEB, Member
- 11. District Food and Supplies Controller, Member
- 12. Commandant Home Guards, Member

- 13. Fire Officer, Member
- 14. District Public Relations Officer, Member
- 15. GM Telecommunications, Member
- 16. Divisional Forest Officer, Member
- 17. Dy Director Animal Health & Breeding, Member
- 18. Executive Officer, Municipal Council Hamirpur, Member

Non Official Members

- Prof.Prem Kumar Dhumal (Honble MLA)
- Sh Ishwar Dass Dhiman (Honble MLA)
- Sh. Inder Dutt Lakhanpal (Honble MLA)
- Sh Vijay Agnihotri (Honble MLA)
- Sh Narender Thakur (Honble MLA)

Organization and Responsibility

The Deputy Commissioner Hamirpur (Chairperson DDMA) has the overall responsibility for disaster management in the District. In case of emergency situation the Incident Commander activates the Incident Command System (ICS). On activation of the ICS, based on the emergency situation the relevant Emergency Support Functions (ESFs) will be utilized.

Since this District Disaster Management Plan (DDMP) is concerned with the many hazards to which the district and the citizens may be exposed before, during and after a disaster occurs, responsible authorities operate in accordance with the six phases of disaster management:

- 1. **Prevention** Preventive actions may include the inquisitiveness about intelligence and other information to a range of activities that may include deterrence, heightened security for potential targets, investigations to determine the nature and source of the threat, public health surveillance and testing, disrupting illegal activities etc.
- **2. Preparedness** Actions may be taken to eliminate or reduce the impact of a disaster. Such measures include zoning and land-use measures, formulating and enforcing building codes, public education about hazards and protective measures, hazard and vulnerability analysis (hrva) and preventative health care.
- **3. Mitigation** It includes moderation of (a quality or condition) in force or intensity. Any cost-effective action taken to eliminate or reduce the short-term risk to life and property from natural and technological hazards is called mitigation. These actions are taken over the short-term to return vital life support systems to minimum standards. Actions may be taken in advance of a disaster to develop operational capabilities and help

communities respond to and recover from a disaster. Such measures include undertaking the Community Based Disaster Preparedness Management (CBDM), construction and equipping of EOC's with warning and communications systems, recruitment, and training of emergency management personnel, development of plans, procedures, arrangements, and agreements, and mock exercises of personnel and systems.

- 4. Response Response actions are taken before, during, or after a disaster /disaster to save lives, minimize damages and enhance recovery operations. Such measures include activation of: Emergency operation centers/ control room, plans and procedures, arrangements and agreements, the emergency alert system, public warning, notification of public officials, provision of mass care, shelter, search and rescue, and security.
- 5. Recovery and Reconstruction These are long-term actions to return life to normal or improved levels. Such measures include damage assessment, assessment of plans, procedures, arrangements, and agreements, and the development of economic impact studies and methods. Reconstructionrefers to the full restoration of all services, and local infrastructure, replacement of damaged physical structures, the revitalization of economy and the restoration of social and cultural life. Reconstruction must be fully integrated into long-term development plans, taking into account future disaster risks and possibilities to reduce such risks by incorporating appropriate measures. Damaged structures and services may not necessarily be restored in their previous form or location. It may include the replacement of any temporary arrangements established as part of emergency response or rehabilitation.

SUB-DIVISIONAL LEVEL DISASTER MANAGEMENT COMMITTEE:

At Sub-Divisional Headquarters, such a committee is chaired by the Sub-Divisional Magistrate. The constitution of Sub-Divisional Level Committee is as under:

- 1. Sub-Divisional Magistrate Chairman
- 2. Deputy Superintendent of Police Member
- 3. Block Medical Officer. Member
- 4. President, Nagar Panchayat concerned. Member
- 5. President, Block Development Committee. Member
- 6. Executive Engineer, HPPWD. Member
- 7. Executive Engineer, HPSEB. Member

- 8. Executive Engineer, I & PH. Member.
- 9. Forest Officer. Member
- 10. Inspector, Food & Supplies. Member
- 11. Regional Manager, HRTC. Member
- 12. Platoon Commander, Home Guards. Member
- 13. Block Development Officer(S) Member.
- 14. In-charge, Fire Station. Member
- 15. Assistant Public Relations Officer. Member
- 16. Divisional Engineer, Telecommunication. Member
- 17. Tehsildar Member Secretary.

NON-OFFICIAL MEMBERS:

- I. The voluntary bodies (NGOs) at Tehsil/Sub-Divisional Level shall also be associated.
- II. Elected representatives of the area and a few prominent citizens.

TEHSIL LEVEL DISASTER MANAGEMENT COMMITTEE:

At Tehsil Headquarters, such a committee is chaired by the Tehsildar. The constitution of Tehsil Level Committee is as under:

- 1. Tehsildar Chairman
- 2. Medical Officer Incharge, Dispensary. Member
- 3. Pradhans, Gram Panchayat. Member
- 4. Station House Officer. Member
- 5. Assistant Engineer, I& PH Member
- 6. Assistant Engineer, PWD Member
- 7. Assistant Engineer, HPSEB Member

- 8. Inspector, Food & Supplies. Member
- 9. Home Guards Platoon Commander Member
- 10. S.E.B.P.O. Member
- 11. Range Forest Officer. Member
- 12. Incharge, Fire Station. Member
- 13. Sub-Division Officer, Telecom. Member
- 14. Naib Tehsildar (Office Kanungo) Member Secretary

NON-OFFICIAL MEMBERS:

- I. The voluntary bodies (NGOs) at Tehsil/Block Level shall also be associated.
- III. Elected representatives of the area and a few prominent citizens.

BLOCK LEVEL DISASTER MANAGEMENT COMMITTEE:

At Block Headquarters, such a committee is chaired by the Block Development Officer. The constitution of Block Level Committee is as under:

- 2. Medical Officer In-charge, Dispensary. Member
- 3. Pradhans, Gram Panchayat. Member
- 4. Station House Officer. Member
- 5. Assistant Engineer, I& PH Member
- 6. Assistant Engineer, PWD Member
- 7. Assistant Engineer, HPSEB Member
- 8. Inspector, Food & Supplies. Member
- 9. Home Guards Platoon Commander Member
- 10. Range Forest Officer. Member
- 11. In-charge, Fire Station. Member
- 12. Junior Engineer, Telecom (JTO). Member

13. S.E.B.P.O Member Secretary	
NON-OFFICIAL MEMBERS:	
I. The voluntary bodies (NGOs) at Block Level shall also be associated. II. Elected representatives of the area a few prominent citizens.	
SUB-TEHSIL LEVEL DISASTER MANAGEMENT COMMITTEE:	
At Sub-Tehsil Headquarters, such a committee is chaired by the Naib Te The constitution of Sub-Tehsil Level Committee is as under:	hsildar.
1. Naib Tehsildar Chairman	
2. Medical Officer In-charge, Dispensary. Member	
3. Pradhans, Gram Panchayat. Member	
4. Station House Officer. Member	
5. Assistant Engineer, I& PH Member	
6. Assistant Engineer, PWD Member	
7. Assistant Engineer, HPSEB Member	
8. Inspector, Food & Supplies. Member	
9. Home Guards Platoon Commander Member	
10. Range Forest Officer. Member	
11. In-charge, Fire Station. Member	
12. Junior Telecom Officer (J.T.O.). Member	
13. S.E.B.P.O Member Secretary	
NON-OFFICIAL MEMBERS:	
I. The voluntary bodies (NGOs) at Sub-Tehsil Level shall also be associat II. Elected representatives of the areas and a few prominent citizens.	ed.
The constitution of Kanungo Level Committee will be as under:	
1. Field Kanungo	
[District Disaster Management Plan]	Page 59

- 2. Patwaris concerned in Field Kanungo Circle. Member.
- 3. Pradhan, Gram Panchayat concerned. Member.
- 4. Junior Engineers of various Govt. establishments. Member.
- 5. Forest Guards of Forest Department. Member.
- 6. Telecom Technician Member.
- 7. Gram Panchayat Vikas Adhikari...... Member Secretary.

NON-OFFICIAL MEMBERS:

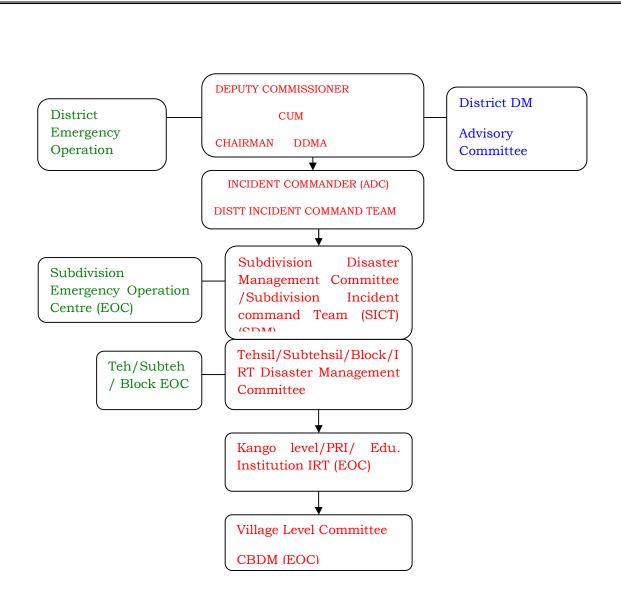
- I. All voluntary bodies such as Mahila Mandals, Yuvak Mandals may be associated in management of disasters.
- II. Elected representatives of the areas and a few prominent citizens.

Gram Panchayat/Village Disaster Management Committee

- Subject to the directions of the District Authority, the Gram Panchayat Disaster
- Management committees will be responsible for the development and implementation of
- GP level disaster management plans.

DISTRICT DISASTER MANAGEMENT AUTHORITY (DDMA), HAMIRPUR

In addition to the **District Incident Command Team (DICT)**, there will be four **Sub divisional levels Incident Command Teams (SICTs)** which can be deployed at the site of a complex emergency/disaster. As and when required, these SICTs will be deployed at the site of an emergency/disaster for **on-scene management**. The teams will focus on the operational aspects of response management, duly supported by other functions in ICS, e.g. Planning, Logistics, Finance / ADCn, etc. The District-level Incident Command Team core management structure Shown in Fig.15



CBDM - COMMUNITY BASED DISASTER MANAGEMENT

IRT - INCIDENT RESPONSE TEAM

DISTRICT ADMINISTRATION

At the District level, DDMAs 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.

4.2 OTHER INSTITUTIONAL ARRANGEMENTS

Armed Forces

Conceptually, the Armed Forces are called upon to assist the civil ADCinistration only when the situation is beyond their coping capability. In practice, however, the Armed Forces for man 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, highaltitude rescue, waterman ship 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 District level, the local representatives of the Armed Forces will be opted in the DDMA meetings to ensure closer coordination and cohesion.

Central Paramilitary Forces

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 respond to disasters which may occur in the areas where they are posted. The local representatives of the CPMFs located in the district Kullu will be co- opted/invited in the DDMA meeting for better coordination.

State Police Forces and India Reserve Battalions

The State Police Forces and the India Reserve Battalions are crucial for immediate response 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. Fire Services and

Home Guard

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 multihazard rescue capability. The existing set up of these services would be strengthened to take up the new role more effectively. 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 Disaster Management as per the need. The potential of these organisations would also be used for education and awareness generation in Disaster Management. A database of trained personnel would be created and uploaded regularly in the DDMA website.

4.3 DISTRICT EMERGENCY OPERATION CENTRE (DEOC)

District ADCinistration shall set up District Emergency Operation Centre and provide adequate manpower for manning them on 24x7 basis round the year and arrange training for the EOC Staff on EOC operations. District ADCinistration shall develop SOP/ Protocol for activation of DEOCs during emergency/disasters. 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 data base of disasters and losses caused by them;
- x. Monitor preparedness measures and training activities;
- xi. Providing information at district level, local level and to 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 ADCinistration;

xiv. Maintain a data base of trained personnel and volunteers who could be contacted at any time; xv. Lease with on-site operation centre, State EOC and other emergency services

The Additional District Magistrate shall be the Nodal Officer for Disaster Management and 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.

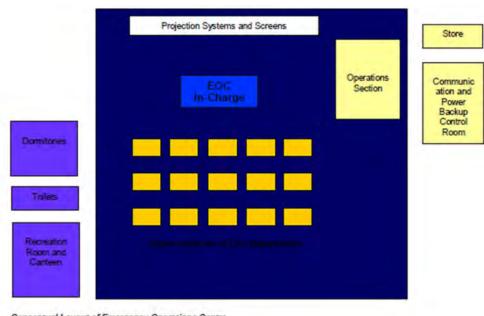
MEASURES TO BE TAKEN FOR DISASTER MANAGEMENT

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 ADCinistrative 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.

DEOC Layout

The DEOC will be organised comprising the below features in a user friendly layout and in a disaster resistant building. A suggested conceptual layout is given below.



Conceptual Layout of Emergency Operations Centre

FUNCTIONING OF THE EMERGENCY OPERATION CENTRE

- 1) Additional District Magistrate(P) –cum-Chief Executive Officer DDMA will be the overall incharge of the EOC and will take the role of Incident Command in certain disasters and in disaster having the large magnitude of damage The Chairman of DDMA i.e. Deputy Commissioner shall be the incident Command and ADC (P) shall function as Additional Incident Command.
- 2) All the members of the DDMA and the nodal officers of all other departments at the district level shall be the members of the EOC.
- 3)The EOC will have the communication connectivity with all the subdivision, blocks and even the village level may be through HAM radios, Satellite telephones etc. 4) The EOC will have the communication equipments which can be mounted on the vehicle and the Incident place can be connected with EOC.
- 5) DEOC will have the connectivity with the other DEOC and SEOC.

- 6) DEOC will have the Disaster management plan of the different departments of the district and other agencies operating in the district along with the Subdivision and block level DM plans.
- 7) Resource inventories of all the departments at the district level along with their locations.
- 8) Demographic. Socioeconomic data of the district village wise.

4.4 TRIGGER MECHANISM & INCIDENT RESPONSE SYSTEM (IRS)

This Trigger Mechanism prescribes the manner in which the disaster response system shall be automatically activated after receiving early warning signals of a disaster happening or likely to happen or on receipt of information of an incident. Activities envisaged in this SOP under the response Phase shall be initiated simultaneously without loss of time to minimize the loss and damage and mitigate the impact of disaster.

The objective of having a trigger mechanism for natural disasters is to have a suo- motto activation mechanism for spontaneous response to set in motion command, control and management of the situation. There shall be two types of situation with different trigger mechanisms for natural disasters:

- (i) Situation I Where Early Warning signals are available
- (ii) Situation II- Where Disaster occurs without early warning

In addition to the **District Incident Command Team (DICT)**, there will be four **Subdivisional level Incident Command Teams (SICTs)** which can be deployed at thesite of a complex emergency/disaster. As and when required, these SICTs will be deployed at the site of an emergency/disaster for **on-scenemanagement**. The teams will focus on the operational aspects of response management, dulysupported by other functions in ICS, e.g. Planning, Logistics, Finance / ADCn, etc. The District-level Incident Command Team core management structure Shown in Figure

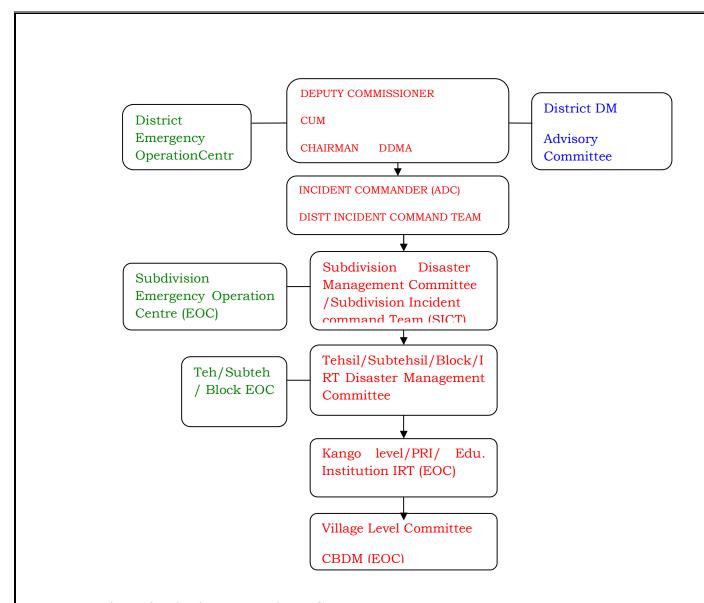


Figure 2: District-level Incident Command Team core management structure

CBDM - COMMUNITY BASED DISASTER MANAGEMENT

IRT - INCIDENT RESPONSE TEAM

Mitigation Plan

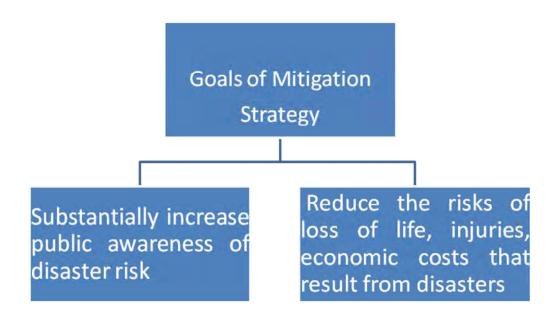
5.1 MITIGATION PLAN

"To identify the existing and potential risks and to reduce potential causalities anddamage from disasters".

Vulnerability analysis and risk assessment are essential for developing mitigation strategies.

The institutional arrangement to ensure the planning, coordination, implementation and monitoring of the district mitigation strategy will be as follows:

The DDMA with inputs from the district advisory/technical committee(s) will plan and coordinate all the mitigation activities at the district level. All the concerned departments will develop and implement their respective mitigation plans. The departments have already identified a nodal officer within their respective departments to coordinate the mitigation activities and who will also be responsible for communicating the status of the department's efforts to the DDMA



Hamirpur district is prone to 24 types of hazards out of the 25 types of hazards to which Himachal Pradesh as a whole is vulnerable to as identified by the High Power Committee Government of India. Mitigation plans will be developed and adapted locally. Mitigation strategies need to ensure the higher level of community involvement and participation. In rural areas, characterized by inadequate infrastructure and poverty groups, all mitigation efforts will have to be backed up by a strong and committed programme of social development for the communities. Constant re-examination, therefore, of development Policies and programmes, leading to equity and social justice, will be pre-requisite to ensure the success of mitigation efforts that are being proposed.

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.

The main elements of mitigation strategy are:

1) Risk Assessment and Vulnerability Analysis

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

2) Construction work

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

3) Infrastructure and Housing Repair and Maintenance

Housing and Roads and Bridges are the two issues which are important in view of disaster. For mitigation of earthquake retrofitting and renovation of lifeline buildings has paramount importance. Lifeline buildings represent critical infrastructure for the state, such as schools andhospitals. The Public works department will be the primary agency responsible of conducting structural assessment, retrofitting and renovation of lifeline buildings. Existing development programmes may be examined to incorporate disaster resistant technologies in all existing and new public buildings. PWD will be responsible for preparing a risk and vulnerability analysis report and present it to DDMA. The NODAL OFFICER of PWD department will be responsible for the said assignment. DDMA will take cognizance of the report and action will be taken

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

All the departments will have to ensure that mitigation measures are incorporated into repairs, major alterations, new development, and redevelopment practices, especially in areas subject to substantial risk from hazards.

For the rural areas, the Rural development department will coordinate with the district and authority to ensure that mitigation measures all been implemented.

Under the National Rural Employment Guarantee Act, provide for strengthening and maintenance of such physical features that may vitally protect/help in rescue of communities during disaster situations.

For the urban areas, the Urban Development department will coordinate with the district authorities to ensure that mitigation measures are included.

4) Research and Technology Transfer

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

DDMA has identified research institution NIT Hamirpur to evolve mitigation strategies.

5) Training and Capacity Building

Training and Capacity Building of Government Officials:

At the district level, training programmes had been conducted in coordination with NGOs, NIT Hamirpur and government training/research institutions.

6) Climate Change adaptation

There are evidences to indicate that Himalayas are warming at a higher rate than the global average rate. 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. 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 reductions hall be encouraged and promoted.

7) Structural & Non structural Measures

- 1) Structural Measures
- 2) Non Structural measures
- 3) Disaster Mitigation Projects

These measures should be taken by all the departments while preparing and execution of the plans.

5.2 Community Level Training and Public Awareness Activities:

HIPA has already organized a workshop on community based disaster management (CBDM) in July, 2014. The community awareness and training activities has been basically carried out in the form of training programmes through NGOs, Private Sector, and Government Training Institutions. Apart from spreading awareness of disasters, the focus will essentially be on community capacity building.

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

5.3 Local Level Preparedness:

The Government realizes the fact the first responder at the time of any disaster is the local level community and hence there is no alternate other than to train them in a way so that they are competent to respond to any incident in an effective way. The areas which are required to be specifically addressed during these trainings are:-

- 1) Search and rescue methods and procedures so as to minimize the loss of life
- 2) Medical First Aid required to be given on the spot.

- 3) Fire Fighting techniques
- 4) Dos and dont's during such disaster
- 5) How to use communication systems like ham radios, satellite stations etc.

5.4 Primary agencies for community level training and public awareness are:

Environment, scientific and technology department, Technical Education Department, NGO, Private sectors, The NGOs, private sector organizations and other government training institutions will, in turn, organize training and simulation exercises at the district and community level, in order to ensure preparedness from the grass-roots.

5.5 Mobilizing Community Efforts for Mitigation Measures:

The community will be encouraged to reduce the impact of the next disaster. Demonstration housing units indicating the various technology features and options will be built by the Government/NGOs/Community. This should prioritize buildings like village offices, primary health centers, community centre, schools etc. The objective of such activity will be to encourage local communities to undertake either at individual, household or community level to avoid loss of life, damage to property and crop.

Land Use Planning and Regulations

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

Incentives and Resources for Mitigation

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

CULTURE OF MITIGATION:



Figure 3: Culture of Preparedness

Culture of Strategic Thinking:

Networking of Knowledge-based institutions and learning exercise should be encouraged for integration of traditional knowledge and advance scientific & technological research.



Figure 4: Culture of Strategic Thinking

5.6 HAZARDS SPECIFIC MITIGATION PLAN

ACTION PLAN FOR EARTHQAUKE MITIGATION

The Main Features are mentioned below:-

- 1. The entire developmental plan conceptualized by the different departments in the districts shall adopt the earthquake prone technology wef 2013-14 financial year so that the future constructions are earthquake resistant.
- Revision and adoption of model building bye-laws for construction both in urban and rural area. All the houses as well as building may be private or govt shall adhere to the National Building Code 2005 developed by Ministry of Housing Govt Of India and BMTPC w.e.f 2012-13
- 3. The departments which are enshrined with the responsibility of approval of house/building maps shall adhere these codes while according approval to the maps. DDMA shall develop a mechanism to inspect at least 50 % construction of building and houses going on in the district so as to examine whether the departments are adhering to these mitigation strategies or not.
- 4. Training of trainers in professional and technical institutions. The capacity building in terms of manpower training i.e. availability of trained engineers

- in public as well as in private sector shall be enhanced by the DDMA by way of imparting training and certifying.
- 5. Launching public awareness campaigns on seismic safety and risk reduction and sensitising all stakeholders to earthquake mitigation.
- 6. Assessing the seismic risk and vulnerability of the existing built environment by carrying out structural safety audits of all critical lifeline structures.
- 7. Training and capacity building of the informal masons who are deployed by the general public for construction of houses in the rural areas. DDMA shall maintain a directory of such masons so trained through the BDOS.
- 8. Introducing earthquake safety education and preparation of DM plans by schools, colleges, universities and and conducting mock drills in these institutions.
- 9. Introducing earthquake safety education in hospitals, main buildings visited by large number of public etc. Conducting of mock drills so that they should have a safe plan in case of such disaster.
- 10. Preparing community and village level DM plans, with specific reference to management of earthquakes and carrying out mock drills up to the block level /village level for enhancing preparedness.
- 11. Strengthening the medical preparedness for effective earthquake response.

ACTION PLAN FOR LANDSLIDE MITIGATION

The Main Features to be incorporated is mentioned below:-

- 1. The Town planning department at the district level in urban areas shall resurvey the areas and make land use plan town wise so that the areas which are vulnerable to land slide could not be used for construction of buildings for residential as well as commercial purpose.
- 2. Revision of town planning bye-laws and adoption of model land use bye-laws in hilly areas.
- 3. The local bodies which are ADCinistering the approval of map shall ensure while according approval that no such approval be given in the land slide zone areas.
- 4. Drawing up a stategy and plan of action for mitigating the impacts of landslides, provide advice and guidance on various aspects of landslide mitigation, monitor the activities relating to landslide mitigation includind landslide zonation and to evolve early warning system and protocol for landslide reduction.
- 5. Training of trainers in professional and technical institutions.
- 6. Training of professionals like engineers and geologists for landslide mapping, investigation techniques, analysis, and observational practices.

- 7. Launching public awareness campaigns on land slide hazard and risk reduction, and sensitising all stakeholders on landslide hazard mitigation.
- 8. Assessing the status of risk and vulnerability of the existing built environment.
- 9. Preparing an inventory of existing landslides, active or inactive, in the area.
- 10. Developing an inventory of the existing built environment in areas around existing landslides and in high hazard zones as per the LHZ maps.
- 11. Preparation of DM plans by educational and health institutes/organisations, government offices, etc., and carrying out mock drills for enhancing preparedness in vulnerable areas. 12. Strengthening the DEOC and communication network.
- 13. Streamlining the mobilisation of communities, government agencies, the corporate sector, and other stakeholders.
- 14. Preparing community and village level DM plans, with specific reference to the management of landslides.

ACTION PLAN FOR DROUGHT MITIGATION

Main features of mitigation plan includes:-

- 1. Drought management plans for the entire season will be prepared by the Agriculture Department in advance in the month of May, based on the long season forecast issued by IMD in April and also the previous season's rainfall.
- **2.** The agriculture department at the district level shall prepare the mitigation plan for such occurrence block wise.
- **3.** As the season progresses from June onwards, the DDMA will review the plans prepared earlier at the onset of the monsoon and revise the strategy if required.
- **4.** Weekly monitoring of these as on and crop condition from June onwards till the DDMP end of the season and make necessary midseason corrections as and when required.
- 5. Agriculture department shall use the remote sensing and GIS technology while providing inputs to the DDMA.
- 6. A sound data base shall be prepared by the agriculture department on weather, crop conditions, and input supply to assist the DDMA.
- **7.** The techniques of rain water harvesting technology will be disseminated among the farmers in the rural areas.
- **8.** The DDMA will make use of the frontier techniques like remote sensing and GIS.

- **9.** A sound database will be created and updated regularly on weather, crop conditions, input supply, credit, insurance and market information, fodder supply etc.
- **10.** Awareness will be brought among the farmers on drought regulations and enforcement.

MITIGATION STRATEGY FOR FIRES

Main features of mitigation plan includes:-

- 1. Vulnerable habitations would be identified and mitigation actions would be taken to avoid/reduce incidents of domestic fires.
- 2. Community awareness would be initiated to reduce and mitigate fire incidents. That could be done:
 - o By providing fire safety videos, CDs, and DVDs.
 - o Providing fire safety material and by conducting fire safety programs.
 - o Conduct fire prevention education programs with local service clubs.
 - o Provide public education training for local fire departments.
- 3. Fire and emergency services would be strengthened in the district.
- 4. Fire insurance would be promoted to transfer the risk.
- 5. Community would be involved in tackling forest fires and their participation would be ensured.

Table 11: Illustrations of Various Govt. Schemes and Development Programme

Sr. No	Name of The Programme	Department/ Sector	Proposed Strategies for DRR Integration into the Flagship Programmes
1.	Indira Awas Yojana	Rural Development	 ♣ Inclusion of such measures like aaplication of hazard resistant design in construction of IAY houses, appropriate sitting of IAY housing guidline of IAY. ♣ Development of model design for IAY house which could be easily referred to by DRDAs at district level and for community awareness depending on the geographic allocation. ♣ Capacity building of Rural masons on safe construction. Capacity Building of PRIs. ♣ Community awareness. ♣ Capacity Building Programmes for DRDA officials on Disaster Risk Reduction issues.
2.	Mahatma Gandhi National Employment Guarantee Scheme	Rural Development	 ♣ Utilization of MGNREGS funds to reduce the vulneability of Panchayat vis natural hazards such as landslide, cloud burst, drought, forest fire, cloud burst, flash floods, earthquake etc. ♣ Identified works are available which take into account the hazard profile and offer continous employment oppertunties in the event of Disasters to ensure livlihood security.

	<u> </u>		# C: ::
			Giving priorty to those works which reduce the vulnerability of area over the works which
			enhances the vulnebility of the area to
			natural hazards.
			♣ Works which reduce disaster risk are given
			priorty in plans such as local mitigation works
3.	Pradhan Mantri Gram	PWD	♣ The Master Plan for rural roads, the district
	Sadak Yojana		rural road plan and identification of core
			network under the planning process of this
			scheme should, which the overall guidlines of
			its preparation, explicity address the dissater risk reduction concerns and accord priorty
			connect the vulnerable habitations.
			The technical guidlines should explicity provi
			for suitable protection and inclusion of disaste
			risk concern expilicty provide for suitable
			protection and inclusion of disaster risk
			concerns explicity while provision of cross
			drainage, slope stabilization, protection works
			are already included, in mulihazard and
			especially flood and landslide prone areas
			weather roads need to be upgraded on a prid basis.
4.	Sarva Siksha Abhiyaan	Education	Development of a policy paper of school
	Sarva Sinsira risinyaan	Education	safety.
			Introducing School Safety as a part of the
			guidlines of SSA which is curently focussin
			on inclusive development.
			♣ Intoducing school safety in the Teacher's
			Training Curiculum. Developing model structurally safe design for schools.
			Training of rural engineers appointed under
			SSA Scheme as well as the SSA State
			Coordinators
			Training of masons in rural areas.
5.		Urban Development	
	Urban Renewal Mission		the detail project report submission and
			appraisal stage in case of infrastructure projects
			as well as housing scheme to ensure structural safety.
			Emphasis on disaster risk audit at the stage of
			preparation of detail project reports.
			4 Inclusion of disaster management as a function
			of the Urban Local Bodies and allocate resources
			♣ Inclusion of amending of building byelaws to
			ensure structural safety as a mandatory reform
			in the Mission cities to ensure safe habitat development. (Both structural safety and fire
			safety norms).
			♣ Inclusion of Disaster Resistant features in the
			houses being constructed under the BSUP
			component as well as promote development of
			safe habitat.
			♣ Inclusion of strategies for disaster management
			in the City Development Plans.

6.	Rajiv Awas Yojana	Urban Development	♣ Since Rajiv Awas Yojana is focusing on Developing slum free cities and Capacity Building ar Community Mobilization is also an important component of RAY, through this programme attempt can be made towards community level disaster preparedness as slum dwellers often become the mos 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. ♣ Also the Housing Programmes to be Implemented in these selected cities can ensure incorporation of hazard resistant features.
7.	National Rural Hea Mission	Health & family welfare	 Ensurethat thevillageHealthPlan andtheDistr health plan explicitly address the disaster risk reduction concerns in the vulnerable habitations and vulnerable districts and the disast management plan as per DM Act 2005 takes links itself to the District and villatealth plans. Provide training to the ASHA workers on disaster health preparedness and Response. Strengthening of Disease Health Surveillanc System in rural areas. Ensuring structural safety of the CHC/PHC at other health care service delivery centres in rural areas. Ensuring structural safety of the CHC/PHC at other health care service delivery centres in rural areas. Training of doctors and hospital staff on mas casualty management and emergency medicine. Community awareness on disaster management.

6.1 Response Plan

In view of the provisions of the DM Act 2005 and the ADCinistrative structure existing in the country at the District and State levels, the roles of the Chief Secretary (CS) and theDistrict Magistrates / DC are all encompassing as regards response. In the IRS, a need was felt to clearly identify a designated authority responsible and accountable by law to respond to disasters and therefore a position of Responsible Officer (RO) has been introduced. Incident response management may however not always require the direct intervention of the RO. On the ground, the management will be done by the IC to whom powers will have to be delegated by the RO. District Magistrates/DCs will perform the role of ROs in their respective ADCinistrative jurisdictions and will be overall responsible for all response activities during any incident or crisis.

As per the DM Act, the District Magistrate / DC is the Chairperson of the DDMA and has been assigned all encompassing role of planning, coordination and execution of DM in his jurisdiction assisted by all line departments and local bodies. The responsibility for disaster response clearly lies with the District Magistrate/DC being the head of the District ADCinistration. It will only be the ADCinistrative machinery – District Magistrate / DC and their team of officers who will be responsible and accountable for effective response in their jurisdictions.

Roles and Responsibilities of District Magistrate as RO

- Ensure that IRTs are formed at District, Sub-Division, Tehsil/Block levels and IRS is integrated in the District DM Plan as per Section 31 of the DM Act, 2005. This may be achieved by issuing a Standing Order by the RO to all SDOs, SDMs and Tehsildars/BDOs;
- Ensure web based / on line Decision Support System (DSS) is in place in EOC and connected with Sub-Division and Tehsil / Block level IRTs for support;
- Ensure that toll free emergency numbers existing for Police, Fire and Medical support etc. are linked to the EOC for response, command and control. For e.g., if there is any fire incident, the information should not only reach the fire station but also the EOC and the nearest hospital to gear up the emergency medical service;
- Obtain funds from State Government as recommended by the 13th Finance Commission and ensure that a training calendar for IRTs of District is prepared and members of IRTs are trained through training institutions of the District;
- Delegate authorities to the IC;

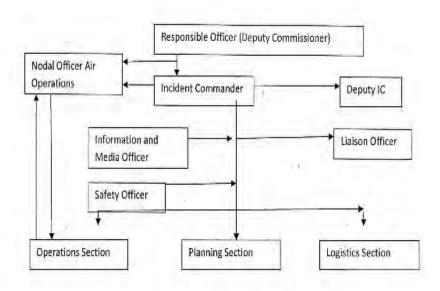
- Activate IRTs at District headquarter, Sub-Division, Tehsil / Block levels, as and when required;
- Appoint / deploy, terminate and demobilize IC and IRT(s) as and when required;
- Decide overall incident objectives, priorities and ensure that various objectives do not conflict with each other;
- Ensure that IAP is prepared by the IC and implemented; Remains fully briefed on the IAP and its implementation; Coordinates all response activities;
- Give directions for the release and use of resources available with any department of the Government, Local Authority, private sector etc. in the District;
- Ensure that local Armed Forces Commanders are involved in the planning process and their resources are appropriately dovetailed, if required;
- Appoint a NO at the District level to organize Air Operations in coordination with the
- State and Central Government NO. Also ensure that all ICs of IRTs of the District are aware of it;
- Ensure that the NGOs carry out their activities in an equitable and non-discriminatory manner;
- Deploy the District Headquarter IRTs at the incident site, in case of need;
- Ensure that effective communications are in place;
- Ensure that telephone directory of all ESF is prepared and available with EOC and members of IRTs;
- Ensure provision for accountability of personnel and a safe operating environment;
- In case the situation deteriorates; the RO may assume the role of the IC and may seek support from the State level RO;
- Mobilize experts and consultants in the relevant fields to advise and assist as he may deem necessary;
- Procure exclusive or preferential use of amenities from any authority or person;
- Conduct post response review on performance of IRTs and take appropriate steps to improve performance; and
- Take other necessary action as the situation demands.

Roles of Local Authorities PRIs and ULBs

The DM Act, 2005 has defined the roles of NACs, Municipalities, Municipal Corporations, Municipal Councils and PRIs under section 41 (1) (2). These bodies will ensure that their officials and employees are trained in DM and resources relating to DM are also maintained in order to be readily available for use in any threatening disaster situation or disaster. These bodies are also required to carry out relief activities in the affected areas in accordance with District DM Plans. The DDMAs will lay down the specific roles and responsibilities of these local bodies in the DM Plan and suitably integrate them with relevant IRTs.

Response Structure

The response structure would be based on Incident Response System (IRS) as per the Guildelines issues by 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 5**. Deputy Commissioner (Responsible Officer) works through Incident Commanders and Incident Response Teams.



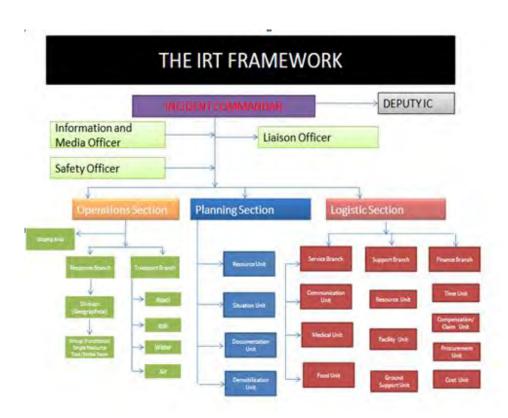


Figure 6: IRT Framework

Incident Response Team (IRT)

The RO of the District will constitute IRTs from among officers at District level. The members of IRTs will be properly trained and sensitized regarding their roles during the pre-disaster phase itself. Selection of different section chiefs will be guided by the nature and type of disaster. The headquarters IRT will provide continuous support to the on-scene IRT(s) and if required join them or take over response on the directions of the RO.

Incident Response System (IRS) - Facilities

For effective response the following facilities may be required to be established depending on the needs of the incidents, the length and time the facilities are needed to be used, the cost to establish it and prevailing weather conditions etc.

Incident Command Post (ICP)

The ICP is the location at which the primary command functions are performed. The IC will be located at the ICP. There will only be one ICP for each incident. This also applies to situations with multi-agencies or multi jurisdictional incidents operating under a single or Unified command. The ICP can be located with other incident facilities like Incident Base.

The ICP may be located at Headquarters of various levels of ADCinistration (State, District, Sub-Division, Tehsil / Block). In case of total destruction or reasons of non availability of any other space, the ICP may be located in a vehicle, trailer or tent. It should however have adequate lighting, effective communication system and other such facilities so that one can function effectively.

Deployment of IRT

Some of the natural hazards have a well established early warning system. States and Districts also have a functional 24 x 7 EOC / Control Room. On receipt of information regarding the impending disaster, the EOC will inform the RO, who in turn will activate the required IRT and mobilize resources. The scale of their deployment will depend on the magnitude of the incident. At times the information about an incident may be received only on its occurrence without any warning. In such cases the local IRT (District, Sub-Division, Tehsil / Block) as the case may be, will respond and inform the higher authority and if required seek reinforcement and guidance.

Objectives of the Emergency Operations Centre

- The EOCs/Control Rooms at District, Subdivision, Tehsil, Block levels will be the nerve centre for coordination and management of disasters. The objectives of the EOCs shall be to provide centralized direction and control of any or all of the following functions:
- Receive and process disaster alerts and warnings from nodal agencies and other sources and communicate the same to all designated authorities.
- Monitor emergency operations
- Facilitate Coordination among primary and secondary ESF Departments/Agencies.
- Requisitioning additional resources during the disaster phase Issuing disaster/incident specific information and instructions specific to all concerned;
- Consolidation, analysis, and dissemination of damage, loss and needs assessment data;
- Forwarding of consolidated reports to all designated authorities.

Location of EOC

The EOC will be set up at a suitable location and the building should be disaster proof so as to withstand the impact of disasters and remain functional during the emergency phase. In district Hamirpur, DEOC is established in Room no. 308, Office of the Deputy Commissioner, Hamirpur.

Communication Network of EOCs

Under the National Communication Plan being implemented by the Government of India, the EOCs at all the three levels shall have a fail proof communication network with triple redundancy of NICNET of NIC, POLNET of Police and SPACENET of ISRO in addition to the terrestrial and satellite based communication to ensure voice, data and video transfer.

Under the network, the EOCs/Control Rooms of all the States will be directly connected with the NEOC/ Control Room of MHA at the National level. The district EOCs/ Control

Rooms will be connected with the respective State EOCs/Control Room. All these control rooms will function on 24x7 basis and will be functional round the year. Suitable personnel will be selected and imparted training in the operation of Control Rooms will be posted to man these EOCs/Control Rooms.

In EOC, Hamirpur, 4 TSPN Lines (1077) toll free no. is available.

DEOC

District Administration shall set up District Emergency OperationCentre and provide adequate manpower for manning them on 24x7 basis round the year and arrange training for the EOC Staff on EOC operations. District Administration shall develop SOP/ Protocol for activation of DEOCs during emergency/disasters. During moonsoon season, District Administration dipute 2 persons in DEOC for proper communication at the time of disaster.

DEOC Layout

The DEOC will be organised comprising the below features in a user friendly layout and in a disaster resistant building. A suggested conceptual layout is given below.

Conceptual Layout of Emergency Operations Centre

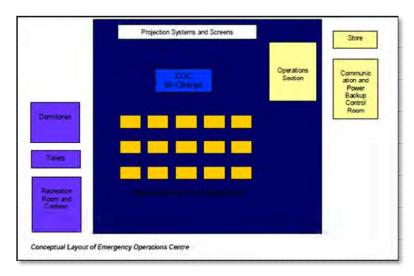


Figure 7: Conceptual Layout of Emergency Operations Centre

Equipment Requirements

- The DEOC will need to operate round the clock, and may itself be subjected to adverse conditions due to the impact of disaster. It needs to be equipped with the following hardware and software for its efficient functioning:
- Resource Inventories and databank of maps and plans at District, Subdivision, Tehsil, Block levels on a GIS platform for quick retrieval and analysis.
- Proper communication equipment for staying linked with the Deputy Commissioner Office, headquarters of line departments, field teams, media, and national and international support agencies.
- A mobile command vehicle with communication equipment.
- Workstations and communication lines for all representatives of the line ministries.
- Radios and television sets tuned to different news channels and coverage. Video conferencing facility.
- Projection equipment and screens.
- Emergency power backup.
- Stock of drinking water, food, medicines, bedding and essential items required for personnel manning the DEOC for long time durations.

Resource Inventories

Resource inventories are useful in quick retrieval of vital information regarding availability and sources of rescue and relief material and personnel during times of emergency. Resource inventories are essential elements of EOC

operations. Such inventories has been prepared and maintained through regular updating at the District level.

Inventories include the following basic elements, and other locally relevant information:

- Contact details of all personnel and organizations concerned with emergency management
- List, with specifications and availability procedures, of all equipment that may be useful for responding to an emergency. This will include communication equipment, transport vehicles, earth moving equipment, cranes, and tools etc. that are available with agencies within the jurisdiction.
- List, with specifications and rate schedules, of relief material that can be sourced from local aid agencies and markets. This will include dry rations, tents and bedding, clothing, utensils, first-aid items and other basic necessity items



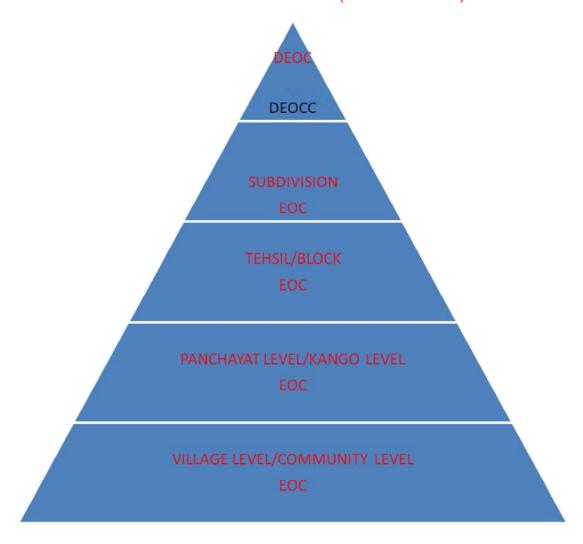


Table 12: Roles and Responsibilities of Nodal Agencies (General)

	1
	Implementation of the District Disaster Management Plan and monitori body for management of disasters in the district.
_ •	They will ensure community participation in the disaster management
Committee(s)	They will also advise the DDMA on implementation of activities at district level.
Department of Reven	Overall coordination, implementation of the EOC activities and documentation and reporting to the DDMA.
. -	Primary agency for maintenance of public infrastructure identifies safer
,	places, ssess physical damage, identify safer routes, and provide necessary econstruction and rehabilitation support. To ensure hazard resistant eatures are in all building by laws.
Department of Town accountry planning	Primary agency responsible for ensuring land use, hazard wise zonation and building by laws.
Department of Home	Primary agency responsible for "Urban Fire", "Village fire", Nuclear disasters, Serial Bomb blasts and Festival related disasters. And also for Security, evacuation, emergency assistance, search and rescue, first aid, law and order, communication, shifting of people to relief camps, traffic management. Burial work of dead bodies, Fire management.
Department Education	The department will prepare curriculum related to disaster management and conduct training programmes for teachers and children. It will coordinate with the local authority and arrange for mock drills, search and rescued rills. Awareness campaigns. Ensuring maintenance and retrofitting of school buildings.
Department of Urban development	Main agency to ensure repair and maintenance in the urban areas.
Department of Forest	Be the primary agency responsible for "Forest Fire". During response an recovery support DEOC with resources. Identification of prone areas, mitigation activities, research and assessment.
Department of Irrigation and Public health	Primary agency responsible for Floods, Drought management, watershe management, enforcement of land-use plan, evacuation from low-lying areas, identification of safer places, construct embankments, arrangement of boats and pump sets, swimmers and divers, communication.
Department of MPP as Power	Primary agency responsible for Dam failures / bursts and Electrical disasters and fires. It will ensure power supply for public facilities such as Hospital, police stations, telecommunication building and meteorological stations.
Department of Health	Primary agency responsible for "Biological Disasters and Epidemics". First aid, health and medical care, ambulance arrangements, preventive steps for other diseases, establishment of health camps

Department of Plannin	Allocation of funds on priority basis for disaster mitigation and rehabilitation projects
Department Information	Communicate warnings to the public, relay announcements issued by SEC, DDMA, telecast special programmes for information and actions,
and Public relations	education and awareness messages for preparedness actions and coordinated
	response. Promote disaster related polices, provide emergency communication systems, enable critical communication links with disaster sites
Department Industries	Primary agency for landslides and mudflows and mining collapses.
Department Horticulture	The primary agency for Hailstorm and Pest Attack for horticulture sect Support
	in crop damage assessment due to disasters.
Department of Animal Husbandry	Primary agency for Animal epidemics. Responsible for fodder Assessments
Department Panchayati	Ensure training of Panchayti raj institutions on disaster management a also
Raj	ensure that all the development schemes of the department have the component of disaster mitigation as in integral part.
Indian red Cross	Overall disaster preparedness and response programs at community lev
International	Provide relief, coordinate with Government, conduct awareness and
Agencies/NGOs	capacity building programmes, preparedness activities at community level, assist in reconstruction and rehabilitation
Food, Civil Supplies ar	Primary agency responsible for identifying the basic needs of food in th
Consumers Affairs	aftermath of a disaster or emergency, to obtain appropriate supplies an transporting such
	supplies to the disaster area.
Social Justice and Empowerment .	Primary agency for building capacities and increasing awareness of disabled persons and women. Protection of manpower and organize special camps for the disabled, widows, children and other vulnerable groups. It will also provide necessary help and assistance for socioeconomic rehabilitation
Department Information	Maintenance of IT infrastructures and HIMSWAN, maintain communication
Technology Department of	and satellite links
Department of Environment, Scien and Technology	Primary agency responsible for earthquakes, Cloud Burst, Heat and Col wave and Thunder and Lightning. Also for GIS mapping for effective disaster management. Primary agency of research and development of Climate Change impact and adaptation activities for the State. It will a
	conduct awareness campaigns related to the environment. Provide inputor new technologies and also for awareness programs.
	One of the executing agency for constructions under implementation o
Housing	recovery
and Urban Developmer Authority	and rehabilitation plans. Responsible for ensuring the mitigation measures while construction or reconstruction of its projects in the statement of the stateme
Department of Finance	Arrange necessary funds and ensure equitable distribution, manage accounts.
Department	Primary agency for Hailstorms, Droughts and pest attacks. Their main
Department	

	to assist in early recovery
Transport	Primary agency for Air, Road and boat capsizing. Arrange for sending personnel relief material to the disaster affected people, keep access routes operational and inform about alternate area, relocate the routes
Department of Rural Development	Primary agency to implement vulnerability reduction projects to allevia poverty and improve people's livelihoods. Ensure Rural development schemes implemented in the State incorporate disaster management measures
Department Technical Education vocational training	Primary agency responsible to conduct certificate training programmes to construction workers. To create a pool of qualified a masons to ensure safe construction practices in construction work.

INCIDENT ACTION LIST

Earthquake Incident Action List

In the event of a major earthquake, all Emergency Operation Centre (EOC) designated personnel will:

- ♣ Check on family and friends, and then; Report to the nearest Emergency Operation Centre.
- ♣ It should be noted that earthquakes affect large areas and thus neighboring communities will also be affected. Mutual aid may be slow in coming or even nonexistent.
- ♣ Establish communications link with alternate Emergency Coordination Centre sites.

Policies

♣ In the event of a major earthquake, Emergency Management Committee will declare an emergency.

Possible Major Effects

- 1. Casualties.
- 2. Deaths.
- 3. Trapped people.
- 4. Damage to property.
- 5. Material damage roads and bridges, utilities, buildings.
- 6. Fires, explosions and fire hazards.
- 7. Escape of gases.
- 8. Flooding.
- 9. Slides.
- 10. Panic.
- 11. Dangers to public health.
- 12. Removal of population and livestock.
- 13. Jurisdictional problems.

Hazard Specific Checklists

DEOC Director (Deputy Commissioner)

- Notify SEC/Public Relations Department if EOC is activated.
- Select Fire Chief or alternate as Operation Chief.
- Establish adequate communications and news release systems (District Public Relation Officer).
- **Establish public inquiry system (District Information Officer).**
- Consider request for outside assistance, including military.
- Leck for critical facilities failure, i.e. police station, hospital, and relocate as required.
- Communicate with adjacent municipalities.

Operations

- Coordinate rescue of trapped, injured persons (Fire & Rescue Department).
- Staff PR positions for possible reception centers (DPRO).
- Evacuate personnel (Police Department).
- Establish traffic control (Police Department).
- **♣** Establish temporary morgue (Police Department).
- Protect property and relocate resources where necessary (Police Department).
- Establish salvage operations of essential items (Fire & Rescue Department).
- Eliminate hazards from damaged utilities (Public Works / Engineering Department).
- Establish emergency public health and medical facilities (Health Department).
- Control of population (Public Information Officer).
- Mobilize necessary manpower and equipment (PWD / Municipality).
- **♣** Coordination and ADCinistration of incoming aid (District ADCinistration / Municipality).
- 4 Set up enquiry service (District Public Relation Information).
- Check for damage to dams (IPH).

Planning

- ♣ Obtain and disseminate current meteorological data and flood forecasts by contacting IMD, Ministry of Earth sciences.
- ♣ Deploy field observers to gather flood intelligence as soon as possible (Situation Assessment Unit).
- Consider possible major effects (Long-Term Planning Unit):
 - o Injuries and fatalities.
 - o Trapped persons.
 - o Damage to property.
 - o Damage to roads, bridges, utilities, buildings.
 - o Fire hazards and explosions.
 - o Escape of dangerous gases, e.g., natural gas.
 - o Flooding from broken water mains.
 - o Hypothermia if event occurs in winter.
 - o Landslides.
 - o Panic.

- o Contamination of normal water supplies.
- o Dangers to public health.
- o Adjacent communities may be affected as well, slowing assistance.
- o Losses to local economy.

Logistics

- 4 Anticipate long term feeding / accommodation support of field workers
- **↓** Consider equipment needs and sources (Supply/Procurement Unit):
 - o Transportation Road / Air Authorities / Schools
 - o Rescue equipment of all kinds All agencies
 - o Public service maintenance vehicles Engineering / Utilities
 - o Communication Equipment DPRO / Amateur Radio
 - o Heavy equipment (bulldozers, etc.) PWD / Industry
 - o Auxiliary lighting Department of Power
 - o Auxiliary power facilities Department of Power
 - o Medical and health supplies/ Health
 - o Food and lodging Welfare / Social Services/NGO
 - o Piping for water, sewer repairs IPH / Industry/MC
 - o Tankers for potable water supplies Utilities/IPH
 - o Mobile public address system / Fire dept / Radio
 - o Emergency feeding services/ Food Supply

Finance/ADCinistration

- 1. Establish Compensation & Claims Unit and Cost Accounting Unit
- 2. Track and keep accurate records for recovery.

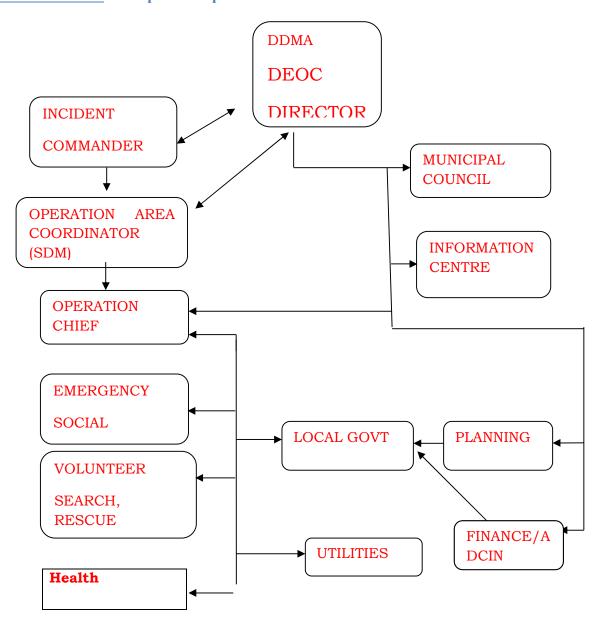
a. Availability of Man Power:

- i. Home Guards
- ii. Police personnel.
- iii. NSS Volunteers of different school and collages.
- iv. NCC Cadets of schools and collages
- v. Youths from different Yuvak Mandals

b. Machines & Equipments:

As per the resource inventory attached at Annexure "A" under Availability

FLOW CHART- Earthquake Response



Landslide, Debris Flow, and Subsidence.

In case of a landslide:

Possible Major Effects

- 1. Casualties.
- 2. Deaths.
- 3. Trapped people.
- 4. Damage to property.
- 5. Material damage roads and bridges, utilities, buildings.
- 6. Flooding.
- 7. Panic.
- 8. Dangers to public health.
- 9. Removal of population and livestock.
- 10. Disruption of traffic and communications.

Policies

Regardless of where the incident occurs, responder safety will be considered first.

Hazard Specific Checklists

DEOC Director

- ♣ Activate DEOC.
- ♣ Ensure members of DDMA are contacted and asked to assemble at headquarter.
- ♣ Establish adequate communications and news release systems (District Information Officer).
- Establish public inquiry system (District Information Officer).
- **♣** Establish proper jurisdiction.
- ♣ Notify adjacent municipalities to as required.

Operations

- ♣ Coordinate search and rescue of victims (Fire & Rescue Branch).
- Staff PR positions for possible reception centers (DPRO).
- **E**vacuate personnel, (Police Branch).
- Evacuate livestock (Agriculture, and Revenue).
- **Establish traffic control (Police Branch).**
- ♣ Protect property and relocate resources where necessary (Revenue and Police department).
- ♣ Coordinate removal and disposal of slide material as required (Public Works).
- Eliminate hazards from damaged utilities (Public Works).

Planning

- Deploy field observers to gather damage intelligence as soon as possible (Situation Assessment Unit).
- To consider further slide potential, obtain current meteorological data.
- Consider possible major effects (Long-Term Planning Unit):
 - o Damage to property.
 - o Closure of roads and highways.
 - o Damage to utilities and communication systems.
 - o Contamination of normal water supplies.
 - o Evacuation of population from danger areas.
 - o Dangers to public health.
 - o Possible convergence of families and friends to help with search.
 - o Disruption of community.
 - o Losses to local economy.
 - o Casuality

Logistics

- Anticipate long term feeding / accommodation support of field workers. (DFSC)
- **♣** Consider equipment needs and sources:
- o Transportation Road / Air Authorities
- o Communication Equipment
- o Heavy equipment (bulldozers, etc.) PWD / Industry
- o Auxiliary lighting Power / Utilities
- o Auxiliary power facilities Power / Utilities
- o Medical and health supplies, Health
- o Food and lodging ,DFSC, Revenue

Finance/Administration

- Establish Compensation & Claims Unit and Cost Accounting Unit.
- ♣ Track and keep accurate records for recovery from field.

Flood

Minor Flooding – is defined as a flooding incident that involves a single or small number of dwellings in a small geographical area. Minor flood events would normally be handled by the appropriate response agency, and are confined to a single jurisdiction.

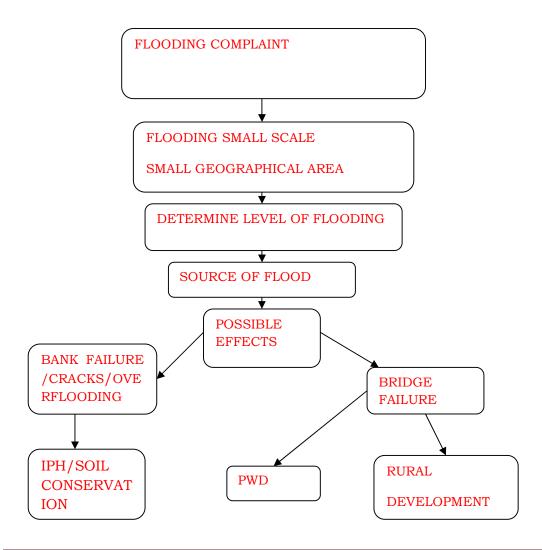
In case of a minor flood:

Possible Major Effects

- 1. Property damage.
- 2. Evacuations.
- 3. Damage to sewer and drainage systems.

Actions to be taken

- ♣ Acquire details from caller to determine extent of flooding (IPH, Revenue, Police, and municipality).
- ♣ Provide caller with contact numbers for overflowing ditches, back yard or road flooding (PWD, Private Contractors, and Ministry of Transportation).
- Provide caller with contact numbers for creek, river or bank erosion flooding (IPH)
- → Direct caller to Emergency Coordinator for further assistance if needed (Receptionist, Municipal Switchboard).
- **♣** Determine source of flooding (IPH).
- ♣ Response agency (IPH, Transportation).
- ♣ Facilitate contact between response agency and caller, assist further if necessary (Revenue, Transportation).



Fire

In case of a Forest / urban /rural fire:

Possible Major Effects:

- 1. Casualties.
- 2. Deaths.
- 3. Evacuation.
- 4. Trapped People.
- 5. Disruption of Traffic.
- 6. Disruption of Utilities.
- 7. Property damage.
- 8. Public Health Issues and Concerns.

Policies

♣ Interface fires will be managed using unified command with Incident Commanders supplied by DFO and the Fire Department.

Hazard Specific Checklists

DEOC Director

- 1. Establish link with Incident Commander and EOC
- 2. Ensure fire command is unified
- 3. Alert DPRO
- 4. Establish news release system (DPRO)
- 5. Establish public inquiry system (DPRO)
- 6. Establish proper jurisdiction (Emergency Coordinator)
- 7. Notify adjacent municipalities.

Operations

- Establish communication link with Incident Commander.
- ♣ Determine need for evacuation through Fire Chief or declaration (Fire & Rescue Department).
- ♣ Warn of potential spread of fire and need for fire breaks (Fire & Rescue Branch).
- ♣ Evacuate personnel, (Police Branch).
- ♣ Evacuate livestock (Ministry of Agriculture).
- ♣ Define working area and establish control perimeter (Police).
- Secure ignition start area for subsequent investigation (Police).
- ♣ Establish traffic control and routes for emergency vehicles (Police).
- Protect property and relocate resources where necessary (Police).
 Eliminate hazards from damaged utilities (PWD /IPH/Power).
- Notify hospitals of casualties (Ambulance Service-108).
- ♣ Establish emergency public health facilities (Health Branch).
- ♣ Establish temporary morgue, if needed (Police Branch, Revenue).
- Arrange security in evacuated areas.
- Activate reception centre(s).
- Establish Family Reunification function.
- ♣ Determine supplementary water needs and access (IPH).
- ♣ Assist public with smoke induced respiratory distress (Ministry of Health).

Planning

- Supervise damage assessment.
- ♣ Consider possible major effects (Long-Term Planning Unit):
 - o Injuries and fatalities.
 - o Fire.
 - o Damage to property.
 - Collapse of buildings and other structures.
 - o Sudden hospital requirements.
 - o Release of toxic smoke, fumes.
 - Disruption of traffic and communications.
 - o Disruption of utilities.
 - o Convergence of media, photographers, politicians.
 - o Possible need to relocate primary EOC.

Logistics

- ♣ Anticipate requests for additional supplies.
- Anticipate requests for food.
- ♣ Consider equipment needs and sources (PWD/IPH/Power):
- o Fire fighting and rescue equipment Fire / PWD/IPH/Industry
- Water tankers (IPH)
- o Auxiliary lighting Power / Utilities
- o Blankets and food and clothing Welfare / Social Services
- o Mobile public address system DPRO / Fire dept / Radio stations
- o Chemical response team Fire / Industry
- o Traffic barricades (Police)

Finance/Administration

- ♣ Anticipate compensation/claim.
- **↓** Track and keep accurate records for recovery.

Transportation Accident

In case of a major motor vehicle crash:

Possible Major Effects

- Casualties.
- Deaths.
- Fires and explosions.
- Trapped persons.
- Disruption of traffic.
- Dangers to public health.
- Convergence.
- Possible mass casualties for buses.
- Dangerous goods spill.

Policies

4 All major motor vehicle crashes should be managed at the scene.

The EOC will provide support and assistance to the Incident Commander as needed or requested.

Hazard Specific Checklists

DEOC Director

- Establish an Incident Command Post.
- ♣ Activate EOC as required (Emergency Coordinator etc. appointed).
- ♣ Make contact with motor carrier and request attendance at EOC.
- Establish news release system (DPRO).
- **Establish family inquiry system (DPRO).**
- Establish adequate communications. (BSNL)
- ♣ Support Incident Commander in defining working area, establishing control perimeter, and securing the scene for subsequent investigation (Police Branch).
- Notify adjacent municipalities as required.

Operations

- Establish routes for emergency vehicles (Police Branch).
- Request ambulance, wreckers, fire trucks and heavy equipment, as needed.
- **Establish traffic and crowd control (Police Branch).**
- Notify hospitals of casualties, including number and type (Ambulance Service-108).
- Eliminate hazards from damaged utilities ((PWD /IPH/Power).
- Request additional police assistance (Police Branch).
- Establish a Reception and Information Centre (DPRO / Red Cross).
- Establish routes for emergency vehicles (Police Branch).
- Establish temporary morgue (Police Branch).
- Request additional buses (HRTC, Private Transportation).
- Request additional ambulance, heavy equipment, wreckers, and specialized equipment as required (Police Branch).
- Organize rescue parties as required (Fire Rescue).
- ♣ Arrange temporary reception area for casualties (Health, Ambulance).
- → Dispatch ambulances for proper distribution of casualties (Health, Ambulance).
- ♣ Define a working area and establish a control perimeter (Fire Rescue).
- Restrict entrance to work area if hazardous or radioactive materials involved (Police Branch, Ministry of Science, and Environment).
- Secure and protect property (Police Branch).

Planning

- ♣ Consider possible major effects (Long-Term Planning Unit):
- o Injuries and fatalities.
- o Fire.
- o Explosion.
- o Trapped passengers.
- o Damage to property.
- o Involvement of dangerous goods, e.g., fuels.
- o Sudden hospital requirements.
- Disruption of traffic and communications.

- o Convergence of media, photographers, politicians.
- o Convergence of friends and family members and need for grieving.

Logistics

- ♣ Prepare to support long-term recovery and investigation operations.
- **↓** Identify potential temporary morgue facilities (Health, Revenue).
- ♣ Consider equipment needs and sources (PWD /IPH/Power):
- o Fire fighting and rescue equipment, Fire
- o Ambulances, Health
- o Communication equipment
- o Auxiliary lighting Power
- o Traffic barricades Police
- o Mobile public address system DPRO/Radio Station
- o Chemical response team Fire / Industry
- Relief transportation Private Industry
- o Heavy recovery equipment PWD, Private Industry
- o Cutting torches PWD /IPH/Power, Private Industry
- Specialized equipment to deal with radioactive material Fire Rescue / Industry / Ministry of Environment
- o Emergency feeding facilities DFSC

Finance/Administration

- Prepare to track expenditures.
- Track and keep accurate records for recovery from Transport Company (HRTC) and/or insurer.

In the aftermath of disasters the affected people must be looked after for their safety, security and the well being and provided food, water, shelter, clothing, medical care etc. so as to ensure that the affected people live with dignity. DDMA shall be responsible for providing prompt and adequate relief assistance to the victims of disasters. The minimum standards of relief shall be laid down by the NDMA and by the SDMAs in terms of sections 12 and 19 respectively.

Standard Operating Procedures for Responsible (SOPs)

A **standard operating procedure** is "a set of instructions constituting a directive that establishes a standard course of action." Standard operating procedures or SOPs, clearly spell out what is expected and required of peg a disaster simultaneously sets into motion required prevention and mitigation measures with minimum loss of time. Operation of Trigger Mechanism requires clear delineation of duties & functions including identification of key personnel. Adequate delegation to act in the first critical 24-28 hours without loss of time in planning or seeking clearance/ approval/ direction from superiors is sought. Standard Operating Procedures (SOPs) are required to be evolved in meticulous detail for effective operation of the Trigger Mechanism.

The objectives of the SOPs

- (a) To provide, in a concise and convenient form, a list of major executive actions involved in responding to natural disasters and necessary measures for preparedness, response and relief required to be taken;
- (b) To ensure that all concerned Departments and Organisations of the District ADCinistrations know the precise measures required of them at each stage of the process and also to ensure that all actions are closely and continuously coordinated;
- (c) To indicate various actions this would be required by the District ADCinistration within its sphere of responsibilities so that it may prepare and review the Contingency Action Plans accordingly.

Department of Revenue and Relief

Department hasdesignated one Nodal Officer of the department. She/he willmaintain contact with forecasting agencies and gather all possible information regarding the alert. She/he willorganise survey of buildings and installations for using as shelters/relief centres during disaster times. She/he will ensure that structural and non-structural mitigation measures are taken by all its department offices. She/he will ensure activation of District Emergency Operation Centre (DEOC) in standby mode and in full form. She/he willinstruct all ESFs to remain in readiness for responding to the emergency and will coordinate and plan all activities with the ESFs. She/he will advice District collector to carry out evacuations where required, and to keep transport, relief and medical teams ready to move to the affected areas at a short notice. She/he will conduct Rapid Assessment and launch Quick Response. She/he will conduct survey in affected areas and assess

requirements of relief. She/he willdistribute emergency relief material to affected population. She/he will coordinate all activities involved with emergency provisions of temporary shelters, emergency mass feeding, and bulk distribution of coordinated relief supplies for victims of disasters. She/he willcoordinate NGO, INGO and international agencies interventions/support. She/he willorganise initial and subsequent technical assessments of disaster affected areas and determine the extent of loss and damage and volume and nature of relief required. She/he willkeep the DDMA informed of the situation.

REVENUE DEPARTMENT (HAMIRPUR)

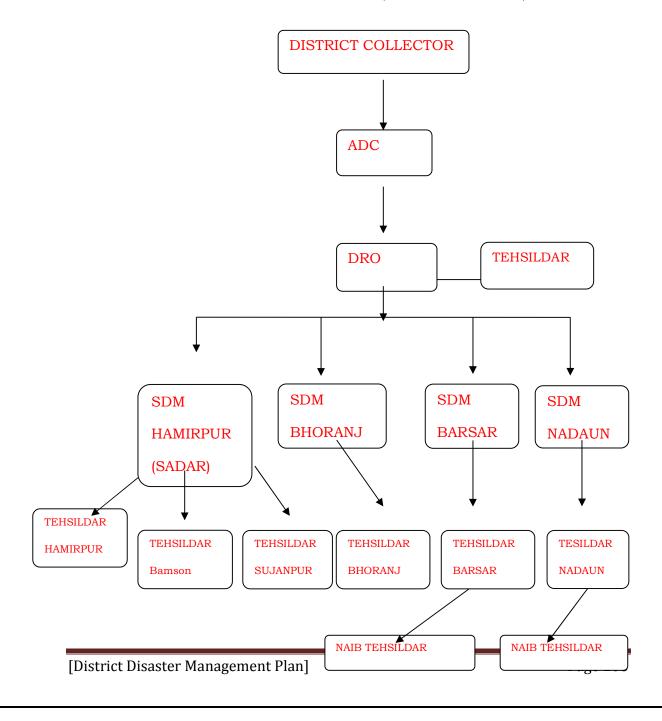


Figure 8: Revenue Department structure

Department hasdesignated one Nodal Officer of the department Shri Phone No. 224757 Mobile No. 9418467267

She/he willmaintain contact with forecasting agencies and gather all possible information regarding the alert. She/he willorganise survey of buildings and installations for using as shelters/relief centres during disaster times. She/he will ensure that structural and non-structural mitigation measures are taken by all its department offices. She/he will ensure activation of District Emergency Operation Centre (DEOC) in standby mode and in full form. She/he willinstruct all ESFs to remain in readiness for responding to the emergency and will coordinate and plan all activities with the ESFs. She/he will advice District collector to carry out evacuations where required, and to keep transport, relief and medical teams ready to move to the affected areas at a short notice. She/he will conduct Rapid Assessment and launch Quick Response. She/he will conduct survey in affected areas and assess requirements of relief. She/he willdistribute emergency relief material to affected population. She/he will coordinate all activities involved with emergency provisions of temporary shelters, emergency mass feeding, and bulk distribution of coordinated relief supplies for victims of disasters. She/he willcoordinate NGO, INGO and international agencies interventions/support. She/he willorganise initial and subsequent technical assessments of disaster affected areas and determine the extent of loss and damage and volume and nature of relief required. She/he willkeep the DDMA informed of the situation. She/he will ensure supply of food, drinking water, medical supplies and other emergency items to the affected population.

Police Department

Police Department has designated one nodal Officer in the department. (see annexure)

In Hamirpur District Police Department has an important role of providing security, logistics, and if necessary, assistance in distribution of relief items and provision of equipment for emergency response. It will prepare an operational Plan for responding to any type of disaster.

Police Department willestablish, maintain and train district search and rescue response team. It will impart training to the members of Police Force in first aid, evacuation, rescue and relief operations. It will conduct Search and Rescue training to local volunteers. It will prepare an inventory of all man power and equipment available. It will prepare an inventory of volunteers who have already completed training courses successfully and can be utilized in the search and

rescue operations. It willidentify the 'High Risk' and 'Risk' areas for different disasters and instruct the existing police installations located in those areas for keeping themselves in readiness for undertaking emergency rescue, evacuation relief operations. It willarrange drills for fire extinguishing, rescue, evacuation and transportation of injured persons and prepare coordinated Action Plans in cooperation with District ADCinistration and concerned local agencies. It willhold annual drills on disaster preparedness and response. It will maintain communications with the police installations in the areas likely to be affected by disaster. It willinform nearest police station (from the likely disaster affected area) for dissemination of warning. It willinstruct all concerned to accord priority to disaster related wireless messages if required by appropriate officials.On receipt of directives from the DEOC for evacuation - organize personnel and equipment for evacuation and undertake evacuation operations. It will earmark a reserve task force, if needed. It willmove task forces to the convenient positions, if needed. It willcarry out search and rescue operations. . It willcarry out fire fighting operations. It will maintain law and order, especially during relief distribution. It will keep close watch for any criminal and anti-state activity in the area. . It will keep direct contact with different officers like District EOC for taking any steps to combat any situation. . It willdispatch situation reports to the DEOC.

It willassist local ADCinistration in removing the dead bodies and debris in affected area. It will arrange security of government property and installations damaged in a disaster. It will coordinate with other offices for traffic management in and around damaged areas. It will assist the local ADCinistration in putting a stop to theft and misuse in relief operation.

Department of Transport

Department has designated one Nodal Officer of the department Sh. Pardeep Singh, Regional Manager HRTC Hamirpur Phone No. 01972222326

During preparedness stage department willdevelop a disaster management plan. It will carry out survey of condition of all highway systems at state and district level. It will carry out survey of condition of all aircraft landing facilities. It willidentify transport vehicles available and ensure that they are all in good working condition. It willensure availability of fuel, recovery vehicles and equipment. It willtake steps for arrangement of vehicles for possible evacuation of people during disaster situations, the department would need to take steps to arrange for sending personnel and relief material to the disaster affected area, relocate the affected people, keep access routes operational and inform about alternate routes.

During emergency it will remain in contact with the DEOC and will take steps for transportation of relief personnel and material to affected areas. It willtake steps for movement of affected population to safer areas. It will disseminate information regarding operational and safe routes and alternative routes; fuel availability etc. to personnel operating in the field. It willlaunch recovery missions for stranded vehicles. It willlaunch repair missions for damaged critical infrastructure and routes. During recovery and rehabilitation time, it will assess damage to transportation infrastructure and will take steps to ensure speedy repair and restoration of transport links.

Department of Public Works

It has designated one Nodal Officer in the department (see annexure)

The Department of Public Works has a vital role in provision and maintenance of vital public infrastructure. During preparedness time department willtake precautionary steps for the protection of government property against possible loss and damage during disaster. It willformulate guidelines for safe construction of public works. It willprepare list, with specifications and position, of heavy construction equipment in Hamirpur district. It will organize periodic training of engineers and other construction personnel on disaster resistant construction technologies. It will actively work to develop a sustainable state-wide hazard mitigation strategy. It will be responsible for repair, Maintenance and retrofitting of public infrastructure. Identify / prioritize mitigation activities of lifeline buildings and critical infrastructure and coordinate with the DDMA members for its implementation.

In Alert and Warning Stage it willinstruct all officials at construction sites to keep manpower and materials prepared for protection and repair of public works. It will direct construction authorities and companies to preposition necessary workers and materials in or near areas likely to be affected by disaster. It will get vehicles inspected, fuel tanks filled and batteries and electrical wiring covered as necessary. It will ensure thatextra transport vehicles should be dispatched from headquarters and stationed at safe strategic spots along routes likely to be affected. It willinspect all roads, road bridges by a bridge engineer, including underwater inspection of foundations and piers. A full check should be made on all concrete and steel works. It willinspect 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. The designation of routes strategic to evacuation and relief should be identified and marked, in close coordination with police and district control room. It will establish a priority listing of roads which will be opened first. Among the most important are the roads to hospitals and main trunk routes. It willgive priority attention to urgent repair works that need to be undertaken in disaster affected areas. Work under construction should be secured with ropes, sandbags, and covered with tarpaulins if necessary.

Emergency inspection by mechanical engineer of all equipments in the district workshops should be done. If people are evacuating an area, the evacuation routes should be checked and people be assisted. The locations for setting up transit and relief camps, feeding centres should be identified and DEOC should be informed accordingly.

During disaster it willprovide assistance to the damage assessment teams for survey of damage to buildings and infrastructure. Adequate road signs should be installed to guide and assist the drivers. Casual labourers to be assembled to work with experienced staff for clearing roads. It will mobilize community assistance for road clearing by contacting organizations. It willundertake cleaning of ditches, grass cutting, burning or removal of debris, and the cuttingof dangerous trees along the roadside in the affected area through maintenance engineer's staff and will undertake repair of all paved and unpaved road surfaces including edge metalling, pothole patching and any failure of surface, foundations in the affected areas by maintenance engineer's staff and keep monitoring their conditions. It willundertake construction of temporary roads to serve as access to temporary transit and relief camps, and medical facilities for disaster victims. As per the decisions of the District Emergency Operations Centre undertake construction of temporary structures required, for organizing relief work and construction of relief camps, feeding centres, medical facilities, cattle camps. It will take steps to clear debris and assist search and rescue teams. It will provide sites for rehabilitation of affected population. After Disaster during recovery and rehabilitation it will carry out detailed technical assessment of damage to public works. It will assist in construction of temporary shelters. It will organize repairs of buildings damaged in the disaster. It will prepare detailed programs for rehabilitation of damaged public works. It will arrange technical assistance and supervision for reconstruction works as per request.

Department of Irrigation and Public Health

In Hamirpur district one Nodal Officer has been designated (see annexure)

The Department is involved in disaster mitigation in relation to drought and floods, as they affect agricultural production, irrigation systems and water supply and management. Some of these mitigation activities include rehabilitation and management of watersheds and water catchment areas and enforcement of land use patterns. This role is critical for improving and expanding irrigation systems to cope with drought situations and manage flood problems.

During preparedness time department will ensure efficient management of flood forecasting and warning centres and improve procedure of flood forecasts and intimation to appropriate authorities.

It willidentify flood prone rivers and areas and activate flood monitoring mechanisms in all flood

prone areas. It willoperate Flood Information Centre in the flood season every year. It will inform all concerned about daily weather news and issue regular press bulletins. It willtake steps for strengthening of flood protection works before the flood season. It will make departmental mitigation plan and ensure its implementation. In the stage of alert and warning it will alert DEOC. Since flash floods get triggered within short time-spans, take steps to alert all though telephone and wireless according to needs.

During Disaster it will be responsible fortransportation of water with minimum wastage (in coordination with the transport department. It willidentify and mark damaged water pipelines and contaminated water bodies and inform disaster victims against using them.

During recovery and rehabilitation it will carry out Environmental Impact Assessment of the disaster. It will take up sustained programs for rehabilitation of flood protection works.

Department of Agriculture

In Hamirpur district one Nodal Officer has been designated. (see annexure)

This department has a role in assessment of damage to agricultural crops, and impact of possible locust attacks. Its main role is to provide seeds and necessary planting material and other inputs to assist in early recovery.

During preparedness timeidentify areas likely to be affected andorganize distribution of seeds, seedlings, fertilizer and implements to the affected people under loan/grant.Arrange for keeping stock of seeds, fertilizers and pesticides.

During warning stage, it should check available stocks of equipments and materials which are likely to be most needed after the disaster. It should stock agricultural equipments which may be required after a disaster. it should determine what damage, pests or diseases may be expected, and what drugs and other insecticide items will be required, in addition to requirements of setting up extension teams for crop protection, and accordingly ensure that extra supplies and materials, be obtained it quickly. It should provide information to all concerned, about disasters, likely damages to crops and plantations, and information about ways to protect the same.

During disaster it willmonitor damage to crops and identify steps for early recovery. It willestimate the requirement of Seeds, Fertilizers Pesticides, and Labour. It shouldorganise transport, storage and distribution of the above with adequate record keeping procedures. It shouldensure that adequate conditions through cleaning operations are maintained to avoid water-logging and salinity. A pests and disease monitoring system should be developed to ensure that a full picture of risks is maintained.

After disaster it willquantify the loss and damage within the quickest possible time and finalizes planning of agriculture rehabilitation. It will also ensure availability of adequate supply of seeds, seedlings, fertilizers, pesticides and agricultural implements. It will assist farmers to re-establish their contacts with agriculture produce market and ensure that appropriate prices be offered to them.

Department of Animal Husbandry

In Hamirpur district one Nodal Officer has been designated (see annexure)

The Department of Animal Husbandry has responsibility towards mitigation prevention of suffering of livestock during disaster, prevention of any animal epidemic, zoonetic disease epidemic, fodder assessment and management during disaster after coordination with DDMA through DEOC (District Emergency Operation Centre).

During preparedness stage it will identify disaster prone areas, livestock population at risk, requirement of medicine, vaccines, equipments, disinfectants and other materials material require any material during disaster in prone area.

During warning stage it will check available stocks of equipments and materials which are likely to be most needed after the disaster.

It will stock Veterinary equipments which may be required after a disaster. It should determine what damage, pests or diseases may be expected, and what drugs and other insecticide items will be required, in addition to requirements of setting up extension teams for animal protection, and accordingly ensure that extra supplies and materials, be obtained quickly.

During disaster it willrush Rapid Assessment Team to Incident site to assess the quantum of damage and immediate requirement for relief and rescue to share with DEOC. It will rush quick team along with the needed medicines equipments and other materials for relief and rescue operation at disaster site to minimize further loss and damage. It willarrange for quick and proper disposal of carcasses with disinfection of the premises with the help of local people, other line department by coordination of DOEC to check spread epidemic. It will take immediate preventive measures like quarantine, immunization and culling etc. as per requirement of the situation.

After disaster it will quantify the loss and damage within the quickest possible time and finalizes planning for rehabilitation. It will coordinate with revenue Department to ensure relief distribution as per direction of the State Govt. / already laid down norms by the Govt.

Department of Education

In Hamirpur district one Nodal Officer has been designated (see annexure)

The department will prepare curriculum related to disaster management and conduct training programme for teachers and children. The department will coordinate with the local authority and arrange for mock drills, search and rescue drills.

During preparedness in consultation with DDMA, include disaster related subjects in the curricula in schools, and colleges. It willarrange for training of teachers and students of disaster prone areas about the steps to be taken at different stages of disaster and organise them, in coordination with volunteers and inspire them for rescue, evacuation and relief works. It will ensure that all schools and colleges develop their disaster management plans. It will ensure that construction of all educational institutions in earthquake zones is earthquake resistant.

During Alert and Warning Stage identify structural and non structural mitigation measures.

It willin coordination with the SSA and/or Public works department assess schools and colleges buildings conditions. It willmake departmental mitigation plan and ensure its implementation. It willensure that earthquake resistant features are included in new school buildings.

During response it will place required number of education institutions and their buildings, under the DEOC for use as emergency shelter and relief centre if necessary. Students and staff can provide local voluntary assistance for distribution of relief material and assistance to special needy people in the locality.

During recovery and rehabilitation it will determine the extent of loss in educational institutions and prepare plans for their rehabilitation.

Department of Technical Education and vocational training

The department will play a vital role in the State mitigation strategy. Its main role will be to conduct training programs to the construction workers, involved at the community level. It will encourage disaster resistant technological practices in buildings and infrastructure. It will encourage the people in earthquake prone areas to adopt earthquake resistant technologies. It will in coordination with PWD conduct regular training to the engineers of the department. It will arrange for training programs and certificate course of construction workers. It will prepare a disaster management plan for the department. It will prepare an inventory of volunteers who have already completed training courses successfully and can be utilized in implementation

of mitigation measures and new construction. During response, recovery and rehabilitation, it willcoordinate with DDMA.

Department of Rural Development

In Hamirpur district one Nodal Officer has been designated(see annexure)

Department of Rural development is one of the main departments that have the mandate to implement vulnerability reduction projects to alleviate poverty and improve people's livelihoods.

During preparedness it willprepare maps showing population concentration and distribution of resources. It willalert all concerned about impending disaster. It will ensure safety of establishments, structures and equipment in the field. It will ensure formation of committee for rescue, relief and rehabilitation work and local volunteer teams.

During response it will ensure information flow from affected block and maintain regular contact with DEOC (24 hrs). It will ensure availability of drinking water at times of need. It will provide necessary infrastructure to carry out relief works. It will assess initial damage

During recovery and rehabilitation it will quantify the loss/damage. It will organise reconstruction of damaged houses on self help basis with local assets and materials received from the government. It will take up repair/reconstruction work of infrastructure damaged by disaster.

Department of Health

In Hamirpur district one Nodal Officer has been designated(see annexure)

The department of Health has a responsibility in the reduction and prevention of suffering during natural and man-made disasters. The emergency department is responsible for prevention and response of natural disasters and man-made disasters, as well as in the investigation and response to outbreak of communicable diseases. During preparedness stage it will develop a plan on emergency preparedness and response within the health sector. It willcarry out and disseminate a risk evaluation of the population. It will ensure disaster management plans are developed in health centres and hospitals. It will ensure that all hospital staff has been informed about the possible disasters in the district, likely damages and effects, and information about ways to protect life, equipment and property. It will ensure that orientation and training for disaster response plans and procedures are undertaken. Special skills required during disaster situations are imparted to the officials and the staff. It will ensure adequate availability of Emergency Health Kits in high risk areas. It willtrain volunteers on emergency preparedness programmes such as first aid and preventive measure against diseases in disaster prone areas. It willprepare a list of medical and Para-medical personnel in disaster prone areas and disseminate it to concerned governors and ADCinistrators. It will establish and operate an early warning system for health threats based on the routine health information and in collaboration with other departments. In Alert and Warning Stage it will conduct damage assessment of hospital infrastructure and request of medical equipment required. It will prepare and keep ready Mobile Hospitals and stock them with emergency equipment that may be required after the disaster. It will assess likely health impacts and share with DEOC for planning purpose. It will ensure pre-positioning of Emergency Health Kits and Personnel. It will direct the activation of health/medical personnel, supplies and equipment as required. During disaster it will mobilise medical teams and Para-medical personnel to go to the affected areas as part of the Rapid Assessment and Quick Response Teams. It will provide medical assistance to the affected population. It will provide chlorine tablets to people in affected area. It will take special care for women with infants and pregnant women. It will carry out technical assessment on health infrastructure availability and need.

Forest Department

In Hamirpur district one Nodal Officer has been designated (see annexure)

During preparedness stage it will prepare a department disaster management plan. It will identifyforest fire prone areas and extra vigilance be ensured in such cases. It willorganise community awareness programs. It will prepare and maintain forest lines. It will prepare mitigation plan for the department buildings and infrastructure. In Alert and Warning Stage it will establish a rapid response team at division/sub-division level, which will have all tools and equipments readily available. During response it will respond in accordance with department disaster management planAfter Disaster it will preparedamage assessment report and share it with DEOC.

Department of Urban Development

In Hamirpur district one Nodal Officer has been designated (see annexure)

In preparedness stage it will develop a disaster management plan for the department, including the identification of location of camps for different type of disasters, existing locations that can be used as shelters, inventories of agencies that can be used for tent establishment. It will conduct regular training the staff on minimum standards for shelter, relief camps and tent structures.

In mitigation stage it will coordinate with the DDMA members for implementation of mitigation activities in the urban areas.

In Alert and Warning Stage it will locate adequate relief camps based on prediction of damage.Quick assessment of functional and stable building structures will be done by this department. It willclear areas for setting up relief camps. In case of damage to offices, it will assist local authorities to establish and house important telecom equipment and officials at the earliest

It will develop alternative arrangements for population living in structures that might be affected after the disaster. It will setting up water point in key locations and in relief camps

In the response stage it will locate relief camps close to open traffic and transport links. It will set up relief camps and tents using innovative methods that save time. It will provide adequate and appropriate shelter to the entire population. It will coordinate with other ESFs in equipping shelter and relief sites with basic needs of communication and sanitation. It will help in maintaining and providing clean water and also procurement of clean drinking water. It will coordinate with DEOC for proper disposal of dead bodies in the urban areas.

During recovery and rehabilitation stage it will implement recovery and rehabilitation schemes through municipalities for urban areas.

Department of Food, civil supplies and consumer affairs

In Hamirpur district one Nodal Officer has been designated (see annexure)

The department will be mainly responsible for identifying the basic needs of food in the aftermath of a disaster or emergency, to obtain appropriate supplies and transporting such supplies to the disaster area.

In preparedness stage it will develop a disaster management plan for the department, through this plan it will ensure timely distribution of food to the affected population. It will ensure maintaining a stock of food relief items for any emergency.

During Alert and Warning Stage it will determine the critical need of food for the affected area. It will prepare a catalogue of available resources of food. It will ensure that food distributed is fit for human consumption and also ensure quality and control the type of food. It will allocate food in different packs that can be given to families on a taken home basis while others that can be distributed in relief camps

During disaster it will coordinate with local authorities and other ESFs to determine requirements of food for affected population. It will mobilise and coordinate with other ESFs for air dropping of food to affected site. It will prepare separate food packs for relief camps as well as large quantity containers. It will control the quality and quantity of food that is distributed to the affected population.

It will ensure that special care in food distribution is taken for women with infants, pregnant women and children.

After disaster it will establish PDS points as per the changed scenario/resettlements (If any). It will alsoissue duplicate ration cards to the disaster victims, who lost their papers.

Department of PanchayatiRaj

In Hamirpur district one Nodal Officer has been designated (see annexure)

During preparedness stage prepares a department disaster management plan update it annually. It will analyse the training needs of the department's personnel, which include its officials and elected representatives of Gram panchayat, panchayat samiti's and zila panchayat and organise trainings with the help of HIDM or other agencies. It will conduct gram panchayat level mock drills as part of preparedness. During disaster it will coordinate with local authorities and support the response efforts also it will coordinate the support from unaffected gram panchayats. After disaster it will ensure proper distribution of reconstruction schemes and monitoring of the same during Block development committee and zila parishad meetings.

Department of Information and Public Relations

In Hamirpur district one Nodal Officer has been designated (see annexure)

The Department has to play a major role in education and awareness programmes for better organized preparedness and response at government and community levels. It also plays a main role to collect reliable information on the status of the disaster and disaster victims for effective coordination of relief work at District level.

In preparedness stage it will develop a disaster management plan for the department. It will conduct education and awareness for local community. It will popularize the techniques for preparedness and survival during predisaster, disaster and post-disaster period through television, radio and other publicity media. It will ensure strict performance of the allotted duties by radio, television, news media, films and publications related departments. It will take proper and adequate security steps for the protection of own installations and properties. It will prepare guidelines / policy for necessary action by mass media on reporting disasters. During Alert and Warning Stage, it will acquire accurate scientific information from the Scientific and technology department. It will flash warning signals on all TV and radio networks. Disseminate information to all victims in the affected area. It will take measures to curb the spread of rumours. It will caution the victims about the do's and don'ts during a disaster. During disaster it will coordinate with the EOCs for required information for relief workers. It will provide information of emergency numbers

and other key contact numbers on television, through newspapers, loudspeakers and radio networks. It will send news flashes of latest updates / donation requirements for disaster area. It will ensure that the news to be broadcasted reflects the true and clear presentation of the actual position and does not create panic in the minds of the people and also advises them to desist from taking unreasonable steps. It will take steps for publicity of news and directives relating to the situation issued by the DDMA. It will curtail normal programmes to broadcast essential information on disaster if requested by the EOC. It will arrange visit to the affected area by the local and foreign journalists in the interest of publication of accurate and true report in the news. It will help victims as well as emergency workers in providing information regarding hospitals, help desk. It will inform unaffected population about hospitals where they can find victims and where assistance is required. After disaster it will arrange dissemination of information of the short and long term measures of different ministries, Departments/Agencies for relief and rehabilitation of the affected people.

Department of Power

In Hamirpur district one Nodal Officer has been designated (see annexure) In the preparedness stage it will develop a disaster management plan for the

department. It will carry out survey of condition of all power supply at district level.

In the Alert and Warning Stage it will establish radio communications with the DEOC and SEOC.It will prepare a First assessment report in conjunction with other ESFs for the DEOC to take further decision. It will check emergency toolkits.

During response it will establish contact with the DEOC and SEOC. It will assist authorities to reinstate generators for public facilities such as Hospital, water supply, police stations, telecommunication building and meteorological stations. It will dispatch emergency repair teams equipped with tools, tents and food. It will establish temporary electricity supplies for relief material warehouses.

During recovery and rehabilitation: It will facilitate restoration of energy systems after a natural /manmade disaster. It will review total extent o damage to power supply installations. It will take steps to ensure speedy repair and restoration of power supply installations.

District Disaster management Plan, Hamirpur

In Hamirpur district one Nodal Officer has been designated (see annexure)

In the preparedness stage it will develop a disaster management plan for the department Non Disaster Time it will ensure all possible steps for the security of manpower, implements, stock, installations /factories etc. It will prepare

listing and locations of industries and establishments for possible sourcing of relief material during disasters. It will ensure training on preparedness programmes to be adopted at different levels for all manpower employed in factories and establishments in disaster vulnerable areas. It will promote the preparation of installation emergency preparedness plans by all industrial units. It will take measures for preventing environmental disaster in chemical industry or industries emitting toxic gases and effluents. It will issue detailed instructions to the employees about their duties and responsibilities in precautionary, disaster and post-disaster stages of normal disaster. It will arrange regular training for mining employees in the disaster prone areas on disaster issues.

During alert and Warning Stage evacuation of the mineworkers from the mines on the receipt of early warning.

During response it will request industries to provide emergency relief material such as food products, temporary shelter, medicines and medical equipment and search and rescue equipment. It will provide labour to other departments for relief supply and distribution. It will provide skilled labour for maintenance of equipment and tools. It will help in establishment of camps. It will ensure minimum wages to labour during relief work in drought or other disasters. It will take steps to plan for rehabilitation of industries adversely affected by disasters. It will issue disaster management guidelines to all the industries and ensure on-site and offsite plans for all industries. It will prepare and disseminate guidelines for the labour security and safety. It willprepare and implement rules and regulations for industrial safety and hazardous waste management. It willprepare and disseminate public awareness material related to chemical accidents. After disaster it will take appropriate steps to provide assistance to concerned departments in reconstruction rehabilitation programmes. It will introduce employment generation schemes and alternate livelihoods for affected populations.

Department of Social Justice and Empowerment

In Hamirpur district one Nodal Officer has been designated (see annexure)

The department will arrange for protection of manpower and organize special camps for the disabled, widows, children and other vulnerable groups. It will also provide necessary help and assistance for socio-economic rehabilitation. In the preparedness stage it will develop a disaster management plan for the department.

Indian Red Cross and National NGOs

In Hamirpur district one Nodal Officer has been designated. (see annexure)

The Indian Red Cross would perform the following duties within the ambit of its own rules and regulations and organisational structure, in association with various governmental organisations. In the preparedness stage it will take steps for preparing community based disaster management plans. It willidentify volunteers in disaster prone areas and arrange for their training. It will organise awareness raising programs, seminars and meetings with the people for improving their capacity to face disasters. It willmaintain contacts with District ADCinistrators on its activities. It will ensure road communication and prepositioning of relief material as close as possible to disaster prone communities.

In Hamirpur district one Nodal Officer has been designated. (see annexure)

It willarrange for the necessary funds as per decision of the State Government/DDMA during disaster. It will ensure quick allocation of funds for meeting relief operations. It will control all accounts under the responsibility of the Government. It will start mobilizing resources for construction of infrastructure, public facilities and structures required for recovery.

After disaster it will allocate and monitor government plan expenditure towards relief and rehabilitation of disaster affected areas.

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

During disaster it will ensure survey of loss and damage in affected areas and dispatch of relief teams from concerned Red Crescent Society Units. It will assist the Government to determine loss, damage and needs related information.

It willgive emergency assistance to disaster affected people especially in the following cases:

- 1.Help in rescue and evacuation work, temporary shelter, first aid, food and clothing,
- 2. Arrange for distribution of relief material received from Red Crescent Unit of areas not affected by disaster and from headquarters.
- 3.Send request for requirement of relief and rehabilitation to the International Federation of Red Cross and Crescent Societies (IFRC) after informing about loss and damage due to disaster.

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

THE EMERGENCY SUPPORT FUNCTIONS

Disaster response is a multi-agency function. There will be one Lead or Primary Agency which will be responsible for managing and coordinating the response while other agencies will support and provide assistance in managing the incident. These ESFs will form integral part of the Emergency Operation Centres (EOCs) and each ESF should coordinate its activities from the allocated EOC. Extension teams and workers of each ESF will be required to coordinate the response procedures at the disaster affected site.

Table 12: Roles and responsibilities of the ESF

ESF	Responsibilities
Transport	Provide coordination of state transport support and local government Coordinate the use of transportation resources to support the need of emergency support forces requiring transportation capacity to perform their emergen response, recovery and assistance missions. It will works with outsi agencies for transportation, coordination and preparedness resour request for assistance when needed.
Power	To facilitate restoration of energy systems after a natural disaster
Communication	Will ensure the provision of state wide telecommunication, support the state, and district in response efforts
Public health ar sanitation	Provide coordinated assistance to supplement state and local resource in response to public health and medical care needs following significance natural or manmade disaster. Resources will be furnish when the state and district resource are overwhelmed and medical a public health assistance is requested from the State government.
Search a: Rescue	Provide specialized life saving assistance to state and local authoritic. In the event of a major disaster or emergency. Its operational activitic include locating, extricating and providing on site medical treatment victims trapped in collapsed structures.
Donations	Donation management is necessary to control the flow of goods a services into a disaster area. If trucks, trains, and planes are allowed in the disaster area to draw their donations, they can easily interfere wi other ongoing disaster response operation. Uncontrolled donations c also put undue burden on disaster response operations as they requir scarce response resources. Above all it is necessary to manage the flow donated gods to be sure that the needs of disaster victims are being m as effectively as possible. Expedite delivery of voluntary gods a

	services to support relief effort in a coordinated manner.
_	To provide a minimum quantity of clean drinking water and to redu the spread of diseases through water during disaster times and to all to people to perform daily task
Information a: Planning	To collect, process and disseminate information about an actual potential situation. To facilitate the overall activities of all responders providing assistance to an effected area. Should maintain a data base of all related disaster related informati inform of GIS that will allow easy access and retrieval of informati during a disaster.
Relief supplies	Coordinate activities involved with emergency provisions of temporal shelters, emergency mass feeding, and bulk distribution of coordinate relief supplies for victims of disasters. In some instances services malso be provided to disaster workers and logistical and resource support to local entities involved in delivering emergency and recovery effor shelter, food and emergency first aid following a disaster. Opera disaster well fare information, to collect receive and report the status victims and assist family reunification; and coordinate bulk distribution of emergency relief supplies.
Food	To identify the basic needs of food in the aftermath of a disaster emergency. To obtain appropriate supplies and transporting su supplies to the disasters area and identify secure, and arrange transport food assistance to the affected areas and authorize food star assistance following a major disaster o emergency requiring staresponse.
Public works an Engineering	contracting for construction management and inspection, contracting a emergency repair of water, and waste water treatment facilities, potal water, emergency power, real state support to assist the states meeting the goals related to life sustaining actions, damage mitigati and recovery activities following a major disaster. Provide PW a engineering support to assist need related to life saving or protecti prior to, during and immediately following an event. Perform immediate damage assessment of the infrastructure
Shelter	To meet the physical needs of individuals, families and communities a safe. Secure and comfortable living space. To meet primary social nee incorporating self management in the process.
Media	To provide and collect reliable information on the status of disaster a disaster victims for effective coordination of relief work at state level.
Help lines	To collect, process and disseminate information about of the welfare citizens of the affected area and managing the tremendous flow information. The speed with which information is received with which changes requires that assistance be developed to ensure accuracy as was easy and appropriate access. The help lines will be responsible providing, directing, and coordinating, logistical resource operations.

During non disaster times the ESF will operate in preparedness mode for their respective departments.

Each ESF is headed by a primary agency, which has been selected based on its authority, resources and capabilities to support the functional area.

The designated primary agencies will be assisted by one or more support agencies (secondary agencies) and will be responsible for managing the activities of the ESF and assisting the DDMA 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 DDMA needs

Emergency Support Functions (ESFs) Plan at District Level

In the aftermath of a major natural disaster wherein DDMA's assistance is to be provided to Subdivisions/ Tehsils/ Panchayats, the command, control and coordination will be carried out under the ESFs Plan.

DEOC shall activate the ESFs and the concerned Department/Agency of each ESFs shall identify requirements in consultation with their counterparts in affected subdivisions, mobilize and deploy resources to the affected areas to assist the DDMA in its response action. The DEOC will maintain a close link with the Subdivisions/ Tehsils/ Panchayats.

ESFs shall be responsible for the following:

- 1. They will coordinate directly with their functional counterpart in Subdivisions/ Tehsils/ Panchayats to provide the DDMA assistance required. Request for assistance will be channelled from the district level through the designated departments/agencies. Based on the identified requirements by the Subdivisions/ Tehsils/ Panchayats appropriate DDMA assistance shall be provided by an ESF Department/Agency to Subdivisions/ Tehsils/ Panchayats or at the district's request, directly to an affected area.
- 2. The designated authorities for each of the ESF shall constitute quick response teams and assign the specific task to each of the member.
- 3. 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
- 4. An inventory of all the resources with details shall be maintained by each of the designated authority for each of the ESF.
- 5. The designated authority for each of the ESF will also enter into precontracts for supply of resources, both goods and services to meet the emergency requirements.
- 6. The designated authority for each of the ESF will be delegated with adequate ADCinistrative, legal and financial powers for undertaking the tasks assigned to them.

Primary and Secondary Agencies

The designated primary agency, acting as the District 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 State 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 Subdivisions/ Tehsils/ Panchayats.

Table 13: Primary Agency for Each ESF

E N		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.	o Coordination of nationa actions to assure the provision of telecommunication supporthe centre, state and district o Coordinate the requirement of temporary telecommunication in the affected areas o Provide human services under the Ministry of Communication		#Make available police wireless network at the affected locations; #Coordinate for the other networl 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	Health and Family Welfa	Department of Ayurveda	o To coordinate, direct an integrate national level response o Direct activation of med personnel, supplies and equipment o Coordinate the evacuati of patients o Provide human services under the Dept of health. o To prepare and keep rea Mobile Hospitals and stoc o Check stocks of equipm and drugs	approach to patient care o Perform medical evaluation and treatment as needed	#To perform the same functions a assigned to the primary agency. #Provide manpower to the primar agency wherever available and needed; #Make available its resources to t primary agency wherever availabl and needed;
3	Sanitation/Sewer Disposable	Urban Developmen and Rural Developmen		oMake arrangement for proposal disposal of waste their respective areas; oArrange adequate mater and manpower to maintai cleanliness and hygiene.	o Ensure cleanliness and hygiene in their respective areas; o Hygiene promotion with the availability mobile toilets;	immediately #Provide4 bleaching powder to th
4	Power	HPSEB Ltd.	Himurja	o Provide and coordinate national support until the local authorities are prepared to handle all por related problems o Identify requirements of external equipment requir o Assess damage for natio assistance	o Review the total extent of damage to the power supply installations by a	
5	Transport	Transport	HRTC, Civil Aviation, GAD	o Overall coordination of t Centre and the civil transportation capacity ir support of central state a		#Make available its fleet for the purpose of SAR (Search and Rescue), transportation of supplic victims etc;

Н				local government entities	protection of freight	#Act as stocking place for fuel for
				o Restoration of roads Coordinate and implemen emergency related respon and recovery functions, search and rescue and damage assessment		fuel for emergency operations; #Making available cranes to the Distt. ADCinistration; #GAD and Civil Aviation will coordinate for Helicopter services etc. required f transportation of injured, SAR tea relief and emergency supplies.
6	Search and Rescue		NDRF,SDRF, Armed and Pa military forces Police, Red Cr VOs, voluntee: and 108.	rescue response system. o Coordinate search and	an estimate of the damage area and the deployment of the SAR team in the area according to the	available ambulances as per requirement; #SDRF, VOs and Volunteers to assist the primary agency in SAR #NDRF, Armed and para military forces to provide assistance to civ authorities on demand; #Police to arrange for the
7	and Engineering	HP PWD	Highways Authority of India, MES,BF	activities to assist local relief work O Begin clearing roads. Assemble casual labour o Provide a work team carrying emergency tool kits, depending on the nature of disaster, essent equipment such as o Towing vehicles o Earth moving equipmen o Cranes o Construct temporary ro o Keep national and other main highways clear from disaster effects such as debris etc.	transit /relief camps o Adequate road sigr should be installed t guide and assist the relief work	available to the PWD and to keep national highways and other facilities in functional state.
8	Communication	Deptt. of Revenue Through Sta DEOC		Information (DWI) System collect, receive, and repor and status of victims and assist family reunification o Apply GIS to speed othe facilities of relief and sear and rescue o Enable local authorities establish contact with the state authorities o Coordinate planning procedures between distrithe state and the centre o Documentation of all procedures at national lev o Provide ready formats for all reporting procedures a standby	response/relief and recovery measures o Situation reports to be prepared and completed every 3-4 hours	#Render necessary assistance in terms of resources, expertise to the primary agency in performing the assigned task.
9	Relief Supplies	Deptt. of Revenue	Deptt. of Food and civil supp	o To collect, process and disseminate information about an actual or potent disaster situation to facili the overall activities of all responders in providing assistance to an affected area in consultation; o Coordinate activities involved with the emerger provisions; Temporary shelters; Emergency supplies; o To coordinate bulk distribution of emergency supplies;	type of requirements depending on need; o Organize donation (material) for easy distribution before entering disaster site	#To assist the primary agency in running the relief camps.

Food and Civil Supplies	Deptt of Food and Public Distribution	Deptt of cooperation	o To provide logistical and resource support to local entities; o In some instances, servialso may be provided to disaster workers; o To coordinate damage assessment and post disaster needs assessmen o Requirement of food for affected population o Control the quality and quantity of food o ensure the timely distribution of food to the people o Ensure that all food tha distributed is fit for huma consumption	o Make emergency food supplies available to population o Ensure the provision of specific nutrients supplementary diet f the lactating, pregna	
Drinking Water	I&PH	Urban Development & Rural Development.	Procurement of clean drinking water o Transportation of water with minimum wastage o Special care for women with infants and pregnant won o Ensure that sewer pipes and drainage are kept separat from drinking water facili		
Shelter	Deptt. Of Revenue	HIMUDA, HPPWD, UD a Panchayati Ra		o Develop alternative arrangements for population living in structures that migh be affected even after the disaster	
. Media	Deptt. of Public Relations	Local DD and	o To provide and collect reliable information on th status of the disaster and disaster victims for effecti coordination of relief work at state level o Not to intrude on the privacy of individuals and families while collecting information o Coordinate with EOC's at the airport and railways frequired information for international and nationa relief workers o Acquire accurate scient information from the ministry of Science and Technology o Coordinate with all TV aradio networks to send ne flashes for specific needs Donation o Respect the socio-culturand emotional state of the disaster victims while collecting information for dissemination	information to guide people towards relief operation o Use appropriate means of disseminating information to victims of affected area o Curb the spread of rumours o Disseminate deactivation message to all field workers at news flashes for specific needs of Donation o	
Helplines	Deptt. Of Revenue	Deptt. of Publi Relation	o Co-ordinate, collect, process, report and displa essential elements of	o One of the most critical needs will be having a simplified	#To assist the primary agency in performing its job effectively and provide its manpower and resour

				information and to facilita support for planning effor in response operations o Co-ordinate pre-planned and event-specific aerial reconnaissance operation assess the overall disaster situation o Pre positioning assessm teams headed by the Stat coordinating officer and deployment of other advance elements o Emergency clearing of debris to enable reconnaissance of the damaged areas and passa of emergency personnel a equipment for life saving property protection and health and safety	and tracking victims and providing assistance o Identify locations for setting up transit an relief camps, feeding centres and setting up of the Helplines a the nodal points in the state and providing the people the information about the numbers	
1	Animal Care	Deptt. of Animal Husbandry	Deptt. Of Pnchayati Raj	o Treatment of animals; o Provisions of vaccination o Disposal of dead animal		making available manpower.
1	Law and Order	Police	Home Guards	o Having sound communication and secur plan in place to coordinat law and order issues; o Training to security personnel in handling disaster situations and issues related to them.	o To maintain law ar order; o To take measure against looting and rioting; to ensure the safety and security o relief workers and materials; o To take specific measure for the protection of weaker and vulnerable section of the society; o To provide safety a security at relief cam and temporary shelt	making available manpower.

SOPS OF EACH HAZARD

Earthquake-Pre Disaster Preventive Measure

Disaster management with respect to occurrence of earthquake holds a special significance in Himachal Pradesh because the entire State is earthquake prone and is classified under Zone IV and V.

District Hamirpur has critical proneness to earthquake for which analytical mapping of resources needs to be done with multifold aim of "Creating Earthquake Resistant Structures" in the District and "Promoting awareness for preventing loss to human life" in the event of an actual earthquake.

In order to achieve these goals we must work on a multidimensional approach. Firstly, a comprehensive analytical modeling is required for making quantifiable assessment of "Annual Construction Pattern of New Houses" along with "Motivational Strategies", to involve and motivate the stakeholders to adopt earthquake resistant house building techniques. Secondly, in event of an actual

earthquake scenario public is required to be guided and made aware about "Safety Measures and Techniques".

IIT Roorki has been indentify as Disaster Resource Institute for Northern States and NIT Hamirpur has been identify as State Resource Institute for Hamirpur for imparting training and conducting workshops for sensitizing the stakeholders.

- **Blocks:** The information regarding new construction in the rural areas can be collected through Gram Panchayats. In District Hamirpur there are 229 Grams Panchayat and therefore data regarding new constructions can be collected through sampled Panchayats. Out of 229 Gram Panchayats 40 Gram Panchayats have been randomly selected for getting information regarding new constructions.
- Municipal Corporation and notified Area Committees. In municipal Committee and Notified Area Committees the construction is regulated by these Urban Local Bodies. Municipal Committee grants permission for construction of building in the meeting of Committee as per Himachal Pradesh Municipal Committee 1994 and Municipal Committee Hamirpur building Bylaws. The information regarding person intending to construct house can be collected through Executive Officer of MC/NAC.
- Town & country Planning Department: Town and Country Planning Department gives sanction to housing plans. The person planning to construct houses apply to Town & Country Planning for approval of their plans, therefore, data regarding potential individuals intending to construct house can be collected from Town and Country Planning Department.

II. Identification of target groups:-

In order to associate and sensitized people to adopt Earthquake Resistant Structural Design, we need to identify the Stakeholders involved. The following is the list of "Target Group" which needs to be oriented toward Earthquake Resistant Structural Design:-

- House Owners.
- Contractors.
- Engineers.
- Architects.
- Masons.

We also need to outline the source from where information about above mentioned target group can be obtained.

House Owners. The possible source from where information about people intending to construct houses can be obtained is as follows:-

Banks: Applications received for house loans

NAC/MC: Application to whom permission for new construction is granted

Gram Panchayats: Ward Members can be asked to inform G.P. Secretary as and when the construction of new building starts. This information can be collected at Block Level through Panchayat Secretaries.

- *Contractors:* At present we have 125 registered contractors with HPPWD in District Hamirpur.
- *Engineers:* Baseline survey needs to be done to find out exact number of Private Engineers working in the field of construction of buildings in the District Hamirpur.
- *Architects:* -The information regarding registered Architects in the District van be collected from Town & Country Planning Department. At present there are 25 registered Architect in the District.
- *Masons:*-Baseline survey is required to be done to obtained information regarding nos. of masons engaged in the building construction work in the District Hamirpur. Also, a mechanism can be worked out wherein this resource directory can be easily prepared by collecting information from BDO's through Panchayats Secretaries.

III. Strategies Regarding "Pre Earthquake Preventing Measures":-

It is not the earthquake rather it is the building that kills people. If the collapse of single building can because possible to stop, it can save many lives residing in that building. It is not possible to abandon to abandon all the old buildings, under the potential threat of earthquake. However it is quite possible that all the newly constructed buildings and structures must be brought under strict building code that resists earthquake damage. For pre Earthquake Preventive Measures following strategy can be adopted:

Orientation of the Target Group: To train and educate people regarding "Earthquake Resistant Structures" the identified target group would be trained and sensitized through a series of workshops and seminars to be organized through NIT and State Council of Science and Technology for adopting "Earthquake Resistant Techniques". They shall also be exposing to low cost. "Earthquake Resistant Housing Technologies" so that the new housing has "Earthquake Resistant' features. If 300 persons n(Target Group) are to be sensitized, then 25 to 30 one day training/ orientation camps are required for a batch of 100 persons.

Cost of Training:At a rate Rs. 100 per person per day, cost of conducting training/orientation camps shall be approximately Rs3 lacs.

Involvement of NIT/SRI for conducting training and workshops:

Training and workshops regarding Earthquake Resistant Structures can be organized with the help of NIT Hamirpur. NIT shall be the nodal agency for conducting training workshop for identified target groups.

Cost effective designs of Earthquake Resistant Structures can be prepared with the help of NIT. Wherein a guide book of cost calculation for houses having "Earthquake Resistant" features can be designed for different categories of construction. To educate people about "inexpensive" structural

features in the constructions, which are "earthquake Resistant" a cost comparison of "conventional Construction: and "Earthquake Resistant structures", can be made.

Cost comparison of "conventional Construction" in brick masonry and Earthquake Resistant Construction: For a conventional building with the plan and elevations (drawing attached) with three rooms, one kitchen, one store, one verandah and one toilet and bathroom, using conventional construction materials i.e. stone, bricks, cement and concrete the overall cost of building comes out to be approximately 4.25 lacs.

If the "Earthquake Resistant" provisions are incorporated in the construction as per the guidelines of IS 4326:1993 the overall cost of the building comes out to be 4.50 lacs. This increase in the cost is 5.55% and is marginal in comparison to the safety provided by the structure after incorporating these provision and the extension in the service life in the building.

The various provisions that can be incorporated are:

- **Plinth band:** this should be provided in those cases where the soil is soft or uneven in their properties as it usually happens in hill tracts. If will also serve as damp proof course. This band is not too critical.
- **Lintel band:** this is the most important band and will incorporate in itself all door and window lintels the reinforcement of which should be extra to the lintel band steel. It must be provided in all stories in buildings.
- **Roof band:** This band will be required at roof level of the slab roofs and eaves level of trussed roofs, and also below or in level with such floors, which consist of concrete band.
- **Vertical reinforcement:** The amount of vertical reinforcing steel will depend upon several factors like the number of stories, story heights, the effective seismic coefficient based on seismic zone, importance to building and soil foundation type. The steel bars are to be installed at the corners of walls and jambs on doors right from the foundation concrete and covered with cement concrete in cavities made around them during masonry construction. This concrete mix should be kept 1:1.5:3 by volume and richer. The vertical steel of opening stopped by embedding it into the lintel band but the vertical steel at corners and junctions of walls must be taken into the roof slabs or roof band.

Additional Concrete and reinforcement required:

- Concrete in the plinth band lintel band and roof band of size 230mm x 75MM =3 x73.42 x 0.23 x 0.075 =3.80 cu.m
- Weight of steel required @ 2 bars of 10mm diameter and 6mm diameter stirrups @150mm center to center = $3(2 \times 73.42 \times 0.0000785 \times 78.5 + 490 \times 0.3 \times 0.0000283 \times 78.5) = 3.9 \text{ kN} \sim 397.5 \text{ kg}$

Weight of steel required around the openings and near corners and T-junctions in the walls = 30 x 2.90x 0.000078 x 78.5 =0,53 kN ~ 54 kg
 Total steel = 451.5 kg

Cost of concrete = 3.80 x 2102.28 = Rs. 7988.66

Cost of steel = $451.5 \times 37.47 = Rs. 16917.70$

Total increase in cost = $24906.36 \sim Rs. 25000$

Result: (%age increase in the cost = 5.55%)

Thecost comparison of "Conventional Construction" in brick masonry and "Earthquake Resistant" constructions shows that there is an increase of 5.55% in the cost of construction with "Earthquake Resistant" features. This increase is marginal as compared to the safety provided by the structure in the event of an Earthquake.

Legislative Inclusions to make Earthquake Resistant feature a mandatory part of house/building constructions in Urban as well as in rural areas is required. Moreover reframing of building code guidelines, manuals and bylaws and their strict implementation is needed.

Instructions are required to be given to all Financial Instructions to make advance to that person only who submit "Earthquake Resistant Design" of the building.

MCs/NACs are also required to be directed to give approval in case of those constructions, where proposals are certified by "Structural Engineer" having Earthquake Resistant Features.

For regulating construction in Rural Area Panchayati Raj Act is required to be amended. A Provision of approval of Gram Panchayat regarding new constructions is required to be incorporated.

IV. Awareness about "Safety Measures and Techniques":-

- In order to create awareness among public regarding "Earthquake Safety Measures and Techniques", an information booklet containing do's and don't in Hindi and English can prepared, which may be circulated to:
- All Educational Institutional i.e. Middle/Secondary Schools, Private Schools and Colleges.
- All Gram Panchayats & Public Institutions.

Suggestions:

Identification of all "*LifeLineBuilding*" in the District is required I to be done. These building may be got "Seismological Assessed" and if necessary "Retrofitting Measures" may be adopted.

- Efforts are required to "Evolve Educational Curricula" in architecture and Engineering Institutions and Technical training in polytechnics and Schools to include disaster, related topics.
- Private Engineers and Masons should be registered and their activities be regulated though appropriate rules and regulations.
- Instructions are required to be given to all Financial Institutions to make advances to those persons only who submit an "Earthquake Resistant Design" of the building that is intended to be constructed.
- Ward Panch can be asked to inform the Gram Panchayat Secretary as and when construction of new building starts so that concerned mason and the owner may be provided information regarding "Earthquake Resistant Techniques" for the construction of the buildings.

EARTHQUAKE -PREDISASTER PREVENTIVE MEASURES:

Disaster management with respect to occurrence of earthquake holds a special significance in Himachal Pradesh because the entire State is earthquake prone and is classified under Zone IV.

District Hamirpur has critical proneness to earthquake for which "Earthquake Preventive Measures" are required to be taken. These measures include "Constructing Earthquake Resistant Structure" and "Creating Awareness" About "Safety Measure and Techniques".

In order to achieve these goals we must work on a multidimensional approach. Firstly, a comprehensive analytical modeling is required for making quantifiable assessment of "Annual Construction Pattern of New Houses" along with "Motivational Strategies", to involve and motivate the stakeholders to adopt "Earthquake Resistant" "House building Techniques". In event of an actual earthquake scenario, public is required to be guided and made aware about "Safety Measures and Techniques".

The assessment of "Annual Construction Pattern" in District Hamirpur can be done by collecting data through Banks (on the basis of loan application sanctioned), Blocks(regarding construction in Rural Area), MC/NAC & T&CP (regarding construction in Urban Area)/ Trends in the sanctioning of house loans by the banks during 2003-04,2004-05,2005-06 show an annual average increase of 7.15%,. This annual average increase is a growth factor for the construction on the basis of which projections for new construction can be made. During 2005-06 2415 Nos. new houses were constructed in the District and for 2006-07 2539 Nos. of houses are projected to be constructed.

In order to associate and sensitized people regarding "Earthquake Resistant Structures, we have identified "Target Groups", these are House Owner, Contractors, Engineers, Architects and Masons.

For Pre Earthquake Preventive Measure different strategies are required to be adopted. Firstly identified "Target Groups" would be trained and sensitized

regarding "Earthquake Resistant Structure" through workshops and seminars. Secondly Specialized institute i.e. NIT/SRI can be involved for conducting training and workshops "Target Group" shall be exposed to low cost "Earthquake Resistant Housing Technologies". "Cost Effective Designs" of "Earthquake Resistant Structures" can be prepared with the help of NIT where in a guide book of cost calculation for houses having "Earthquake Resistant' feature can be designed for different categories of constructions. Cost compression of conventional constructions in the brick masonry and "Earthquake Resistant Structure" shows that there is an increase of 5.5% in the cost of construction with "Earthquake Resistant" features. This increase is marginal as compared to safety provided by the structures in the event of actual Earthquake. Legislative measure to make "Earthquake Resistant" features as a mandatory part of house/ building construction in Urban as well as in Rural area are require to be taken. Instructions are required to be given to all Financial Instructions to make advances to those persons only who submit "Earthquake Resistant Design" of the building MCs/NACs are also required to be directed to give approval incase of those constructions, where proposals are certified by "Structural Engineer" having Earthquake Resistant features. Awareness about safety measures is required to be created among public. For this booklet containing do's and don'ts can be prepared, which can be circulated to all Educational and other Public Institutional". It is suggested that private Engineers and Masons should be registered and their activities be regulated though appropriate rules and regulations.

Drought:

This problem is being faced in Bamson, Bhoranj, Hamirpur, Bijhari and some parts of Nadaun and Sujanpur blocks. The district ADCinistration is combating this problem by deploying drinking water tankers, installation of deep water hand-pumps and reviving the traditional water sources.

In order to check this problem district has 4 Nos. of Watershed/ Hariyali Projects, which are at various stages of implementation. The total outlay of these projects is 20.49 Crores. A watershed project Rs. 5.00 crores in respect of development block Hamirpur and Sujanpur has been completed. In these projects stress has been laid on soil moister conservation by constructing small nalla bandhs and big check dams. In total 612 Nos. of check dams/ Nalla bandh have been constructed. Out of these 86 Nos. check dams are relatively of big size. Out of 612 check dams/ nalla bandhs 526 Nos. have water stored in them. The construction of these check dams has lead to the charging of the ground water and as a result some of the dry traditional water sources have been revived. Hand pumps were installed in the areas/ villages of water scarcity where there was a possibility of installation of hand pumps(Table). The detail of the hand pumps installed is as follows:

Table 13: No. of Hand Pumps installed in Hamirpur

<u>Year</u>	No. of Hand Pumps Installed during the year district
2007-08	129
2008-09	282
2009-10	304
2010-11	235
2011-12	204
2012-13	229
2013-14	23

In villages facing shortage of drinking water tanker are deployed. A separate plan under the supervision of district ADCinistration has already been drawn in coordination with IPH department to mitigate this disaster.

FOREST FIRE AND URBAN, RURAL FIRE:

To deal with the fire incidents in the district Hamirpur there is one fire service station at Hamirpur which has the manpower of 15 personals, which includes 5 drivers. The fleet of fire brigade has 5 vehicles which include:

1.	Fire vosuer	1	9000
2.	Water Tenders	2	4200
3.	Small water tender	1	2200
4.	Quick Response Vehicle (QRV)	1	350

In case of major fire incidents Home Guards can be pressed to service as there are five companies of Home Guards having 511 Nos. of Home Guards. In any emergent situation 15 Nos. of Home Guards are readily available for deployment.

In thickly populated area of the district i.e. Hamirpur, Sujanpur and Nadaun towns, there are 30 water hydrants.

RELIEF, RECOVERY, REHABILITATION AND RECONSTRUCTION PLAN

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 pain staking effort by all concerned. The ADCinistration, 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 psycho social support and trauma counselling would be developed for implementation during the reconstruction and recovery phase.

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 GIA 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 construction norms, designs and guidelines will be finalised during normalcy so that community is well aware of them. Services of CBO, CSOs, and faith based organisation will be taken for this purpose to gain acceptance.

RECONSTRUCTION OF SOCIAL INFRA STRUCTURE

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 there construction 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. On-going 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 that such assets are hazard resistant, durable, and sustainable. Disasters may also end up in destroying the existing village or housing site sand 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 do not end up in rebuilding 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 would 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.

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 DDMAs would identify locations for setting up temporary camps and make an inventory in advance of them. Use of premises of educational institutions for

setting up relief camps need to be discouraged as it hampers DDMP 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 be fitting the local environment, ecology and culture, immediate shelters with suitable sanitary facility will be undertaken to ensure are as on able quality of life to the affected people. The DDMAs 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.

Financial Provision and Implementation of DDMP

With the 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 Fund and District Disaster Mitigation fund 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 DDMAs for the purpose of mitigation as per the HPDM 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 Visa Vis various disasters may be consulted while preparing mitigation projects.

TECHNO-FINANCIAL REGIME

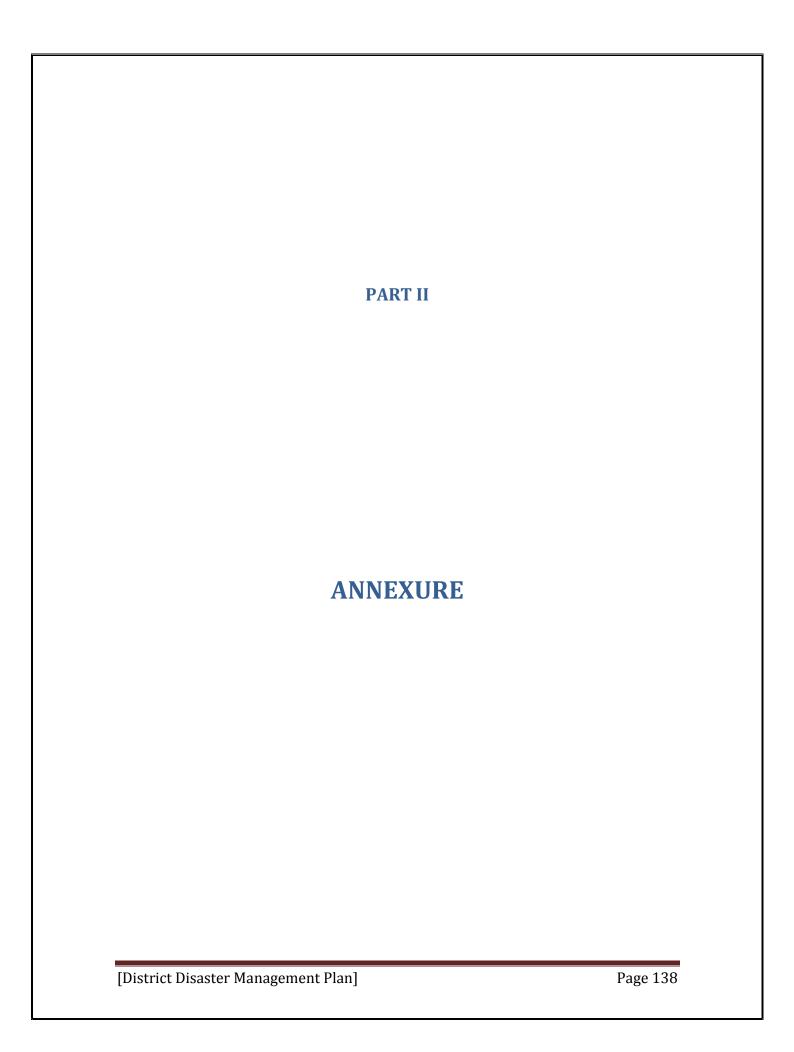
Considering that the assistance provided by the Government for rescue, relief, rehabilitation and reconstruction needs cannot compensate for massive losses on account of disasters, new financial tools such as catastrophe risk financing, risk insurance, catastrophe bonds, micro-finance and insurance etc., 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.

Monitoring, Evaluation, Updation and Maintance of DDMP

The following monitoring and evaluation procedure would be followed to make the plan functional and a living document:-

- ❖ The DDMA shall regularly review the implementation of the plan.
- ❖ 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.
- ❖ 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.
- * Resource inventory of the district fed into the IDRN would be regularly updated and appended to the plan.
- ❖ 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.
- ❖ A soft copy of the plan would always be kept in the DDMA website for reference by all concerned.
- ❖ 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.
- * 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.
- * 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 ADCinistration.
- ❖ 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.
- ❖ The DEOC would assist the DDMA in keeping the plan in updated form and collecting, collating and processing the information.
- ❖ The DDMP would be comprehensively reviewed in the year 2013 latest by March and incorporating feedback from the departments and field officers.



LIST OF NODAL OFFICERS

Nodal officer Revenue Department; Sh.Bal Krishan Chaudhary, DRO, Ph. 01972222649

Table 14: List of Nodal officers

Sr.	Name of office	Name of office	Designation	Mobile No.	Fax No.	Phone No.	Email ID
1.	Dy. Director Ele. Edu.	Sh. Ashwani Chambyal	Distt. Science Supervisor	9418073781	0197 2227		Sudhirchandel6@gmail. m
2.	C.M.O. Hamirpur	Dr. Sanjay Jagot	Sr. Medical officer incharge	9418096596	0197 2222		DTOHPHMR@rntcp.org.
3.	Dy. Director Higher. Edu.	Sh. Bhudia Ram	Supdt. G-l	9805328775	0197 2214		
4.	RM HRTC Hamirpur	Sh.Pardeep Sharma	RMHRTC		0197 2223		https://rohpr@hrtc.gov
5.	Sub. Div. Eng.(HRD) O/O GMTD Hamirpu	Pritam Chand Dhiman	DE(O/D)	9418058600	0197 2225		PCdhiman@bsnl.co.in
6.	Commandt Home Guard	Sh. Oma Pati jamwal	Commandt Home Guard	9418036663	0197 2222		Hg10bn-hp@nic.in
7.	S.P. office Hamirpur	Sh.Shamsher Singh	ASP	9882347576		01972- 224958	Asp-ham-hp@nic.in
8.	Dy. Director Horticulture	Dr. Pardeep Sakhyan	Distt. Horticulture officer	9418179807	0197 2247	01972- 224757	
9.	Dy. Director Agriculturre	Dr. Alvel Singh	Dy. Director Agriculture	9418046105	0197 2254	01972- 222502	

भूकम्प के प्रति सावधानियां

जिला हमीरपुर अति संवेदनशील व संवेदनशील क्षेत्र में पड़ता है अथवा मण्डल पांच व चार में पड़ता है। अतः यहां के निवासियों को निम्नलिखित बातों का अनुसरण करना चाहिएः

- 1. घर पर या काम करने वाली जगह अथवा गाड़ी में आपात्कालीन लाईट या इमरजेन्सी लाईट रखनी चाहिए क्योंकि अक्सर भूकम्प के पश्चात बिजली गुल हो जाती ळें
- 2. आग बुझाने का यंत्र घर पर या कार्यालय में होना चाहिए ताकि आग लगने की दशा में उस पर नियन्त्रण हो सके।
- सेल से चलने वाला रेडियोसेट अवश्य अपने पास रखें क्योंिक भूकम्प के समय
 अन्य संचार माध्यम ध्वस्त हो जाते हैं।
- 4. कम से कम तीन चार लीटर पीने का पानी प्रत्येक व्यक्ति के लिए घर में उपलब्ध होना आवश्यक है।
- पौष्टिक एवं आसानी से खराब न होने वाली खाद्य सामग्री का भण्डारण कम से कम तीन दिन की आवश्यकतानुसार जरूर करें।
- 6. प्रथम उपचार किट (First Aid Kit) जिसमें आधारभूत औषधियां हों जरूर पास रखें। इसमें विशेष औषधियां भी होनी चाहिए।
- 7. आपात्कालीन सामग्री सुरक्षित स्थान पर रखें और यह सुनिश्चित करें कि परिवार के प्रत्येक सदस्य को इस बारे में जानकारी हो।

भूकम्प के समय सावधानियां

- 1. ऊंची मंजिल की इमारतों से बाहर निकलने की कोशिश करें। अगर आप नहीं निकल सकते तो किसी टेवल या डेस्क के नीचे आ जाएं। अपने सिर व चेहरे को ढक लें तािक गिरने वाली चीजों से सुरक्षित रह सकें।
- अगर आप बाहर हैं तो खुली जगह आ जाएं और पेड़, इमारतों एवं बिजली की तारों से दूर रहें। पहाड़ी क्षेत्रों में ढलानों से दूर रहें यह उचित होगा।
- बिना सोचे समझे भूकम्प के समय इमारतों से बाहर न दौडें। गिरती ईंटों व सामान से मृत्यु हो सकती है। भूकम्प के समय लिफ्ट का प्रयोग न करें।

4- अगर आप गाड़ी चला रहें हों तो सड़क के एक तरफ हो जाएं। पुलों, पेडों, इमारतों और बिजली की तारों से दूर रहें। गाड़ी के भीतर ही रहें और भूकम्प के थमने का इन्तजार करें।

मकान की छत की ओर न दौडें न ही आंशिक या दरार पड़ी इमारत या घर में जाएं क्योंकि थोड़ा सा भूकम्पीय कम्पन इसे ध्वस्त कर सकता है।

Table 15: Telephone Directory of officers in respect of District Hamirpur

Sr. No.	Name & Designation	Office Number	Residence Number	Mobile number
1.	Sh. Madan Chauhan, IAS , DC	224300	224343	9418097111
1.	Hamirpur	224300	224343	9410097111
2	Mrs. Rupali Thakur,IAS , ADC Hamirpur	224343	224325	981686110
3.	Dr. Ashish Sharma ,HAS,AC to DC Hamirpu	222449	222348	9418485816
4.	Mrs Kritika Kolhari,IAS,SDM, Hamirpur	224304	224303	9418479677
5	Sh. Akshay Sood,HAS SDM, Barsar	288045	288044	9418394443
6.	Sh. Balwan Chand ,HAS,SDM, Bhoranj	266928	265264	9418134462
7.	Sh.BalKrishanChaudhary	222649		
	DRO Hamirpur			
8.	Sh. Rajiv Thakur , Tehsildar Hamirpur	222226	222226	9817011951
9.	Sh. Yasvant Dhiman, N.T,Hamirpur	-do-	-do-	9418223199
10.	Sh. Suresh Patial , Tehsildar, Sujanpur	272047		9418049742
11.	N.T.Sujanpur	-do-		
12.	Sh. Bali Ram Sharma, Tehsildar Barsar	288029	288029	9418738600
13.	N.T. Barsar	-do-		
14.	Sh. Amar Singh, N.T. Bijhari	283342	283342	9418057419
15.	Sh. Om Parkash , Naib Tehsildar, Galore	242316	242316	9418008932
16.	Sh. Rajesh Verma , Tehsildar Taunidevi	278030		9418460074
17.	Sh. Harbans Lal, The. Election Hamirpur	222610		9816372230
18.	Sh. Suman Kapoor, Naib Tehsildar Hamirpu	-do-		9418008501
19.	Distt. Plg. Office:			
20.	Sh. Vinod Garg, DIO, NIC Hamirpur	223036		9418109710
21.	Sh. Ajay Singh Bodh, HPS , S.P. Hamirpur	224358	224357	9418466604
22.	Sh. Shamsher Singh, Addl. Supdt.of Police			9882347576
23.	Sh. Lal Man Sharma , Dy. S.P.(H.Q)	224338		9418077169
24.	Sh. Balbir Singh, Dy. SP(Vigilance)	222307		9418067397
25.	Sh. Ravinder jaswal ,SDPO, Barsar	288021		9418369202
26.	Sh. Santosh Patial ,IPS commandant 4 th Bt. jangalberi	276652/3/44		9418003007
27.	Sh.Rakesh Sharma ,PODDA Hamirpur	221407	223335	9418092444
28.	Sh. Sunil Chandel ,BDO Hamirpur	222278		9418176650

29.	Smt. Sudershan Suman , BDO Bhoranj	266022		9418918183
30.	BDO Sujanpur,	272023		9410910103
31.				0410051550
32.	Sh. Shashi Patial ,BDO Nadaun	232236		9418051558
	,BDO Bijhari	283023		0410010626
33.	Er. M.K. Manhas Chief Engineer, HPPWD	222925	000000	9418010636
34.	Er. B.R.Dhiman, Supdt. Eng.	223965	222228	9418751357
35.	8 7	222510	224011	9418137606
36.	8 7	222783	224911	9418036887
37.	Er. D.K.AggarwalExecutive eng. BArsar	288041	288022	9418023077
38.	Er. D.S. Patial ,A.E.PWD Elec.	222449		9418088220
	Er. R.K. Kanwar, Chief Engineer IPH	221365		9418086559
	Er.S.K.Chaudhary, S.E.IPH Hamirpur	224899	224898	9418010124
41.	Er. Vijay Kumar Dhatwalia, Exe. Eng. IPI	222346	222010	9418006844
	Hmr			
42.	Er.N.P.Parmar ,Exe.Eng.Barsar	288060	288059	9418074488
	Er.P.R. Rattan, S.E.HPSEB Hamirpur	224330	222380	9418478223
44.	Er. R.S. Thakur, Executive Eng. HPSEB Hmr	222213	222215	9418082220
45.	·	222308	222383	9418000299
46.	Dr. A.R.Singha, Registrar, NIT Hamirpur	224390	223070	9418029120
47.	Sh. Som Dutt Sankhyan Dy.Director Hr.Edu.Hmr	221499		9418962245
48.	Sh. Inderjeet Singh Thakur, -do- Ely.E Hmr	222749		9418453708
49	Sh. P.C. patial Principal NSCBM Govt. Colle Anu	222227		9418158505
50	Sh. Rakesh kapoor ,Pri. Poly.Tech. Baru	258509		9418039399
51.	Sh. R.C. Sharma ,-do- K.V. Hmr	221621	222570	9459832444
52.	Sh. Jageshwar , -do- Nadaun	233123	222310	9418147062
53.	Sh. Ambesh Kumar , Pri. JNV Dun		266987	9816854569
00.	(Bhoranj)	200000	200501	2010001002
54.	, , ,	222269		9418257309
55.		-do-		9418021009
	Dr. P.R.Katwal CMO Hmr,	222223		9816050300
	Dr. Ramesh Chauhan , MOH Hmr.	222043		9418058018
58.	Sh. Pardeep Thakur, Conservator of For		224622	9418031005
	Hmr			
59.	Sh. Anil Joshi DFO Hmr	224922		9418108062
60.	Sh. Kishori Lal , RTO Hamirpur	221330	221331	9418458202
61.	Sh. Daljeet Singh Dogra , HRTC Hmr	224485		9418000543
62.	Dr.Y.S. Rathore Dy. Director Animal Hus		222576	9418113991
	Hmr.			
63.	Sh. Omapati jamwal Commandant Ho Guard Hmr	222224	222823	9418036663
64.	Sh. V.K. Sharma , E.O. MC, Hamirpur	221513		9418032727
65.	Sh. P.R.Sen. G.M. DIC, Hmr	222309	9418456680	
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Table 16: Office of the Superintendent of Police , Hamirpur

Name of Officer/Units	Designation of Officer	Telephone No. (office)/Resi.	Mobile No.
Sh. Ajay Singh Bodh , HPS	S.P. Hamirpur	224358	94184- 66604
Sh. Shamsher Singh,HPS	Addl. S.P. Hamirpur	224958	98823- 47576
Sh. Raman Sharma , HPS	DY.S.P.(H.Q)	224358	94180- 81788
Sh. Rajinder jaswal , HPS	SDPO , Barsar	289840	94183- 69202
Control Room. S.P. Office	-	224339	
Police Line Hamirpur	-	258410	
Police Station Hamirpur	-	224306/100	
Police Station Barsar	-	288021/100	
Police Station Nadaun	-	224306/100	
Police Station Bhoranj	-	266040/100	
Police Station Sujanpur	-	272021/100	
Police Station Jahu	-	263073	
Police Station Awahdevi	-	275637	
Police Station Deotsidh	-	286188	
PAR Galore	-	242007	
PAR Bijhar	-	283021	
PAR Bhora (I/CASI Vinod Kumar)		-	94185- 26884

Table 17: Office of the Chief Medical Officer, Hamirpur

Name of Officer/Units	Designation of Officer	Telephone No. (office)/Resi.	Mobile No.
Health & Family Welfare Distt . Hamirpur (H.P)	1. Medical Specilist	-	
1. R.H. Hamirpur	2. CMO , Hamirpur	222223	98160-50300
	3. MOH, Offfice	222403	94180-96596
	4. Emergency SMO	222222	94180-58018

[District Disaster Management Plan]

	Office		
2do- CHC Tauni Devi	BMO, Office	278434	94181-14909
3. –do- CHC Barsar	-do- Office	288388 & & 288034	94180-37580
4. –do- CHC Bhoranj	-do- Office	266026	94180071143
5. –do- CHC Nadaun	-do- Office	232248	94181-25935
6. –do- CHC Sujanpur	-do- Office	272043,272707	94181-54102

Table 18: Office of the Executive Engineer (C&W) Operation Circle

Name of Office /Institution	Name of Officer	Designation of Officer	Telephone No. (Office) /Resi.	Mobile No.
HPSEBL	Er. Baldev	A.E. Sub	01972-	94180-58013
Hamirpur	Chand	Division No.2	222218	
		Hamirpur		
o/o A.E.Sub	Er. Arun	A.E.Sub Div.	01972-	94184-20001
Division	Sharma	Nadaun	232226	
Nadaun				
o/o A.E.Sub	Er. Yashveer	A.E.Sub Div.	01972-	94180-82255
Division	Singh Thakur	Barsar	288023	
Barsar				

Table 19: Office of the Commandant Home Guards 10th Battalion, Hamirpur

Name of Office/ Institution	Name of Officer	Designation of Officer	Telephone No (Office/Resi.)	Mobile No.
Fire Brigade	Sh. Devi Chand	Office Incharge	222533/101	94183-
	Sharma	Fire Brigade		30507
o/o	1. Sh. Ramesh	Company	-	94596-
Commanddant	Chand	Commander		49139
Home Guards	2. Sh. Ashok	Platoon	-	94181-
10 th Battalian	Rangra	Commander		65465
Hamirpur	3. Sh. Parvin	-do-	-	98056-
	Kumar			56247
Company	Sh. Madan Lal	-do-	-	97360-
Sujanpur				46258
Company	1.Sh. Surinder	Company	-	94595-
Nadaun	Paul	Commander		04763
		Platoon		
	2. Sh. Amrit Lal	Commander	-	

				94184- 50708
Company	Sh. Nanak	Company	-	94185-
Bhota	Chand	Commander		32641
Company	1.Sh. Ashwani	1.Senior	-	94181-
Barsar	Kumar	Company Commander	_	78513
	2. Sanjeev	2.Company		98161-
	Kumar	Commander		29807

Table 20: Office of the Executive Engineer, IPH Division Barsar.

Name of officer	Designation Officer	of Telephone (Office) /Resi.	No Mobile No.
Er. Narender Paul Sharma	Executive Engineer	01972-288060	9418074488
Er. P.C. Sharma	A.E. Barsar	-do-	9418498199
Er. R.C. Katoch	A.E. Bhota	-	9418459368
Er.Jitender Kumar Garg	A.E.Galore	-	9418473100
	A.E. Bhoranj	-	9418073912
Er. Vikram Singh Thakur	J.E. Bijhari	-	9418406233
Er. Suresh Kumar Anand	J.E. Chakmoh	-	9805130630

Table 21: Office of the Executive Engineer, Hamirpur Division HPPWD, Hamirpur

Name of Office /Institution	Name of Officer	Designation of Officer	Telephone No. (Office)/Resi.	Mobile No.
Hamirpur Sub Div.	Er. N.P. Singh	Executive Engineer	222510/222230	9418137606
	Er. Ajay Bhaskar	Asstt. Eng.	225333	9418034555
	Er.P.C. Verma	-do-	272034	9418046444
	Er.Suresh Kumar Walia	-do-	232399	9418471223
	Er. Dev Raj	Addl. Asstt. Eng.	225333	9418022989
	Er. Hari Ram	-do-	-do-	9418056824
	Er. Naresh Jamwal	Jr. Eng.	-do-	9817065625
	Er. Sanjeev Gautam	-do-	-do-	9418028588

	Er.Ashok	-do-	-do-	9817770325
	Kumar			
0		A 1 11 1	070004	0016706000
Sujanpur	Er. B.D. Rana	Addl. –do-	272034	9816726898
Sub. Div.				
	Er. Sanjay	Jr. Eng.	-do-	9816218752
	Kumar			
	Er. Gian	-do-	-do-	9418057681
	Chand			
	Er.	-do-	-do-	94180-18371
	R.K.Saklani			
Nadaun Sub.	Er. Ashok	Addldo-	232399	9418456123
Div.	Sharma			
	Er. Jeewan	-do-	-do-	9418019629
	Lal Sharma			
	Er. Ramesh	-do-	-do-	9418138568
	Nanda			

Table 22: Office of the Executive Engineer, Barsar Division HPPWD Barsar

Name of Office /Institution	Name of Officer	Designation of Officer	Telephone No. (Office) /Resi.	Mobile No.
Barsar Sub Div.	Er. Bhag Singh Sem		01972- 2988041	94180-49663
	Er. Suresh Kumar	JE	-	94184-60175
	Er. T.N. Garg	-do-	-	94182-70460
-do- Dhaneta	Er. Deepak Kapil		-	9418058531
	Er. Pawan Kumar	JE	-	9816182390
	Er. Vinod Kumar	-do-	-	9418004010
	Er. Vijay Kumar Dhiman	-do-	-	9418113700
-do- Bhoranj	Er. R.V. Verma		-	9418457723
	Er. Vipan Sharma	JE	-	9418383179
	Er. Rajesh Kumar	-do-	-	9418485072

Table 23: Office of the Executive Engineer, Taunidevi Division HPPWD Taunidevi

Name of Office /Institution	Name of Officer	Designation of Officer	Telephone No. (Office) /Resi.	Mobile No.
Taunidevi	Er.	EE	278422	9418103303
Sub Div.	R.K.Sharma			
	Er.	AE	278302	9418047520
	B.D.Ruhan			
Lambloo-do-	Er. P.P.Singh	-do-	248505	9418417906
Samirpur-do-	Er. J.C.	-do-	275459	9418023797
	Kanungo			
Kakkar-do-	Er. Hargivind	AE to EE	-	9816671899
	Kaushal	Kakkar		
T/Sub Div.	Er. Ravi	AAE	278302	9418055015
	Kumar Jaswal			
-do-	Er. Rattan	-do-	-do-	9418337122
	Chand			
Lambloo-do-	Er. Kishore	AAE	248505	8988387265
	Chand Kamal			
-do-	Er. Chander	JE	-do-	9816413644
	Bhanu			

Table 24: Office of the Animal Husbandry, Hamirpur

Name of Office/ Institution	Name of Officer	Designation of Officer	Telephone No (Office/Resi.)	Mobile No.
_ ·	Dr. Y.S. Rathor	Deputy Director	01972-222476	94181-1399
Director Animal Health./Breeding	Charma	A.D(Ext.)	-do-	94181-0327
	Dr.Parvesh kaushal	A.D. (Project)	-do-	98160-5332
o/o Dis Statistical officer	Sg. Tarlok Chand	Distt. Statistic Officer	01972-222397	94180-1823

Table 25: Status of Gosadans in respect of District Hamirpur

Address	Name and Address with Tel. No & the NGO managing the Gosadan	No./Mobile	Land Available	Carrying Capacity	Present Strength
1.	2.	3.	4.	5.	6.

		040=0	10 77 1 1	= 0	
Thakur	Thakur	01972-	12 Kanal in	50	42
Dwara	Dwara	2131168	the name of		
Goshala	Goshala		Temple		
jamali-Dham	jamali-Dham				
, P.O. Ropa	Committee				
The. & Distt.					
HMR					
Vidhata	Vidhata	01972-	550 K- in the	100	30
Gousewa	Gousewa	248200	name of	100	
Samiti	Samiti		Temple		
Mahadev	Mahadeb		Temple		
Mandir	Trust				
Gasota P.O.	Trust				
Bohanir The.					
& Distt. HMR					
	0:	04106 22016	0.417.0034	00	07
Gian Ganga	Gian Ganga	94186-33216	04K-08M	22	37
Goushala	Gouseva				
Balute P.O.	Sansthan				
Chamned					
The. & distt.					
HMR					
Mahakalika	-	01972-	05-00 Kanal	30	59
Mandit		282009			
Goshala					
kachwin P.O.					
Barsar Distt.					
HMR					
Kamdhenu	Sh. Swami	98826-33686	24-00 K in	-	-
Gau kalian			Jahoo & 6		
Sabha Jahu			K13M in		
P.O. Jahu			Mundkhar		
The. Bhoranj					
Distt. HMR					
Kamdhenu	Sh. Amin	01972-	8K-17M	25	20
Gausadan	Chand patyal	252891	-		
Bumana P.O.	Chairman				
Tal The. &	Gosadan				
Distt. HMR	Gooddar				
Lakshami	Sh. Lakshmi	01972-	13K-	60	70
Narayan	Naryan	208196	10M+10K(Govt	00	70
Goraksha	Goraksha	200190	land)		
Sewa Samiti			iaiiuj		
Goushala	Goushala				
Bharoli	Bharoli P.O.				
Bhagour					
	Nadaun Distt.				
Weighor	HMR Ch. Vrighen	01070	1.01-/Im ±1	55	4 E
Krishan	Sh. Krishan	01972-	10k(In the	აⴢ	45
Gopal	Gopal	234042	name of		
Goushala	Goushala		Goushala &30		
Bhadrun	Bhadrun		K other)		
	(Dhaneta)				
	The. NDN &				
	Distt. HMR				
Shiv Shakti	Shiv Shakti	01972-	2k+2K	35	26
Gosadan	gosadan	231314	Surrounding		
Malag	Malag				
(Kangoo)	(Kangoo)				
	The.NDN				
	Distt. HMR				
The second secon					

Vinod	Vinod	98053-51622	6Marla	50	54
Memorial	Memorial				
Goushala	Goushala				
	SamonaP.O				
	Bir Bagehra				
	The. SJN				
	Distt. HMR				
Baba Puri	Goushala		6K	30	18
Goushala	Bumbloo The.				
	Barsar Distt.				
	HMR				
Baba Balak	B.B.Nath		3k		9
		-	3K	-	9
nath Goshala	Goshala				
	Sadan Paplah				
Baba Balak	Baba Balak	0	13K	-	-
nath Trust	nath Trust				
kawal	kawal				
(Deotsidh)	(Deotsidh)				
Go Sadan	Go Sadan	-	0K-13M	-	27
Seva Society	Seva Society				
Souta	Souta Teh.				
	BHG. Distt.				
	HMR				

Table 26: List of Nodal officer for Gosadan in Distt. Hamirpur

कम सं0	गोसदन का नाम	नोडल अधिकारी का नाम/पद	Ü	नोडल अधिकारी का दूरभाष न0
1	ठाकुरद्वारा गौशाला समिति जमली, डा0 तरोपका, तह0 व जिला हमीरपुर हि0प्र0	,वरिष्ठ पशु चिकित्सा अधिकारी हमीरपुर		94182—9900 1
2.	विधाता गो सेवा समिति गसोता, डा० गसोता, तह० व जिला हमीरपुर हि०प्र०		पशु चि० धलोट	94180—697 04
3.	ज्ञान गंगा गो सेवा संस्थान बल्यूट, डा० लम्बलू, तह० व जिला हमीरपुर हि०प्र०		पशु चि० डेरापरोल	94180—122 69
4.	कामधेनु गउ कल्याण सभा जाहू, डा० जाहू, तह० भोरंज, जिला हमीरपुर हि०प्र०		पशु चि० भरेड़ी	94180—6766 1
5.	कामधेनु गौषाला समिति बुमाणा, डा० ताल, तह० भोरंज, जिला हमीरपुर हि०प्र०	चिकित्सा अधिकारी	C	255059
6.	बाबा पुरी गौषाला बुम्बलू, डा0 बुम्बलू, तह0 बडसर, जिला हमीरपुर हि0प्र0	डा० संजीव कालिया, पशु चिकित्सा अधिकारी	पशु चि० वड़सर	94181—251 65
7.	बाबा वालक नाथ टस्ट कलवाल दयोटसिद्ध	डा० धीरज कौशल, पशु चिकित्सा अधिकारी	पशु चि० विझड़ी	94182.06394

			_ 4 - 4 -	
8.	महाकालिका मन्दिर गौशाला		पशु चि0 विझड़ी	94182-0639
	कच्छवीं, डा० बिझड़ी, तह०	चिकित्सा अधिकारी		4
	बडसर, जिला हमीरपुर हि०प्र०			
9.	श्री लक्ष्मी नारायण गउ रक्षा सेवा	डा० विपिन चौधरी, वरिष्ठ	पशु चि० नदौन	98161-4706
	समिति भडोली भगौर, डा0	पश् चिकित्सा अधिकारी	S	1
	झलाण, तह0 नादौन,जिला	3		
	हमीरपुर हि0प्र0			
10	श्री कृष्ण गोपाल गौषाला भदर्रु	डा० संदीप शर्मा, वरिष्ठ	पश् चि० जसाई	94180-9094
10	धनेटा, डा० धनेटा, तह०	,	नसु १५० जसाइ	94 180 9094
		पशु चिकित्सा अधिकारी		9
	नादौन,जिला हमीरपुर हि०प्र०	. 0		
11	बाबा वालक नाथ गोसदन	010 (1 (1 1 11, 11)	पशु ाच0 जसाइ	94180—9094
	पपलाह वद्यमणा	पशु चिकित्सा अधिकारी		9
12	विनोद मैमोरियल गोषाला,समोना	डा० विश्वदीप राठौर,	पशुचि० जंगलवेरी	94180-34844
	डा० वगेहड़ा तह० सुजानपुर	वरिष्ठ पशु चिकित्सा		
	जिला हमीरपुर	अधिकारी		
13	शिव शक्ति गौशाला समिति	डा० सुनील शर्मा वरिष्ठ	पशु चि0 रैल	94184.64784
	मालग (कांगु), डा० कांगु, तह०	पश् चिकित्सा अधिकारी	3	
	नादौन, जिला हमीरपुर ;हि०प्र०द्ध	पसु विविधारता जीववर्गत		
44	गौसदन सेवा सोसाइटी सौटा	चा० गानेष क्यान बनिव	1101 	04404 0000
14		डा० सुरेष कुमार बरिष्ठ		94181—6988
	तह० भोंरज	पशु चिकित्सा अधिकारी	भोरज	4
15	गोपाल कृष्ण गौशाला गोलह	डा० संदीप पाटिल पशु	•	94180.66490
		चिकित्सा अधिकारी	मक्कड–मूसन	
16	श्री सनातन धर्म गोपाल गोसेवा		पशु चि० विझड़ी	94182-0639
	समिति पपलोह	चिकित्सा अधिकारी		4
17	श्री जगदीशशर्मा वढीतर डा०	डा० सुभाष चन्द पषु	पशु चिकित्सालय	94181-6424
	जौडे अम्ब तह० बडसर	चिकित्सा अधिकारी	दांदडू	4
18	श्री सुरिन्द्र कुमार गांव व डा०	डा० सुभाष चन्द पशु		94181-6424
	मैड तह0 नादौन	चिकित्सा अधिकारी	दांदडू	4
	10 dec listi	1 11 11 (11) 911-11 (1	11.18	•

Table 27: List of the Volunteers selected for Disaster Management (Disaster Risk Reduction) By NYK Hamirpur

Sr. No.	Name o <u>f</u> Volunteer	Full Name of the Volunteer	Contact No.
1.	Sanjeev	s/o Tilak Raj vill. & P.O. Chamiana Teh.SJN . Distt. HMR	9625422815
2.	Subhash Chand	s/o Sh. Mallu Ram VPO Mundkar Teh.BhoranjDistt.HMR	9418973898
3.	Ankush Thakur	s/o Sh. Pawan Kumar vill. Balore PO& The. Bhoranj Distt. HMR	9736572541
4.	Ashwani Kumari	d/o Sh. Nand Lal vill. Balore PO & The. Bhoranj Distt.HMR	988212130/01972315497
5.	Gorav Rana	s/o Suresh Chand vill Lundari P.O Dhanwin The. Bhoranj Distt.HMR	9129640286

6.	M: V	J/- Novel I al will Dulous DO 0 Tal. Dlamasi Disa HMD	000212120/01072215/07
7.	Manoj Kumari Navneet Kumar	d/o Nand Lal vill. Balore PO & Teh. Bhoranj Distt.HMR s/o Surjeet Singh vill. & PO Kulhera Teh. Bhoranj	988212130/01972315497
		Distt.HMR	<u>-</u>
8.	Ankush	s/o Bidhi Chand vill. & P.O Kulhera Teh. Bhoranj Distt.HMR	-
9.	Ashwani Kumar	s/o Prasotam Chand vill. Dughahar & PO Kulhera Teh. Bhoranj Distt. HMR	-
10.	Ajay Kumar	s/o Preetam Chand villHatehra Po Bhota Teh.Barsar	9736555634
11.	Sanjeev Kumar	s/o Ram Krishan vill. Ghangot (Khurd) PO Ghangota Teh Barsar Distt. HMR	9459164565
12.	Dinesh Kumar	s/o Jivan Kumar vill. Kaswar PO Gawardoo Teh.Barsar	9418450955
13.	Pilot	s/o Lt. Sh. Shakti Chand vill. Nanot PO uhal Teh. Bamson	9817072712
14.	Raj Kumar	s/o Bahadur Singh vill. Awah Devi Teh. Bamson Distt. HMR	-
15.	Kamal Singh	s/o Sh. Chandel Singh VPO Awahdevi Teh. Bamson Distt. HMR	9129501709
16.	Mukesh Kumar	s/o Joginder Pal vill. & PO Bagwara Teh. Bamson Distt. HMR	8894471185
<i>17</i> .	Vipan Kumar	s/o Gian Chand VPO Awahdevi Teh. Bamson Distt. HMR	9124367930
18.	Prakesh	s/o Prasotam Chand vill. Dari PO Bagwara Distt. HMR	9129367930
19.	Mukesh Kumar	s/o Hari Singh vill. Khandehra PO Kakdiyar Tehsil & distt. HMR	9882828612
20.	Rampi Singh Rana	s/o Kushal Chand Rana vill. Panayala PO Khiya Tehsil & Distt. HMR	8988007903
21.	Lucky	s/o Kishor Chand vill. Sher PO Dhaned Tehsil & Distt. HMR	9418399067
22.	Vijay Kumar	s/o Kashmir Singh vill. Julli PO Kot Tehsil & Distt. HMR	9625659292
23.	Nisha Kumari	D/o Desh Raj vill. Kandari PO Didwin Tehsil & Distt. HMR	9805592022
24.	Sarita Sharma	w/o Raj Kumar vill. Manwain PO Lag Manwin Tehsil Bhj. Distt.,HMR	9805438729
25.	Sunita Kumari	w/o Rajesh Singh vill. Balore PO& Tehsil Bhg. Distt. HMR	9129642981
26.	Anju Kumari	d/o Ashok kumar vill. Balore PO & Tehsil Bhoranj Distt. HMR	9817871567
27	Bholan Devi	d/o Bishamer Singh vill Balore PO & Tehsil Bhoranj Distt. HMR	9805074052
28.	Anu Kumari	d/o Sh. Amrit lal vill & PO Jijawin Tehsil Bhoranj	9459892958
29.	Meera Kumari	w/o Kuldeep Singh vill. Bassi Po Kharwar Tehsil Bhoranj	9817551673
30.	Bimla Devi	d/o Attru Chand VPO Uhak Tehsil Bhoranj	9459652943
31.	Bandana Kumari	d/o Hem Raj vill. Nahlwin PO Aaghar Tehsil Bhoranj	9459219449
32.	Kartar Chand	s/o Sail Ram VPO Nanahi Tehsil SJN	9817791025
33.	Sunita Devi	d/o Rulia Ram vill. Sawahal PO Ree Tehsil SJN	9805835074
34.	Reeta Devi	w/o Mohinder Singh vill. Jangal Beri Tehsil SJN	9816834491
35.	Manu Kumari	d/o Surjan Singh vill. Beri PO jangal Beri Tehsil SJN	9816640496
36.	Saroj Kumari	w/o Vinod Kumar vill. Budwin (Bag) PO Galore Tehsil Nadaun	8894448154
37.	Santosh Kumari	w/o Sandeep Singh VPO Balduhak Tehsil Nadau	9625367079
38.	Rita Devi	d/o Yudvir Singh vill. Jangal PO Putdiyal Tehsil NDN	9817833113
39.	Kusam Raj	Kusam Kalamunch Labour VPO Ladrour Distt. HMR	9816196286
40.	Santosh Kumari	Shiva Vocational Educational Society Bhareri Distt. HMR	9894492075
41.	Puspa Devi	Yuvati Mandal Pahil PO Bhareri Distt. HMR	9805206549
42.	Sunil Kumar	Yuvak Mandal Jol-Sapper VPO JolSapper Tehsil NDN	9418115274
43.	Reeta Thakur	YDC/Mahila Mandal Gawardu , Distt. Hamirpur	9418450955
44.	Leela Devi	Mahil Mandal upper Baloh PO Baloh Distt. HMR	9817394088
45.	Suneel kumar	Yuvak Mandal Tikkar PO Samirpur	9459556473

46.	Sarita Devi	Mahila Mandal Lagwalbasti Distt. HMR	9418532657
47.	Veena Sharma	Mahila Kalyan Samiti Baroh PO Dugha Distt. HMR	9418028746
48.	Nitesh Thakur	Jyoti Y.M. Karar, VPO Karara Distt. HMR	9817551003
49.	Surekha Devi	Ganpatti Mahila Mandal BAjuri Distt. HMR	9418274603
50.	Bimla Rathaour	Sarswatti Kala Munch Bijhari	9817248745
51.	Kartar Chand	Vikas Yuvak Mandal Nalahi Distt. HMR	-
52.	Kavita Devi	Mahila Mandal Khia-Brahamna PO Bhaddu Distt.HMR	-
53.	Puspa Devi	Mahila Mandal VPO Bhaddu Distt.HMR	-
54.	Nirmla Devi	Mahila Mandal Mussan PO Makkar Distt.HMR	9816576771
55.	Kamla Devi	Mahila Mandal Manwin PO Lagmanwin Distt.HMR	01972315758
56.	Satish Kumar	Yuvak Mandal Joh PO Badhani Distt.HMR	-
57.	Dinesh Kumar	s/o Krishan Chand vill. Baroh PO Dugha Distt. HMR	9817907108
58.	Sanju	s/o Milkhi Ram VPO Bagwara Distt. HMR	9882425386
59.	Arpna Kumari	d/o Man Singh vill. Dalchehera PO Nain Distt. HMR	8894623866
60.	Rajnee Kumari	w/o Ravi Kumar Vill. Chaniyana PO Nalahi Tehsil SJN	9817771993
61.	Pradeep Kumar	s/o Bachetre Singh vill. Bagwani PO Putdiyal Tehsil Nadaun	9817370394

Sr.	Name of	Full Name of the Volunteer	Contact No.
No.	Volunteer		
62.	Manoj Kumar	s/o Jai Chand vill. Barachal PO Buni Distt. HMR	9459002483
63.	Dharamvir Rangra	s/o Sita ram vill. Samu PO Tarkwari Tehsil Bhoranj	8894642333
64.	Sapna Kumari	d/o Ashok Kumar vill. Bhadu Po Khia distt. HMR	9459811413
65.	Kamal Krishan	s/o Vishnoo Ram Vill. Upper Mansui PO Saur Distt. HMR	9418471724
66.	Ata Bhatia	d/o Pratap Chand vill. Beri PO jangal Beri Tehsil Sujanpur	9817686427
67.	Ranjana Devi	d/o Jyoti Prakash vill. Anu PO & Tehsil Hamirpur	9459011820
68.	Ram pal Sharma	s/o Gori Shankar Sharma vill. Nahan PO Maharal Distt. HMR	94181125943
69.	Rachana Datwalia	w/o Parsotam Singh OM Mahila Mandal Dera Tjhehra Tehsil Barsar	9817381437
70	Rakesh Kumar	s/o jagdish Chand vill. Jijakari PO Maur Tehsil Barsar	9816774380
71.	Desh Raj	Kavir Yuvak Mandal Upper Kashmir Tehsil nadaun	01972239112
72.	Jasvir Singh	Pradhan Suryans Yuvak Mandal Barar malh Distt. HMR	-
73.	Suman Devi	Ganesh Y.M Chadiyar Balduhak Tehsil Nadaun Distt. HMR	9817591765
74.	Jasir Singh	Chairman Jyoti Yuvak Mandal Karar Disrr. Hamirpur	9318791865

Table 28: List of "Life Line buildings" District Hamirpur

Sr. No.	Name of Building	Location
1.	Deputy Commissioner office –cum-residence, Hamirpur	Anu (Hira Nagar) 01972- 224343
2.	Supdt. Of Police office –cum-residence Hamirpur	Anu Awahdevi road 01972- 224357
3.	Supdt. Engineer I&PH office-cum- residence Hamirpur	Govt. accommodation near Hamir hotel Ph. 01972- 224898
4.	Supdt. Engineer HPPWD office –cumresidence Hamirpur	Situated at the top of the Bazar near office Sujanpur road HMR
5.	Supdt. Engineer HPSEB operation office – cum- residence Hamirpur	Govt. accommodation near D.F.O. office Ph. 01972-224330
6.	Supdt. Engineer HPSEB works office-cumresidence HMR	HP housing Board colony Hamirpur
7.	Addl. Distt. Magistrate office-cum-residence Hamirpur	Near D.F.O. office Hamirpur
8.	Addl. Supdt. Of Police Office –cum- residence Hamirpur	PWD colony Hamirpur
9.	Deputy Supdt. Of Police office-cum-residence Hamirpur (Distt. H.Q)	-
10.	C.M.O office-cum- residence Hamirpur	Residing old civil Distt. Hospital building lowar bazaar Hamirpur Ph. 01972-222262
11.	Medical Supdt. Office –cum-residence Hamirpur	Residing in Pvt. Building Hira Nagar Hamirpur Ph. 01972-223031
12.	Commandant Home Guard office –cumresidence Hamirpur	Pooled P.W.D Colony Hamirpur Ph. 01972- 222823
13.	General Manage Telecom office-cum- residence Hamirpur	3 rd Floor of B.S.N.L building near head Post office Ph. 01972-221900
14.	Sub. Divisionl office © office –cum- residence Hamirpur	Near D.F.O. office HMR Ph. 01972-224303
15.	A.C. to D.C. Hamirpur office-cum- residence Hamirpur	Earmarked in Pooled PWD Colony Hamirpur Ph. 01972-222348
16.	S.D.O. © office-cum- residence Barsar	Near office in the middle of the bazaar Mehre Ph. 01972-288044
17.	S.D. O © Nadaun office-cum- residence Nadaun	Pooled PWD Colony at nadaun Ph. 01972-232570
18.	S.D.O (c) Bhoranj office-cum- residence Bhoranj	-
19.	Deputy Supdt. Of Police Mehre(Barsar) office –cum-residence	SDPO residence Mehre in Bazar (Rental building)
20.	Town hall Hamirpur	Middle bazaar Hamirpur

21.	Govt. Sr. Sec.School(Boy) Hamirpur	Upper Bazar Hamirpur
22.	S.D.O.(c) Hamirpur	At the top of the Bazar
,	5.2.0.(c) 114.11.p.	Hamirpur
23.	Excise & Taxation officer -cum- D.F.S.C	Near Mini Secretariat
	Hamirpur	Hamirpur
24.	Telephone Exchange Hamirpur	Near pooled PWD colony
		Hamirpur
25.	Zonal civil Hospital Hamirpur	At the end of the bazaar
26.	DivisionalForest officer Hamirpur	-do- top of the bazaar (Danf
		Qwali)
27.	Tehsildar office building Hamirpur	At the middle of the Bazar
28.	Nagar Parishad office Hamirpur	-do-
29.	General Manager Telecom Hamirpur	-do- near Head Post office
		Hamirpur
30.	Head Post office	Near mini Secretariat
		Hamirpur
31.	Bachat Bhawan building Hamirpur	Near Mini Sectt. Hamirpur
32.	XEN HPPWD Hamirpur	Near GSSS(Boy) Hamirpur
33.	Commandant Home Guard Hamirpur	-do-
34.	Govt.DegreeCollege Hamirpur	At Anu Sujanpur road
		Hamirpur
35.	P.W.D. Rest house Hamirpur	At the middle of the bazaar
36.	HPSEB Rest house Hamirpur	At Anu (Hira Nagar)
37.	Nagar Parishad Rest house Hamirpur	Near Telephone Exchange
		Hamirpur
38.	Govt. Polytechnic college Hamirpur	At baru
39.	Zila Parishad Bhawan Hamirpur	Situated on Nalti road near HRTC workshop Hamirpur
40.	ITI (for women) building Hamirpur	-do-
41.	Sainic Rest house Hamirpur	-do-
42.	Supdt. Engineer I&PH HMR	At the top of the bazaar Hamirpur
43.	NIT Campus Hamirpur	At Anu Awahdevi road
		Hamirpur
44.	Mini Sectt. Hamirpur	At the top of the bazaar
		Hamirpur
45.	Akashwani Centre (Radio Station) Hamirpur	At Anu near Degree College Hamirpur
46.	PolyclinicHospital Hamirpur	At the end of the Bazar Hamirpur
47.	Distt. AyurvedaHospital Hamirpur	-do-
48.	Fire Station Hamirpur	Near Mini Secretariat
		Hamirpur
49.	CentreSchool Hamirpur	At Hira nagar Hamirpur
	HPSEB Department Name of station &	÷ ·
	Location of Power Grid –and Sub Station	
50.	Mattansidh 220/132 KV	
51	Anu (Hamirpur) 132/33-11 K.V	
	Sub Station	
52.	Sujanpur 33/11KV	
53.	Barbadar (Chabutra) –do-	
54.	Taunidevi -do-	

55.	Kakkar -do-	
56.		
5 7 .	<u> </u>	
57. 58.	Bhota 33/11 K.V	
59.	Ladraur -do-	
	Kotla -do-	
60.	Barsar -do-	
61. 62.	Galore -do-	
	Nadaun -do-	
63.	Dhaneta -do- Name & Location of Godown of D.F.& S.C.	
	Hamirpur	
64.	Bahanwi 65. Bhaleth	
66.	Birasvi Tehsil Barsar	
00.	Godown of Food grains of civil supply	
	corporation Hamirpur	
67.	Patta	68. Tarkwari
69.	Bohani	70. panjot
71.	Nadaun	72. Barsar
	Name of Station & Location of Sub	. 2. Darsar
	Telephone Exchange	
73.	Bhoranj/Bassi	74.Bhareri
75.	Bhota	76. Jahoo
77.	Ladraur	78. Tal
79.	Kharwar	80. Awahdevi
81.	Tikker Khatrian	82. Taunidevi
83.	Uhal	84. Kakkar
85.	Jangal Beri	86.Sujanpur
87.	Patlandhar	88. Kot
89.	Rail	90.Rangas
91.	Dhaneta	92. Galore
93.	Barsar	94.Bijhari
95.	Chhakmoh	96.Chabutra
97.	Salauni	
	Name & Location of Community Health	
	Centre & Primary Health Centre	
98.	Taunidevi	99. Uhal
100.	Bagwara	101.Sujanpur
102.	Gubber	103. Jangal Beri
104.	Patlander	105.Bhoranj
106.	Bhareri	107. Bhota
108.	Bara-Gran	109. Bijhari
110	Jahoo	111. Barsar
112.	Garli	113.Nanawan
114.	Nalti	115. Nadaun
116.	Galore	117.Dhaneta
118.	Kashmir	119.Choru
120.	kangoo	

Table 29: Helicopter Request

For Aircraft/Helicopter Requisitioning at Disaster Time

Wing Commander Vineet Sharma, Chief Operation Officer

Air Force Station Sarsawa-247232, Saharanpur (U.P)

Mobile: 07599342240, Phone 01331-244822,01331-245280

E-Mail: vinysim@gmail .com

ANNEXURE

District Disaster Resource Inventory

Disaster Response Resource Inventory

Disaster Response Resource Inventory refers to the resources available within the jurisdiction and these resources will easily available during any crisis in this district. For such purpose nationwide data base portal has developed by National Institute of Disaster Management i.e. Indian Disaster Resource Network (IDRN).

IDRN utilized through district and data updated through web portal, IDRN consist online data base of equipments, skilled men power and critical supplies. These data base can be utilizes at the equipments, skilled men power and critical supplies. These data base can be utilizes at the time of crisis; the hard copy of updated equipment related details is having with DEOC separately. For utilization of the same anyone can use the link www.idrn.gov.in

Role of District ADCinistration

- 1. District Emergency Operation Centre, Hamirpur is overall in charge of updating the resource inventory.
- 2. Every department in the district has been provided with individual username and password for data updation on the website.
- 3. Every department should nominate Nodal Officer for the Disaster Management and this inventory is updated under the guidance of Nodal Officer. During the time of record entries in the system following has to be checked by
 - a.) Quality of Data
 - b.) Maintenance of Hard Copies
 - c.) Monitoring & Usage of Hard Copies
- 4. Every department of this district is own responsible for updation of resource inventory timely on the portal.

5. Resource Inventory data is updated within every 3 months by the departments or whenever seems necessary.

Resource Inventory Available in the district

Office of the Superintendent of Police, District- Hamirpur Himachal Pradesh.

Nodal Officer: - Sh. Lal Man Sharma

Contact No.:- Mobile No. 9418077169; Phone No. 224338

Fax No. 222053; Email Id: - dysp-ham-hp@nic.in

r. no	Item Name	Qu Quality Available		
1.	Circular Saw with Diamond Blade (electric)	01		
2.	Sl Sledge Hammer	03		
3.	Heavy Axe	01		
4.	et of Rope tackle (3 sheave- 2 sheave)	02		
5.	Blankets	02		
6.	Helmet	50		
7.	Axe	01		
8.	Public Address System	02		
9.	Rope 02			
10.	Bucket	02		
11.	I Inflatable Light Tower	01		
12.	Electric Generator	02		
13.	Extension Ladder	01		
14.	Aluminium Ladder	01		
15.	VHF Sets static	15		
16.	VHF Sets Mobile	32		
17.	W Walkie Talkies Sets	43		
18.	HF Sets Static	16		
19.	C Cranes- Heavy Duty, fork type	01		
20.	4 Wheel Drive Vehicle	06		
21.	Motor Cycle	19		
22.	Truck	01		
23.	Mini Bus	01		
24.	Bus	01		

Police Stations and available of Staff.

Sr.No cation of Name of Officer Police Station	Contact No.	Ios of Staff Available
--	----------------	---------------------------

1.	Sadar Hmr	Inspr. Rajinder 224306 Kumar		49
2.	Sujanpur	ASI Jai Chand	272021	26
3.	Nadaun	I Mohinder Singh	223246	27
4.	Barsar	SI Mohan Lal	288021	34
5.	Bhoranj	Inspr. Mukesh	'36592121	34
		Kumar		

Commandant Home Guard 10th Battalion Hamirpur District.

Nodal Officer: - Major. Khem Singh (Retd)

Contact No.:- Mobile No. 9882194953; Phone No. 222274

Fax No. 222247; Email Id: - hg10bn-hp@nic.in

ir.no	Item Name	Quality Available
1.	Bolt Cutters (Shears)	01 nos
2.	Jack with 5 ton lift	02 nos
3.	Sledge Hammer	04 nos
4.	Heavy Axe	02 nos
5.	Gloves-Rubber, Tested up to 25,000 volt	04 pair
6.	Stretcher Harness (Set)	01 no
7.	Blankets	02 nos
8.	Shovel	09 nos
9.	Spade	09 nos
10.	Crow Bar	13 nos
11.	Helmet	24 nos
12.	Pick Axe	04 nos
13.	Axe	02 nos
14.	Door Breaker	02 nos
15 .	Knife Salvage	01 nos
16.	Ceiling Hook	02 nos
17 .	eathing Apparatus Set (BA set)	5 nos
18.	Rope	465 meters
19.	Bucket	03 nos
20.	Inflatable Light Tower	01 nos
21.	Search Light 02 nos	
22.	Electric Torch	02 nos
23.	Extension Ladder	03 nos
24.	Rope Ladder	01 nos
25.	Aluminium Ladder	01 nos

Individual Human Resources Details

Sr.No	Name	of	Age	Skill Description	Contact No.
	Person				

1.	Ashok Kumar	41	Rescue, Flood and Fire 9418165465 Fighting
2.	Parveen Kumar	40	Rescue, Flood and Fire 8628041100 Fighting
3.	Raj Kumar	37	Rescue, Flood and Fire 9817772899 Fighting
4.	Ramesh Chand	45	Rescue, Flood and Fire 9805992170 Fighting
5.	Ravinder Kumar	41	Rescue, Flood and Fire 9805157641 Fighting
6.	Sushil Kumar	36	Rescue, Flood and Fire 9418533249 Fighting
7.	Ankush Parmar	34	Rescue, Flood and Fire 9459317808 Fighting
8.	Ishver Dass	37	Rescue, Flood and Fire 9817060343 Fighting
9.	Jugvinder Singh	38	Rescue, Flood and Fire 9736701931 Fighting
10.	Bikesh Chand	36	Rescue, Flood and Fire 9736118399 Fighting
11.	Sanjeev Kumar	38	Rescue, Flood and Fire 8988309545 Fighting
12.	Kamlesh Kumar	34	Rescue, Flood and Fire 9817405820 Fighting
13.	Ashok Kumar	42	Rescue, Flood and Fire 9418976574 Fighting

Battalion Training Centre is in Nadaun having capacity of **50 persons** providing training of **Search and Rescue & Fire Fighting.**

Nehru Yuva Kendra Sangathan Organization, Hamirpur.

Nodal Officer: - Smt. Ira Prabhat (District Youth Coordinator)

Contact No.: - Mobile No. 9418818512; Phone No. 222271

Fax No. 222271; Email Id: - nykhamirpur@gmail.com

Sr.No	Name of Volunteers	Block	Contact No.
1.	Sh. Ankit Kumar	Bamson	9882875657
2.	Sh. Nishant Kumar	Bamson	9418212552
3.	Rakhi	Sujanpur	8988423957
4.	Neha Kumari	Sujanpur	9459857716
5.	Rajni Devi	Hamirpur	9459688109
6.	Pallavi Devi	Hamirpur	9805144362
7.	Bharat Kumar	Hamirpur	9882844873
8.	Rajni Kanta	Nadaun	8988423957
9.	Jyoti Kapil	Nadaun	9736414050

10.	Parveen Kumar	Bhoranj	9882316416
11.	Hosiyar Singh	Bhoranj	9816687427
12.	Roma Devi	Bhoranj	9418533672
13.	Anuradha	Bijhiri	9418548359
14.	Sapna Devi	Bijhiri	9816829599

Health and Family Welfare Department, Hamirpur

Sr.no	Name of Item	Quantity
1.	Stretcher	30 No.
2.	Wheel Chair	30 No.
3.	Medicine Trolley	30 No.
4.	1st Aid Box	8 No.
5.	Endotraceal Tube	24 No.
6.	Drip Stand	8 No.
7.	Ambu Bag	10 No.
8.	Laryngoscope	10 No.
9.	Chloroscope with O.T.	20 No.
	Reagent	
10.	Glucometer	6 No.
11.	Suction Apparatus	5 No.
12.	ECG Machine	2 No.
13.	Folding Stretcher	5 No.
14.	I.V. Fluid Stand	15 No.

Other Rescue Operation Tools available in the District Hamirpur.

Sr.n o	Name of Item	SDM Hamirpu r	SDM Nadau n	SDM Barsa r	SDM Bhoran j	Naib Tehsilda r Galore	Naib Tehsilda r Sujanpu r
1.	Spade	01	01	01	02	02	02
2.	Helmet	06	06	06	06	02	02
3.	Crowbar 6 feet	01	01	01	01	01	01
4.	Pick Pickaxe	01	01	01	01	01	01
5.	Rubber Gloves	02 pair	02	02	01	02	02
6.	Rain Coat	01	02	02	02	-	-
7.	Gum Boat	02	02	02	01	02	02
8.	Stretcher Folding	02	02	02	02	-	-

9.	Shovel	01	01	01	01	02	02
10.	Rope Fix	200 mtr	200 mtr	200 mtr	200 mtr	200 mtr	-
11.	Crowbar 3 feet	01	01	01	01	01	01
12.	Life Tube	02	02	02	02	02	02
13.	Hand Saw	02	02	02	02	02	02
14.	Sledge Hammer	02	02	02	02	02	02
15.	Genthi	02	02	02	02	02	02
16.	Hand Operator Power Saw	01	01	01	01	01	01
17.	Search Light	01	01	01	01	01	01
18.	First Aid Box	01	01	-	01	01	-
19.	Ladder Aluminiu m	01	01	-	-	-	-
20.	Blanket	04	04	-	04	01	-
21.	Tent (14 x 10ft)	03	-	-	-	-	-
22.	Tarpal (19 x 16ft)	01	-	-	-	-	-

ANNEXURE

Format for First Information Report on occurrence of natural calamity

(To be sent to MHA, Government of India within maximum of 24 hours of occurrence of calami	ty)
From: State Date of Report	
То	
JS (DM), MHA (fax:; email:)	
I/c National Integrated Operations Centre, MHA (fax:; email:)	
a. Nature of Calamity	
b. Date and time of occurrence	
c. Affected area (number and names of affected districts)	
d. Population affected (approx.)	
e. Number of Persons	
□ Dead	
□ Missing	
□ Injured	
f. Animals	
g. Affected	
h. Lost	
i. Crops affected and area (approx.)	
j. Number of houses damaged	
k. Damage to public property	
I. Relief measures undertaken in brief	
m. Immediate response & relief assistance required and the best logistical means of delivering relief from State/National	g that
n. Forecast of possible future developments including new risks.	
[District Disaster Management Plan] Page	163

DAMAGE ASSESSMENT FORMS:

INITIAL ASSESSMENT REPORT

INITIAL	ASSESSMENT REPO	ORT													
L															
1	NATURE OF DISAST														
2	DATE OF OCCURRE								TIME						
3	DAMAGE AND LOSS										_				
	Nume of the Site	Total		Perg		People		Severit	¥	imnedale		OUSCO		/clm	
	(Vilage, District)	Popu	iation ted	mss	KQ.	injured				needs	D	amag		taken	
		Affec	0.0							4	\vdash		_		
								Н	L		L	M	Н		
4	NFRASTRUCTURE	DAMAG	E												
	Name of the Ste		Ante	Anim	alc	Water	R	eni	Power	Communic	G	ovt.		Others	
	(Village, District,	Hou	Agric utur	7411111	20	SOURCE	a		I LINE	aton		uliding		Vescio	
	[elm	e				he	ldge			-	,	•		
		Link	-				_	-			+				
							T				+				
							\vdash				+				
							\vdash				+				
5	NEED ESTIMATES		1				l								
	Name of the Ste (VIII	80B.	Medica	1	Poo	ulaton		Come	Food	Waler	52	ellab	m	Any	
	District 1		Needs			iring shelte		5			-			Ohe	
			Person			armsq oncis	_		1		+			- OIL	_
6	ANY OTHER VITAL I	NFORM	ATION		•					•					
<u> </u>															
7	SPECIFY IMMEDIAT	E NEED	is. (With	quali	ty)										
	Food		-	-	_										
	Firstald														
	Machinery														
8	Possible Secondary	Affects	C												
-															
9	NAME THE CONTAC	PER	OM:												
10	AGENCY/ADDRESS:	:													
L	TELEPHONE NUMBE	ER													
11.															
DATE									SIGNA	TURE					
FCR O	FFICE PURPOSE:								REPOR	ET NO.:					
ACTIO	N TAKEN:								\longrightarrow						
									- 1						

DISASTER DOCUMENTATION REPORT

ORGANIZATION	ASSIGNMENT LIST	1. INCIDENT NAME	2. DATE PREPARED	3. TIME PREPARED
POSITION	NAME	4. OPERATIONAL PERIO	OD (DATE/TIME)	
5. INCIDENT COMMANDER A	ND STAFF	9. OPERATIONS SECTION	ON	
INCIDENT COMMANDER		CHIEF	- I	
DEPUTY		DEPUTY		
SAFETY OFFICER	-	a BRANCH I- DIVISION	GROUPS	
INFORMATION OFFICER		BRANCH DIRECTOR	5,100,10	
LIAISON OFFICER	+	DEPUTY	-	
ENISON OF TOES		DIVISION/GROUP		
6. AGENCY REPRESENTATIV	Æ	DIVISION/GROUP		
AGENCY NAME	23	DIVISION/GROUP	 	
AGENC! INVIL		DIVISION/GROUP	1	
_		DIVISION/GROUP		
		- DIVISION ONCOP		
		b. BRANCH II- DIVISION	GROUPS	
		BRANCH DIRECTOR		
		DEPUTY		
7. PLANNING SECTION		DIVISION/GROUP		
CHIEF	= /	DIVISION/GROUP		
DEPUTY		DIVISION/GROUP		
RESOURCES UNIT		DIVISION/GROUP		
SITUATION UNIT		DIVISION/GROUP		
DOCUMENTATION UNIT		-		
DEMOBILIZATION UNIT		-		
TECHNICAL SPECIALISTS		c. BRANCH III- DIVISION	VGROUPS	
		BRANCH DIRECTOR		
		DEPUTY		
		DIVISION/GROUP		
8. LOGISTICS SECTION		DIVISION/GROUP		
CHIEF	-T			
DEPUTY		d. AIR OPERATIONS BR	ANCH	
		AIR OPERATIONS BR. D	7.11.1	
		AIR TACTICAL GROUP	SUP.	
a. SUPPORT BRANCH		AIR SUPPORT GROUP		
DIRECTOR		HELICOPTER COORDIN		
SUPPLY UNIT		AIR TANKER/FIXED WIN		
FACILITIES UNIT	10			
GROUND SUPPORT UNIT		10 FINANCE/ADMINISTR	RATION SECTION	
		CHIEF		
		DEPUTY		
b. SERVICE BRANCH		TIME UNIT		
DIRECTOR		PROCUREMENT UNIT		
COMMUNICATIONS UNIT		COMPENSATION/CLAIN	SUNIT	
MEDICAL UNIT		COST UNIT	2400	
FOOD UNIT				

INCIDENT BRIEFING	1. INCIDENT NAME	2.DATE PREPARED	3. TIME PREPARED
	4. MAP SKETC	н	
ICS 201 (12/93) NFES 1325 PAGE	5. PREPARED	BY (NAME AND POS	SITION)

	6. SUMMARY OF CURRENT ACTION:	S
CS 201 (12/93) NFES 1325	PAGE 2	

6. OPERATIONAL PERIOD (DATE/TIME) 5. GENERAL CONTROL OBJECTIVES FOR THE INCID	DENT (INCLUDE ALTERNATIVE	S)	
5. GENERAL CONTROL OBJECTIVES FOR THE INCID	DENT (INCLUDE ALTERNATIVE	S)	
. WEATHER FORECAST FOR OPERATIONAL PERIO	0		
. WEATHER FORECAST FOR OPERATIONAL PERIO	0		
B. WEATHER FORECAST FOR OPERATIONAL PERIO T. GENERAL SAFETY MESSAGE	0		
	0		
7. GENERAL SAFETY MESSAGE B. ATTACHMENTS (√IF ATTACHED)			
C. GENERAL SAFETY MESSAGE B. ATTACHMENTS (√IF ATTACHED) ☐ ORGANIZATION LIST (ICS 203)	EDICAL PLAN (ICS 208)		

