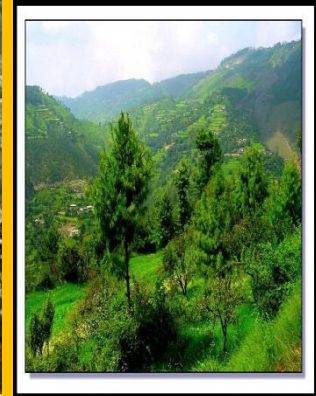
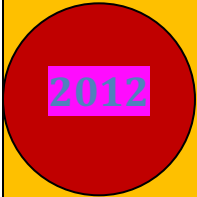
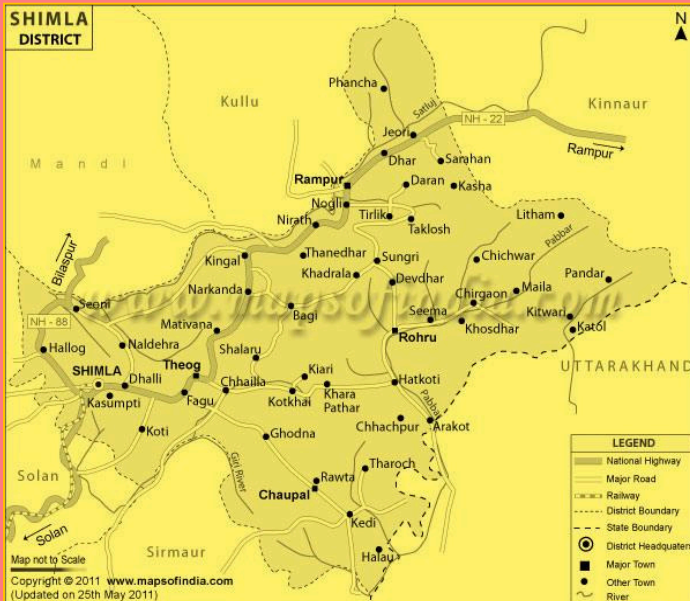




सत्यमेव जयते



DISTRICT DISASTER MANAGEMENT PLAN OF DISTRICT SHIMLA



PREPARED BY

DISTRICT DISASTER MANAGEMENT AUTHORITY SHIMLA

FOREWORD

The state of Himachal Pradesh is vulnerable to 25 hazards out of 33 hazards identified by the HPC Govt. of India and further District Shimla is prone to 16 such hazards. The most imminent danger is due to earthquake, flash floods, cloud bursts, hailstorms and road accidents.

Therefore it is imperative to be prepared to encounter such hazards in very good state of preparedness and mitigation instead of the relief centric approach which is now possible due to the new techno legal regime, since the enactment of the Disaster management Act 2005 and the development of the science and technology that most of the disasters can be followed since their inception and those which can't be predicted earlier, the development of technology has made the human beings so capable that their impact can be reduced by adopting the mitigation measures in the form of scientific construction.

Further the provisions of section 30(2) i of the Act makes it mandatory on the part of District Disaster management Authority to prepare the Disaster Management plan including the response plan of the district and based upon this plan all the departments at the district level shall also prepare their response plan to manage the disaster in a better way. Further the DDMA shall also review the developmental plans at the district level of the govt departments and the local authorities with a view to make necessary provisions therein for prevention of disaster or its mitigation.

Therefore this plan is an attempt on the part of DDMA Shimla to identify the hazards vulnerable areas in the district Shimla and prepare the mitigation, prevention, incident response system along with the SOPs for the different departments and agency along with the capacity building of the community so that the document serves as a guideline in the management of disaster in the effective and the efficient way.

I hope in future the community and other stake holders will be competent enough to face the vagaries of nature in a brave way by taking all measures of prevention, mitigation, preparedness and response aspects of the disaster management and not the relief centric approach.

Dinesh Malhotra
(IAS)
Deputy Commissioner
Shimla.

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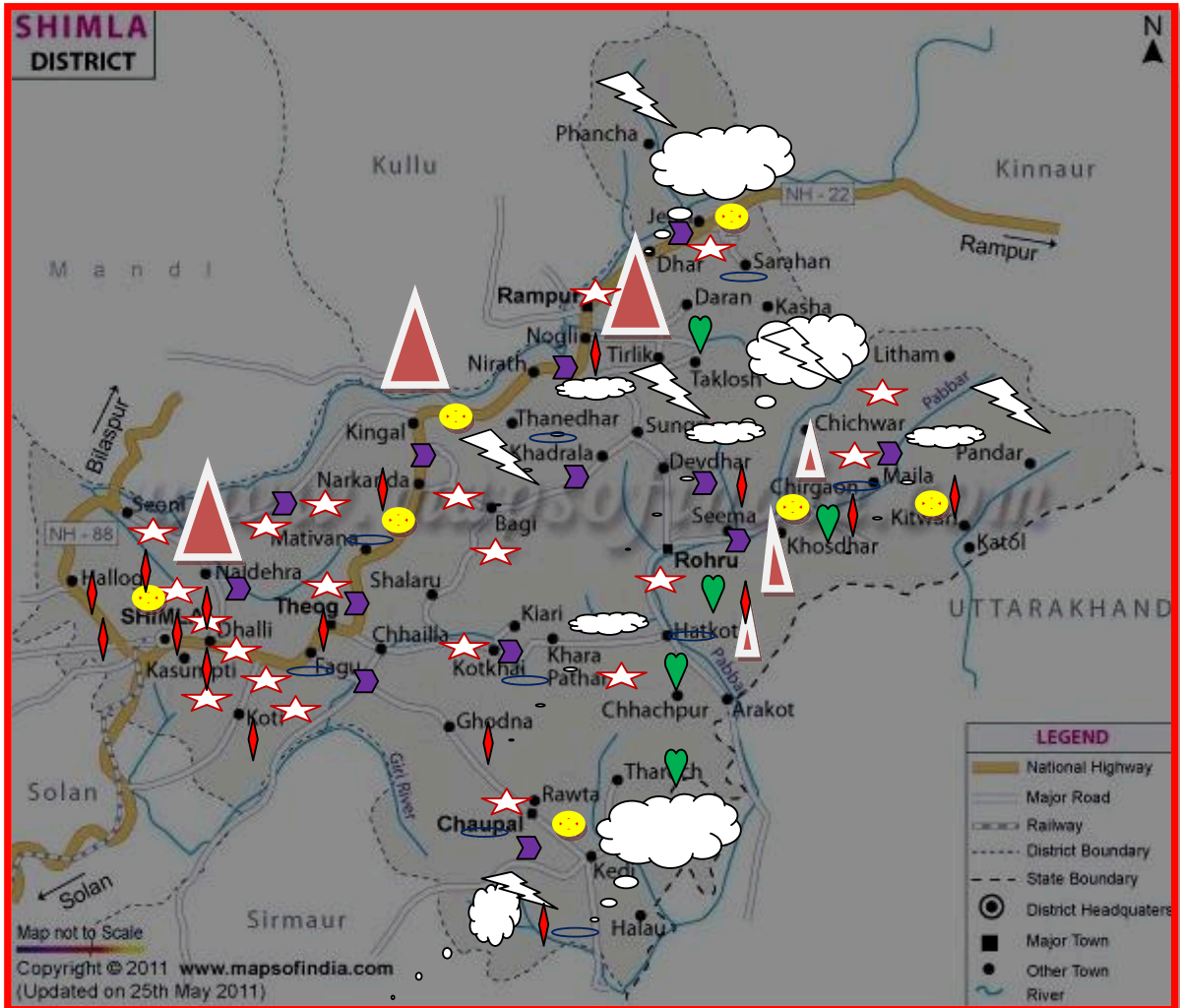
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INDICATIVE LAYOUT OF DDMP SHIMLA

VERSION NO 1/2012

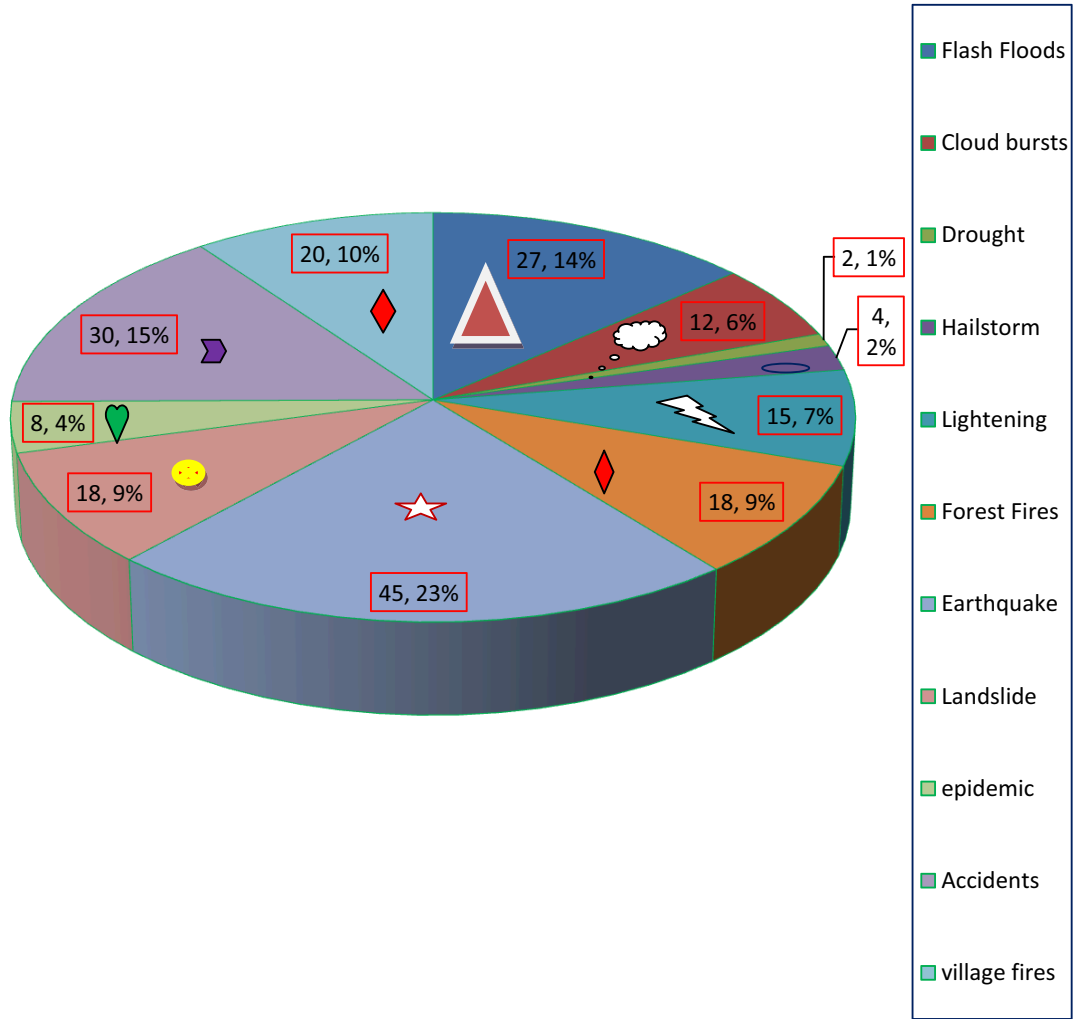
DISTRICT DISASTER MANAGEMENT PLAN OF DISTRICT SHIMLA

MULTI HAZARD MAP OF DISTRICT SHIMLA



	Flash Flood		Earthquake		Cloudburst
	Hailstorm		Road accident		Landslide
	Forest fire village fire		Epidemic Waterborne disease		Lightening

HAZARD VULNERABILITY OF DISTRICT SHIMLA



**DISTRICT DISASTER MANAGEMENT
AUTHORITY SHIMLA**

**DEPUTY
COMMISSIONER**

SP

CMO

SE (PWD)

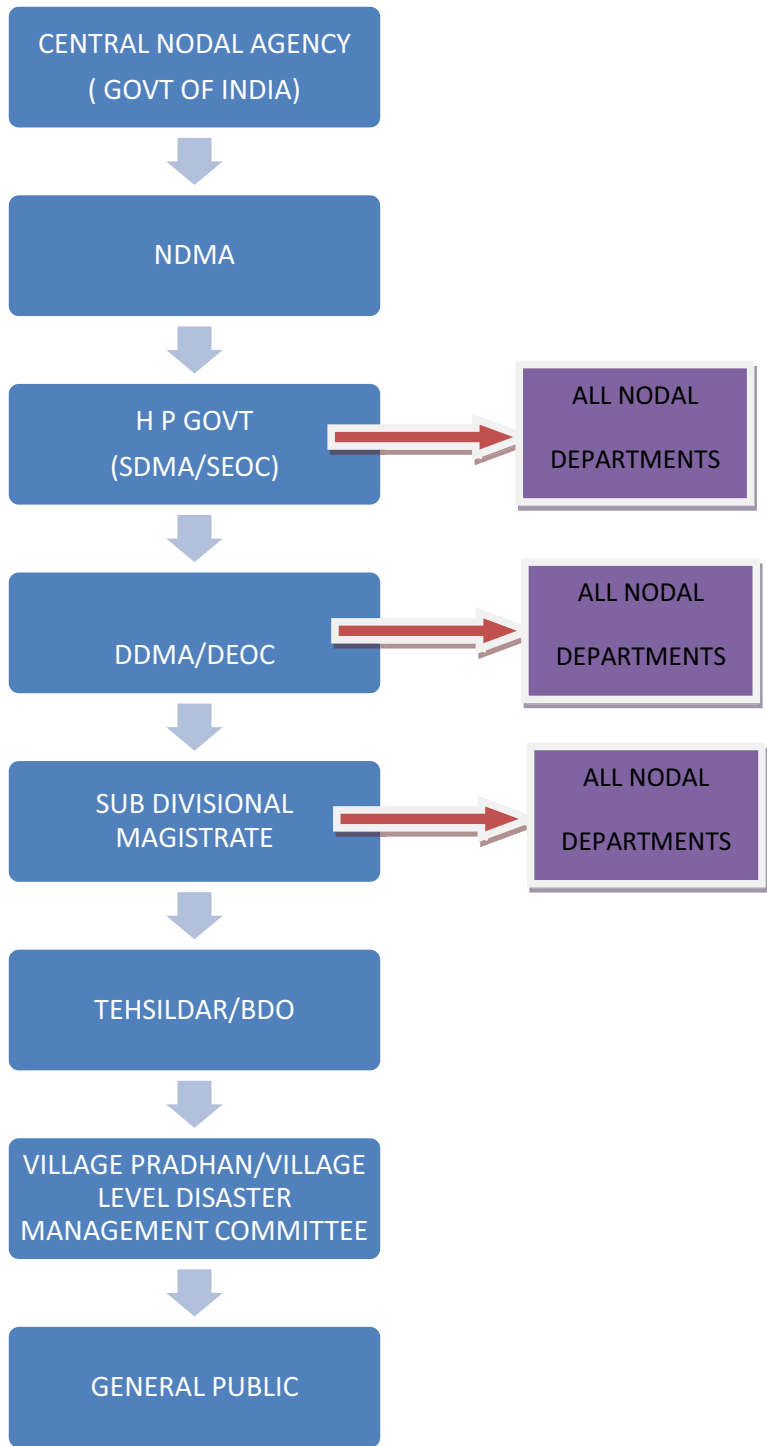
SE
(ELECTRICITY)

SE (I&PH)

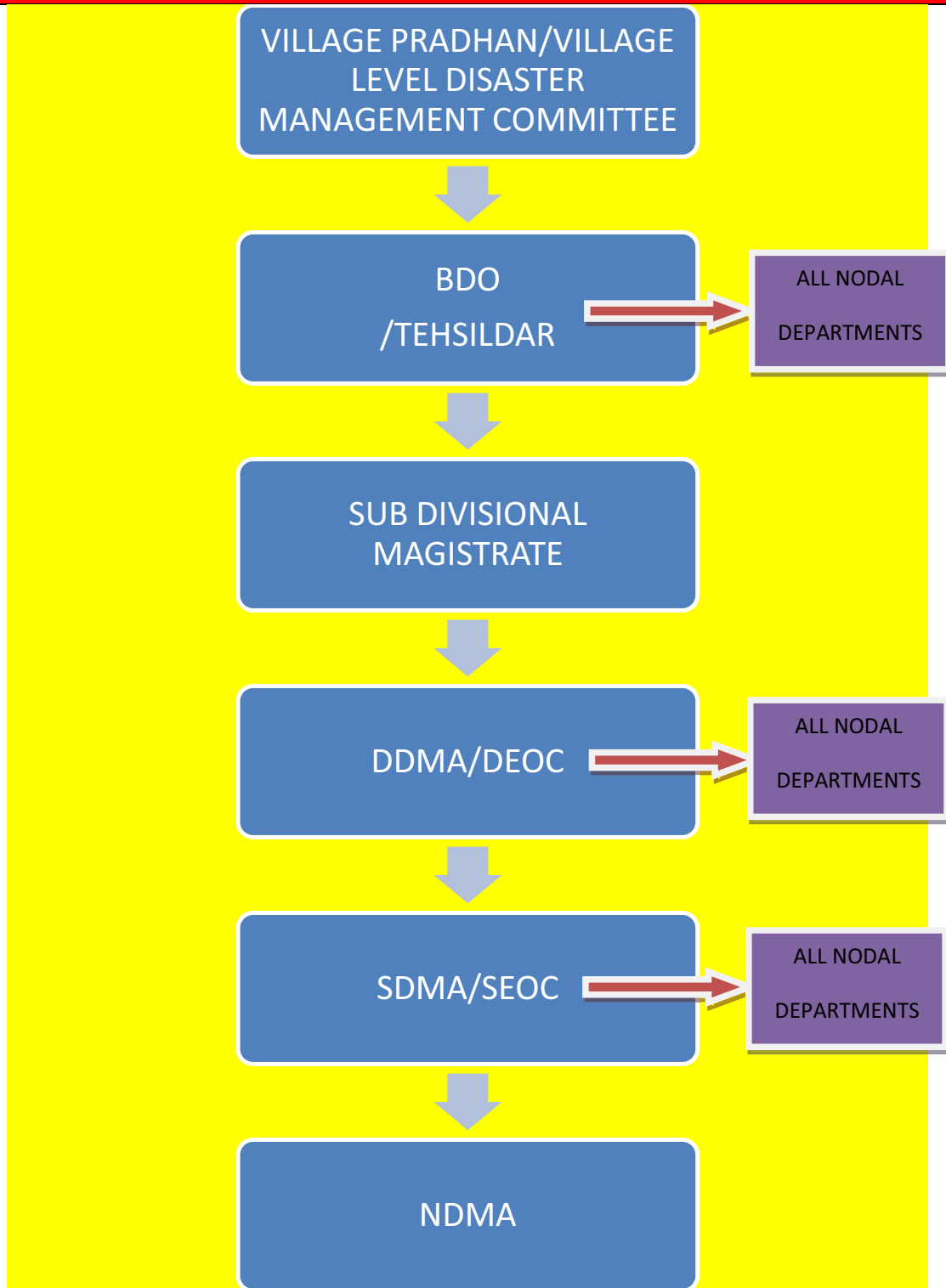
CHAIRPERSON
ZILA
PARISHAD

ADM (P)
CHIEF
EXECUTIVE
OFFICER

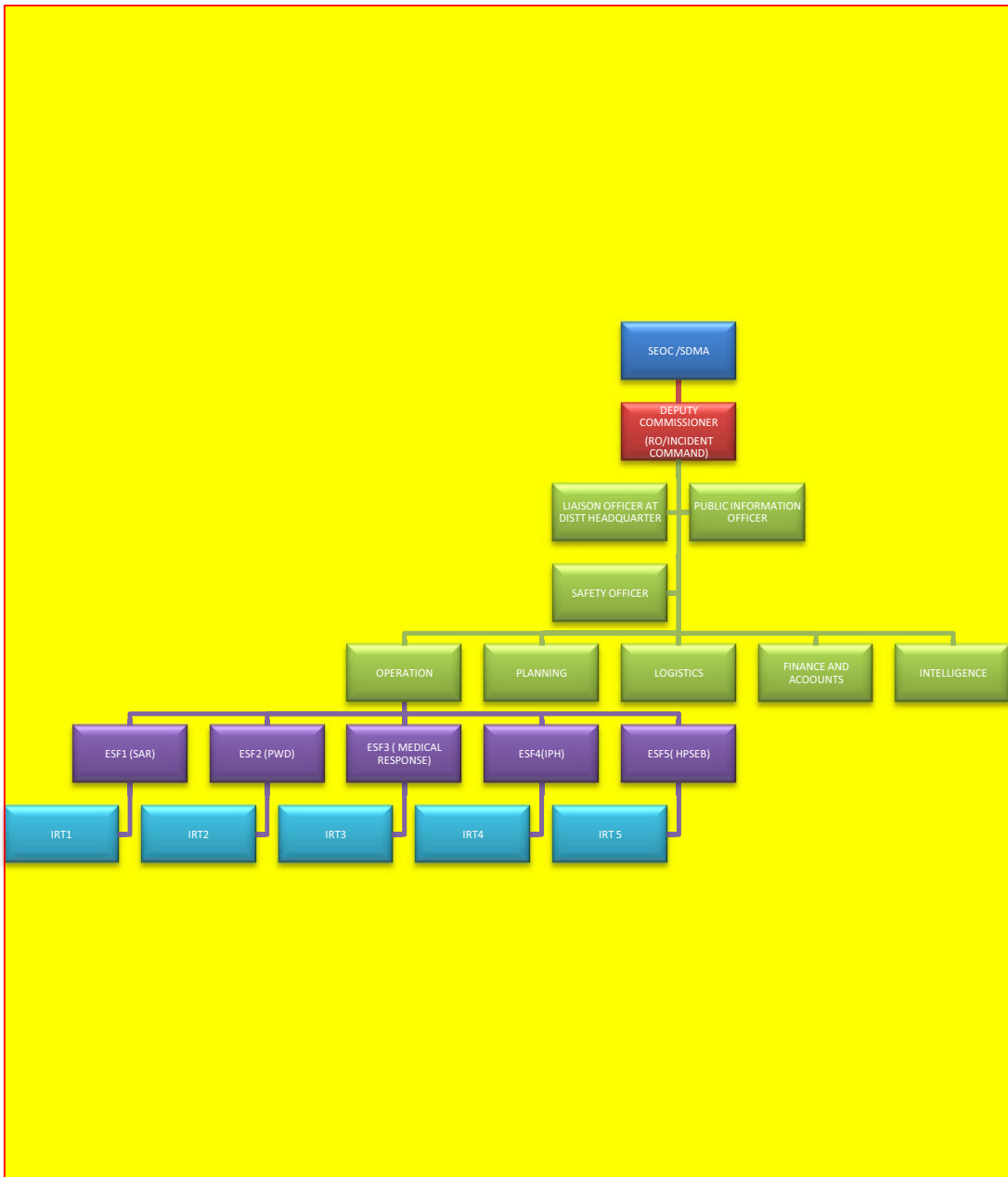
TRIGGER MECAHNISM FOR SUCH DISASTER WHEN WARNING SIGNALS ARE AVAILABLE (TYPE I DISASTER)



TRIGGER MECAHNISM FOR SUCH DISASTER WHEN WARNING SIGNALS ARE NOT AVAILABLE (TYPE II DISASTER)



**INCIDENT COMMAND SYSTEM/TRIGGER MECHANISM FOR
DISASTER TYPE I AND TYPEII**



IMPORTANT TELEPHONE NUMBERS

1. (D.C. Office)

Sr. No.	Name & Designation of officer	Office	Mobile Number	Residence
*1	D.C. Shimla Sh. Dinesh Malhotra IAS	0177- 2655988	94180-77244	2626745
1.	ADC Shimla Sh. B.C. Badalia, IAS	0177- 2657003	94180-26165	0177- 2622713
2.	ADM(L&O) Sh. N. K. Lath, HAS	0177- 2657005	94180-10896	0177- 2628895
**4	ADM(P) Sh. Ram Kumar Gautam, HAS	0177- 2653436	94184-80006	0177- 2629908
3.	SDM Shimla(Urban) Sh. Rajiv Kumar, HAS	0177- 2657007	94180-58845	--
4.	SDM Shimla (Rural) Sh. Suneel Sharma, HAS	0177- 2657009	94186-83266	0177-
5.	SDM, Theog Sh. Yashpal Singh Verma, HAS	01783- 238502	98054-40777	01783- 230501
6.	SDM, Rampur Sh. K.R. Sehgal, HAS	01782- 233002	94184-75720	01782- 233030
7.	SDM, Rohru Sh. Minu Ram Dhiman, HAS	01781- 240009	94188-60264	01781- 240609
8.	SDM, Chopal Sh. Krishan Chand, HAS	01783- 260014	94592-18995	01783- 260056
9.	SDM, Dodra Kwar Sh. Ashok Chauhan, HAS	01781-27001	94180-94755	-
10.	AC to DC Shimla Sh. Malok Singh, HAS	0177- 2657011	94184-67899	-
11.	DRO, Shimla Sh. Narender a Kumar Aluwalia	0177- 2657013	94180-16747	-
12.	Tehsildar, Shimla (Urban) Sh. Anil Sharma	-	94180-27775	-
13.	Tehsildar, Shimla(Rural) Sh. Rajiv Kumar	0177- 2813064	98166-62244	-
14.	Tehsildar, Theog Sh. Jeet ram Bhardwaj	01783- 238242	94592-54929	-
15.	Tehsildar, Rampur Sh. Mukesh Sharma	01782- 233003	94184-75338	01782-
16.	Tehsildar, Rohru Sh. Suraj Negi	01781- 240088	-94187-05707	01781-
17.	Tehsildar, Chopal Sh.	01783- 260039		01783- 260039
18.	Tehsildar, Chirgaon Sh. Prithavi Singh	01781- 277232	98167-44998	98167-43345
19.	Tehsildar, Suni Sh. Sant Ram Sharma	0177- 2786625	94181-61070	0177- 2786625
20.	Tehsildar, Kumarsain	01782-	94184-75267	01782-

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	Sh. Deva singh Negi	240033		240033
21.	Tehsildar, Kotkhai Sh. Mani Ram Negi	01783- 255368	94187-56654	01783- 255368
22.	Tehsildar, Jubbal Sh. Devi Singh Kaushal	01781- 252014	98172-54010	--
23.	Tehsildar, Nankheri Vacant	01782- 225625	--	--

2.(S.P. Office)

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
1	SP Shimla Sh.Chander Shekhar, IPS	0177- 2656535	94184-54547	0177- 2659979
2	ASP (L&O) Sh. Ramesh Pathania, IPS	0177- 2803212	94180-53666	0177- 2625666
3	ASP (Hqrs) Sh. S. Arul Kumar, IPS	0177- 2653497	8894997780	--
4	DSP (City) Sh. Parveen Thakur, HPS	0177- 2652123	94183-10163	--
5	DSP (Hqrs) Sh. Brijesh Sood, HPS	0177- 2652123	94180-39449	--
6	DSP(Traffic) Sh. Puneet ' Raghu, HPS	0177- 2652123	94188-00022	--

3.(MC. OFFICE)

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
1	Commissioner Sh. M.P. Sood, IAS	0177- 2812899	94182-50005	0177- 2621651
2	Asstt. Commissioner Sh. Ashish Kohli, HAS	0177- 2656576	94180-85682	0177- 2650654
3	XEN(water supply) Er. Vijay Gupta	0177- 2807021	94184-70578	--
4	XEN (R&B) Er. Sanjay Gupta	0177- 2802771	94184-66696	--
5	XEN Er. Himanshu Bist	0177- 2802771	94180-60273	--
6	Health Officer Sh. Omesh Bharti	0177- 2802771	94181-20302	--

4.(PWD)Mech., NH, Civil & Elect.)

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
1.	SE Mech. Er. Divesh Sharma	0177- 2842353	94184-60807	0177- 2845556

DISTRICT DISASTER MANAGEMENT PLAN OF DISTRICT SHIMLA 2012

2.	XEN Mech. Er. Tej Pal Shartma	0177- 2841169	94180-48519	--
3.	SE, NH Er. B. S. Bhardwaj	0177- 2657551	94180-66077	0177- 2653536
4.	XEN Solan Er.Mehesh Single	0177- 2653062	01792-223804	01792- 223117
5.	XEN Rampur Er.Passing Negi	01782- 233214	94180-27276	--
6.	AE , NH Sub-Div. Dhalli Er. Vijay Chauhan	0177- 2841145	94180-30099	--
7.	SE Civil Er. B. S. Chauhan	0177- 2653455	94184-77325	0177- 2801125
8.	XEN Div. No. I Er. R. K. Verma	0177- 2658385	94184-86600	2802661
9.	XEN Div. No. II Er. Deepak Raj Chauhan	0177- 2804134	94180-50100	--
10.	XEN Div. No.III Er. Som Nath Sharma	0177- 2652832	94180-85668	2658758
11.	XEN, Theog Er. Ayub Chaudhary	01783- 238376	94184-63331	--
12.	SE (PWD Elect.) Er. D. C. Chaudhary	0177- 2620055	94184-82477	-
13.	XEN (Elect) Div. No. 1	0177- 2621398	-----	0177- 2807200
14.	XEN Div. No. II Er. K.C. Patyal	0177- 2658918	94180-86776	2835900

5.(HPSEB)

Sr. No.	Name & Designation of officer	Office	Mobile number	Residence
1.	Addl. S.E. Div. No. 1 Er. Sanjeev Maria	0177- 2623952	94180-23530	0177- 2621666
2.	AE, Khalini Er. Pratap Singh	0177- 2624123	98160-25518	--
3.	AE, Dhalli Er. H.R. Shaarma	0177- 2647669	94180-51011	0177- 2624433
4.	AE, Mashobra Er. Chet Ram Sharma	0177- 2740247	94184-34282	--
5.	AE, Jatogh Er. Sat Parkash Thakur	0177- 2837126	94182-09732	
6.	AE,Junga Er. Sarwan Kumar	0177- 2752477	94180-38530	--
7.	Sr. E.E., Div. No. 2 Er. K.K. Bassi	0177- 2620120	94184-52324	--
8.	AE, Maliana Er. Virender Kumar Sharma	0177- 2630480	98163-21895	0177- 2674222
9.	AE,Bharari Er. Arun Kumar	0177- 2805209	94184-20001	94187-12001
10.	Sr. E.E. City elect. Div.	0177-	94180-35522	0177-

INDICATIVE LAYOUT OF THE PLAN

	Er. Bisheshwar Sharma	2653338		2842920
11.	AE, Commercial Er. Arun Kumar	0177- 2653338	94595-86150	--
12.	AE, Sanjauli Er. R. P. Modgil	0177- 2640008	94180-19517	0177- 2640869
13.	AE, Chhota Shimla Er. Arun Gupta	0177- 2623951	98160-95693	0177- 2841700
14.	AE, Ridge Er. P.K. Sharma	0177- 2652206	94184-84816	0177- 2626816
15.	AE, Edgah Er. H.K. Sharma	0177- 2658901	94180-95733	0177- 2835151
16.	AE, Boileauganj Er. M.L. Dhiman	0177- 2830985	94180-05615	0177- 2808075

6.(Fire)

Sr. No.	Name & Designation of officer	Office	Mobile number	Residence
1	Chief Fire Officer Sh. M. S. Sonkhla	0177- 2629945	98160-05626	0177-283318
2	Div. Fire Officer Sh. B. S. Mahal	0177- 2657087	9459144136	0177- 2623318
3	Station Fire Officer Sh. D. D. Sharma	0177- 2652939	9816005626	0177- 2030318

7.(Forest)

Sr. No.	Name & Designation of officer	Office	Mobile number	Residence
1.	DFO, Shimla Sh. V. K. Sharma	0177- 2623412	94180-62648	0177- 2831631
2.	ACF Shimla Sh. Dhanwant Thakur	0177- 2623412	94180-88022	--

8.(Jubber Hatti Airport)

Sr. No.	Name & Designation of officer	Office	Mobile number	Residence
1	Controller Sh. Divesh Kumar Tyagi	0177- 2736284	94180-37925	--
2	ATC Incharge Sh. Arvind	0177- 2736835	94180-92294	--

9.(Railway)

Sr. No.	Name & Designation of officer	Office	Mobile number	Residence
3.	Station Supdt. Sh. G.S. Rajput	0177- 2652696	98050-39931	0177- 2652696
4.	AE Sh. Dinesh Kumar	0177- 2653901	98050-39220	0177- 2652854

10.(HRTC)

Sr. No.	Name & Designation of officer	Office	Mobile number	Residence
1	DM, HRTC Sh. A. P. Naddu	0177- 2812328	94180-00531	--
2	RM., HRTC Dhalli Sh. Mohinder Singh	0177- 2647295	98053-81807	--
3	RM, HRTC, Taradevi Sh. Deva Singh Negi	0177- 2830363	94181-00560	--
4	Inspector, ISBT Sh. Shankar Lal Sharma	0177- 2656326	98050-61434	--
5	Inspector, Local Bus Stand Sh. Liaq Ram Verma	0177- 2658925	98161-76869	--

11.(Home Guard)

Sr. No.	Name & Designation of officer	Office	Mobile number	Residence
1	Commandant, Home Guard, 2nd Bn Sh. A. K. Prasher	0177- 2621467	94185-21856	01772625790
2	Commandant, Home Guard, 3rd Bn Sh. Madan Lal	0177- 2651423	94180-94366	0177- 2658255

12.(Misc.)

Sr. No.	Name & Designation of officer	Office	Mobile number	Residence
1.	Sr. M.S. (IGMC) Dr. K.S. Rana	0177-2658845	94181-58984	0177- 2844485
2.	Blood Bank (IGMC)	0177-2803073	--	--
3.	CMO (DDU) Dr. R. K. Gupta	0177-2657225	94180-33052	0177- 2805757
4.	Sr. M.O. (DDU) Dr. P.C. Sharma	0177-2658941	94180-21676	--
5.	Blood Bank (DDU)	0177-2658940	--	--
6.	Secy. Red Cross Society, Shimla Sh. Deepak	01772656730	94593-60510	0177- 2653343

INDICATIVE LAYOUT OF THE PLAN

7.	GM, BSNL Shimla Sh. Prem Singh	0177-2800666	94180-03000	2800555
8.	GM (Admn.), BSNL Shimla Smt. Indira Thakur	0177-2620240	94181-22022	0177-2673131
9.	GM, Tourism Deptt. The Mall Shimla Sh. C. R. Rangta	0177-2652704	94181-00441	--
10.	District Tourism Officer Sh. Surender Justa	0177-2633181	94184-56677	0177-2620606
11.	Manager(Production) HP Milk fed, Rampur Sh.R. K. Chauhan	01782-	94180-74143	--
12.	RTO, Shimla Sh. Arun Bhardwaj	0177-2658379	94180-54233	--
13.	DFSC, Shimla Sh. Ramesh Gangotra	0177265-7022	94181-26156	--
14.	DPRO, Shimla Sh. Daya Ram	0177-2657024	94182-74674	0177-2621666

13.(Emergency Services)

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
1.	Fire Station, The Mall, Shimla	101	--	--
2.	Fire Station Chhota Shimla	2623269	--	--
3.	Fir Station, Boileauganj	2830664	--	--
4.	Ambulance	102	--	--
5.	Traffic Police	2652217	--	--
6.	Police Control Room	2621714	--	--
7.	Inter State W/Less	2621728	--	--
8.	CID Control Room	2622408	--	--
9.	Sectt. Control Room	2622204	--	--

14.(BDOs)

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
1.	BDO, Mashobra Sh. Sanjay Bhagwati	0177-2740248	94180-58973	0177-2740248
2.	BDO, Basantpur Smt. Ajay Kumari	0177-2784533	94180-22381	--
3.	BDO, Theog Sh. Bhuvan Sharma	01783-238210	94186-70335	011783-238210
4.	BDO, Narkanda Ms. Chetna Kadwal	01782-242428	94184-56920	01782-242428
5.	BDO, Rohru Sh. Shiv Ram	01781-240037	94595-57400	--
6.	BDO, Jubbal Sh. Budh Ram (Officiating)	01781-252024	98162-12616	--
7.	BDO, Chirgaon	01781-	98161-67579	--

	Sh. O.P. Chauhan (Officiating)	277229		
8.	BDO, Chopal Sh. Yogesh Chauhan	01783- 260024	94186-58911	--
9.	BDO, Rampur Sh. Satinder Thakur	01782- 233025	98160-67867	01782- 233025
10.	BDO, Nankheri Sh. Rajesh Dhiman	01782- 225606	98160-79779	01782- 225606



INDICATIVE LAYOUT OF THE PLAN

LINKAGES WITH SDMA				
LINKAGES WITH DDMAS				
STATE DISASTER MANAGEMENT AUTHORITY				
SR NO	DESIGNATION IN SDMA	POST HELD	TELEPHONE NOS	
			OFFICE	RESIDENCE
1	CHAIRPERSON	CHIEF MINISTER	2625400	2652874
2	MEMBER	REVENUE MINISTER	2621196	2621693
3	CHIEF EXECUTIVE OFFICER	CHIEF SECRETARY	2621022	2621707
4	MEMBER	FINANCIAL COMMISSIONER (REV)	2622080	2621238
5	MEMBER	SECY (HOME)	2622269	2628282
6	MEMBER	SECY (PWD)	2621907	2623927
7	MEMBER	SECY(HEALTH)	2621904	2620580
8	MEMBER	DGP	2626938	2628940
9	MEMBER	ADDL .SECY(REV)	2628480	2625903
STATE EXECUTIVE COMMITTEE				
SR NO	DESIGNATION IN SEC	EX OFFICIO POST HELD	TELEPHONE NO	
			OFFICIAL	RESIDENCE
1	CHAIRPERSON	CHIEF SECRETARY	2621022	2621707
2	MEMBER	FINANCIAL COMMISSIONER (REV)	2622080	2621238
3	MEMBER	SECY (HOME)	2622269	2628282
4	MEMBER	SECY (HEALTH)	2621904	2620580
5	MEMBER SECRETARY	ADDL. SECY (REV)	2628480	2625903

LINKAGES WITH OTHER DDMAS

Sr No	Desigantion	Telephone Number	
		Office	Residence
1	DDMA Bilaspur		
	Chairman –cum-Deputy commissioner Bilaspur	01978-224155	01978-224150
	Chief Executive officer-cum- Additional District Magistrate Bilaspur	01978-224763	019778-222209
2	DDMA Chamba		
	Chairman –cum-Deputy commissioner Chamba	01899-224847	01899-225380
	Chief Executive officer-cum- Additional District Magistrate Chamba	01899-222540	01978-2224880
3	DDMA Hamirpur		
	Chairman –cum-Deputy commissioner Hamirpur	01972-224300	01972-224343
	Chief Executive officer-cum- Additional District Magistrate Hamirpur	01972-224324	01972-2243250
4	DDMA Kangra		
	Chairman –cum-Deputy Commissioner Kangra	01892-222103	01892-224950
	Chief Executive officer-cum- Additional District Magistrate Kangra	01892-223321	01892-226832
5	DDMA Kinnaur		
	Chairman –cum-Deputy commissioner Kinnaur	01786-222252	01786-222251
	Chief Executive officer-cum- Additional District Magistrate Kinnaur	01786-222227	01786222327
6	DDMA Kullu		
	Chairman –cum-Deputy	01902-222727	01902-222726

INDICATIVE LAYOUT OF THE PLAN

	Commissioner Kullu		
	Chief Executive officer-cum- Additional District Magistrate Kullu	01902-222226	01902-222321
7	DDMA Lahaul Spiti		
	Chairman –cum-Deputy commissioner Lauhal	01900-222501	01900-222503
	Chief Executive officer-cum- Additional District Magistrate Lauhal	01900-222225	01900-222224
8	DDMA Mandi		
	Chairman –cum-Deputy commissioner Mandi	01905-225201	01905-236202
	Chief Executive officer-cum- Additional District Magistrate Mandi	01905-225205	01905-225206
9	DDMA Solan		
	Chairman –cum-Deputy commissioner Solan	01792-220656	01792-220555
	Chief Executive officer-cum- Additional District Magistrate Solan	01792-223705	01792-220076
10	DDMA Sirmaur		
	Chairman –cum-Deputy commissioner Sirmaur	01702-225025	01702-225026
	Chief Executive officer-cum- Additional District Magistrate Sirmaur	01702-222410	01702-222481
11	DDMA Una		
	Chairman –cum-Deputy commissioner Una	01975-225800	01975-225900
	Chief Executive officer-cum- Additional District Magistrate Una	01975-225188	01975-225888

DISASTER MANAGEMENT LINKAGES

NODAL MINISTERIES AT GOVT OF INDIA LEVEL

NODAL DEPARTMENTS AT THE STATE LEVEL

Nodal Ministries at Union Level

Ministries Responsible for Various Categories of Disasters:

Disasters	Ministries / departments
Earthquakes and Tsunami	MHA/Ministry of Earth Sciences/IMD
Floods	MHA/Ministry of Water Resources/CWC
Cyclones	MHA/Ministry of Earth Sciences/IMD
Drought	Ministry of Agriculture
Biological Disasters	Ministry of Health and Family Welfare
Chemical Disasters	Ministry of Environment & Forests
Nuclear Disasters	Ministry of Atomic Energy
Air Accidents	Ministry of Civil Aviation
Railway Accidents	Ministry of Railways

Nodal Departments at State Level

Type of Hazard	Primary Agency/Department	Supporting Agencies / Departments
Water and Climate Related Disasters		
1. Floods	Department of I and PH	IMD, CWC, ES&T
2. Hailstorm	Department of Agriculture and Horticulture	IMD, Home, insurance and Revenue
3. Cloud Burst	Department of I and PH	IMD, CWC, ES&T, Revenue
4. Heat Wave and Cold Wave	Department of Revenue	IMD, ADMN, forest, Health
5. Snow Avalanches	Snow and Avalanche Study Establishment (SASE), Manali (DRDO)/Deptt. of Home/CSRT	Tribal Admin, IMD, Health, Home and Revenue, Mountaineering Institute/S&T/GSI
6. Droughts	Department of Agriculture/IPH	IMD, Revenue, RD, Nauni and Palampur universities/ Department of Land records
7. Thunder and Lightning	Department of Revenue	IMD/ES&T

INDICATIVE LAYOUT OF THE PLAN

Geologically Related Disasters		
8. Landslides and Mudflows	Geological Wing of Department of Industries, PWD, BRO & UD	GSI, CRRI, Ministry of Earth Sciences, Wadia Institute of Geology, Wadia Institute of Himalayan
9. Earthquakes	Department of Environment, Science and	IMD, Ministry of Earth Sciences/GSI
10. Dam Failures/ Dam Bursts	Department of MPP and Power	IPH
Chemical, Industrial And Nuclear		
11. Chemical and Industrial Disasters	Department of industries/ Department of labour and	HPSEB, Department Of labour & employment, Home, Admn, DMI Bhopal, and NDRF
12. Nuclear Disasters	Department of Home	DEST, Admn, Central Ministry of Atomic Energy &
Accident Related Disasters		
13. Forest Fires	Forest Department	Fire Department, ES&T, Home and
14. Urban Fires	Department of Home(Fire)	IPH, Health, TCPI, Admn and Home
15. Major Building Collapse	Department of UD	PWD, Health, Home and Admn
16. Serial Bomb Blasts	Department of Home	Admn, Health and Family Welfare
17. Festival related disasters	Department of Home	Admn, Health and Family Welfare/Department of Art language and culture
18. Electrical Disasters and Fires	HPSEB/ MPP and Power	Home, Health and Revenue
19. Air, Road and Rail Accidents	Department of Transport, Indian Railway and Civil Aviation/GAD	Home, Health and Family welfare and
20. Boat Capsizing	MPP and Power/IPH	BBMB, Home, Health and Family Welfare and Admn.
21. Village Fire	Department of Home	Home, Revenue, Health and Family Welfare
Biologically Related Disasters		
22. Biological Disasters and Epidemics	Department of Health	Home, Revenue and NDRF
23. Pest Attacks	Department of Agriculture and Horticulture	Home, Revenue. and NDRF
24. Cattle Epidemics	Department of Animal Husbandry	Home, Revenue. and NDRF
25. Food Poisoning	Department of Health	Home, Revenue and NDRF

Nodal Agencies for Early Warning

Following are the Nodal agencies in the Government of India and in the state mandated for early warning of different natural hazards prevailing in the state of Himachal Pradesh:

Disasters	Agencies	Agencies at State level
Cyclone	Indian Meteorological Department	Agriculture Department
Tsunami	Indian National Centre for Oceanic Information services	N/A
Floods	Central Water Commission	IPH
Landslides	Geological Survey of India	Geology wing of industry department.
Avalanches	Snow and Avalanches Study Establishment SASE(DRDO)	Department of Environment Science & Technology
Heat & Cold Waves	Indian Meteorological Department	Department of Revenue

INDICATIVE LAYOUT OF THE PLAN

Locations of Helipads in Himachal Pradesh

Sr. No.	Name	Latitude	Longitude
1.	BARMANA	31.424167	76.830833
2.	BILASPUR	31.333333	76.750000
3.	SHAH TALAI	31.450000	76.516667
4.	GHUMARWIN	31.450000	76.716667
5.	HATWAR	31.583333	76.700000
6.	GEHRWIN	31.366667	76.683333
7.	JHANDUTTA	31.366667	76.650000
8.	BUHAR (KOTIDHAR)	31.316667	76.633333
9.	SWARGHAT	31.225000	76.708333
10.	BBMB FOOTBALL GROUND NANGAL	31.383333	76.366667
11.	NFL GROUND NAYA NANGAL	31.383333	76.366667
12.	LUHNU	31.333333	76.750000
13.	GSSS JUKHALA	31.266667	76.850000
14.	NAMHOL	31.261111	76.865278
15.	BAKLOH	32.488889	75.922222
16.	BANIKHET	32.552778	75.958333
17.	BHARMOUR	32.447222	76.541667
18.	CHAMBA	32.572222	76.119444
19.	CHAURI	32.441667	76.008333
20.	CHHATRU	32.325000	77.383333
21.	KILLAR	33.086111	76.408333
22.	SAACH	33.033333	76.416667
23.	AJOG	32.925000	76.463889
24.	BARSAR	31.533333	76.463889
25.	HAMIRPUR	31.688889	76.541667
26.	NADAUN	31.783889	76.369444
27.	SUJANPURTIHRA	31.831944	76.500278
28.	BIAR	31.569444	76.479167
29.	BARU	31.680556	76.540278
30.	GOVT. COLLEGE GROUND HAMIRPUR	31.702778	76.521389
31.	KANJYAN	31.680556	76.637500
32.	SAMIRPUR	31.721667	76.651389
33.	JUNGALBARI	31.843333	76.531389
34.	NIT HAMIRPUR	31.705833	76.524722
35.	BAIJNATH	32.050000	76.633333
36.	DHARAMSALA	32.176389	76.307778

37.	GAGAL	32.175000	76.272222
38.	JAISINGPUR	31.908333	76.605556
39.	NURPUR	32.183333	75.900000
40.	PALAMPUR (AR)	32.116667	76.563889
41.	PALAMPUR (UN)	32.102778	76.558333
42.	PONG DAM	32.016667	75.902778
43.	REHAN	32.169444	75.913889
44.	SAPRI	31.897222	76.308333
45.	YEOL	32.163889	76.372222
46.	DHARAMSHALA ARY GROUND	32.250000	76.166667
47.	DHALIARA	31.856944	76.193611
48.	SHAHID BHUVNESH DOGRA GROUND DEHRA	31.866667	76.212778
49.	GIABUNG	31.775000	78.441667
50.	CHOLLING (NEAR KARCHHAM ARMY)	31.583333	78.083333
51.	KARCHAM	31.516667	78.172222
52.	POOH	31.758333	78.588889
53.	RAKCHHAM	31.383333	78.380556
54.	RECKONG PEO	31.891667	78.286111
55.	SANGLA (JP IND)	31.430556	78.241944
56.	SUMDO	32.058333	78.605556
57.	KUPPA	31.441944	78.245278
58.	ROPA	31.790278	78.449167
59.	JANGI	31.608333	78.433333
60.	LARJI	31.716667	77.216667
61.	MANALI	32.250000	77.183333
62.	NAGAR	32.119444	77.152778
63.	PALCHAN	32.310000	77.189444
64.	BARING	32.655556	76.850000
65.	CHHOTA DARA	32.266667	77.516667
66.	JISPA	32.642778	77.189444
67.	KAZA	32.216667	78.080556
68.	RUKLING	31.604167	78.438056
69.	SAGNAM	32.034722	78.058333
70.	SISSU	32.480556	77.118056
71.	STINGRI	32.569444	77.077778
72.	TABO	32.097222	78.383333
73.	TANDI	32.538889	76.980556
74.	TINDI	32.750000	76.466667

INDICATIVE LAYOUT OF THE PLAN

75.	TINGRIT	32.850000	76.786111
76.	UDAIPUR	32.711111	76.666667
77.	JUNJAIL	31.522222	77.222222
78.	KARSOG	31.391667	77.227778
79.	MANDI	31.711111	76.938889
80.	PANDOH	31.673056	77.055556
81.	PRASHAR LAKE	31.758333	78.000000
82.	SARKAGHAT	31.681667	76.729444
83.	SUDHAR	31.933333	76.983333
84.	SUNDERNAGAR	31.519444	76.888889
85.	KANGU	31.441667	76.858333
86.	THACHI	31.680556	77.211111
87.	BATAIL	31.584722	76.740556
88.	DHARAMPUR MANDI	31.805556	76.762500
89.	KAW KARSOG	31.356667	77.231111
90.	BASA	31.583333	77.333333
91.	SHIKARI DEVI	31.483333	77.166667
92.	JOGINDERNAGAR (DOHAG)	31.997222	76.762778
93.	GOVT. POLY. TECH. COLLEGE GROUND SUNDERNAGER	31.250000	76.897222
94.	GSSS KARSOG (MUMAIL)	31.383333	77.202778
95.	ANNADALE	31.119444	77.163889
96.	CHOPAL	30.958333	77.588889
97.	DODRAKAWAR	31.208333	78.088889
98.	DEHA (SHIMLA)	31.466667	77.450000
99.	JHAKHARI	31.505556	77.719722
100.	JUBBAL	31.116667	77.663889
101.	KALYANI (RETREAT)	31.138889	77.300000
102.	KANDA	31.566667	77.163889
103.	KUMARSAIN	31.325000	77.452778
104.	RAMPUR	31.466667	77.636111
105.	ROHRU	31.216667	77.752778
106.	SARAHAN	31.511111	77.797222
107.	THEOG	31.133333	77.041667
108.	THARU NANKHARI	31.333333	77.550000
109.	SEONI	31.255556	77.133333
110.	AMBOTA	30.777778	77.688889
111.	RAJGARH	30.833333	77.302778
112.	HARIPURDHAR	30.766667	77.533333

113.	KAFOTA	30.625000	77.700000
114.	KALA AMB	30.530556	77.202778
115.	NAHAN	30.569444	77.291667
116.	PAONTA SAHIB	30.438889	77.627778
117.	SANGRAH (AT JAUGADHDHAO)	30.697222	77.444444
118.	SARAHAN (SIRMOUR)	30.716667	77.200000
119.	SHILAI	30.683333	77.700000
120.	TRILOKPURI	30.594444	77.517778
121.	BARU SAHIB	30.758333	77.300000
122.	DNKNAR	30.716667	77.288889
123.	HALHAN	30.733333	77.638889
124.	SHALANA RAJGARH	30.841667	77.300000
125.	RENUKA	30.608611	77.449722
126.	BAROTIWALA (SCHOOL GROUND)	30.933333	76.816667
127.	DAGSHAI	30.866667	77.083333
128.	NALAGARH	31.041667	76.716667
129.	NAUNI	31.866667	77.172222
130.	SANAWR	30.908333	77.000000
131.	SOLAN(ARMY)	30.916667	77.100000
132.	BOHAR	31.319444	76.636111
133.	M/S JINDAL MECTECH PVT AS LANDING GROUND NALAGARH	31.500000	76.716667
134.	CHAIL	30.963056	77.211111
135.	BADIDHAR, 2KM AWAY FROM BATAL CHOWK	32.500000	76.950000
136.	SHALAGHAT (KOTLI)	31.211111	76.983333
137.	MARKET COMMITTEE DHALLI (PARWANOO)	30.838889	76.988889
138.	GSSS DHARAMPUR GROUND	30.966667	76.816667
139.	GOVT. COLLEGE GROUND NALAGARH	31.033333	76.750000
140.	GROUND OF UHF NAUNI	30.866667	77.166667
141.	SANGNAI(AMBOTA) UNA	31.705000	76.342222
142.	UNA	31.472222	76.266667
143.	DULEHAR	31.341944	76.212778
144.	KANGAR	31.443611	76.209444
145.	SNGNAI	31.702778	76.044444
146.	THANAKALAN	31.580556	76.347222
147.	KHAD PLAY GROUND	31.526667	77.502778
148.	POLICE LINES JHALEHRA	31.488333	76.244722
149.	GOVT. SS SCHOOL SALOH	31.477778	76.200000
150.	GOVT. ELEMENTARY SCHOOL GROUND CHURURU	31.606111	76.158611

INDICATIVE LAYOUT OF THE PLAN

151.	AMB GONDPUR BENERA	31.748333	76.033889
152.	MANDALI	31.526111	76.359444

INDICATIVE LAYOUT OF THE PLAN

**IMPORTANT CONTACT DETAILS FOR DISASTER RESPONSE DISASTER
MANAGEMENT DIVISION, MINISTRY OF HOME AFFAIRS**
(for reporting of grave disaster and for requisitioning of Army, Air force and NDRF)

Name of Officer / Designation	Telephone (Office)	Telephone (Residence)	Mobile No.	Email id
R. K. Singh HOME SECRETARY	23092989 23093031 23093003 (Fax)	24103058		hshso@nic.in
A.E. Ahmad SECRETARY (Border)	23092440 23092717 (Fax)	24602518		secybm@nic.in
Ravindra Kumar Srivastava Joint Secretary (Disaster Management)	24638206 24610906 (Fax)	26874825		jsdm@nic.in
Dev Kumar Director (Disaster)	24642853	26266708	9871087616	
J P Mishra Director (NDM –II)	24642381			
Sanjay Aggarwal Director (NDM – III)	24642381			
Control Room (Disaster Management)	23093563 23093564 23093566	23093750 (Fax)		
Toll Free No. (MHA, C/R)	011-1070			

NATIONAL DISASTER MANAGEMENT AUTHORITY
(for reporting of grave emergencies and request for specialized response)

Name of Officer / Designation	Telephone (Office)	Telephone (Residence)	Mobile No.	Email id
M. Shashidhar Reddy, MLA, Vice Chairman	011-26701701 011-26701704 011-26701706 (Fax)			vc@ndma.gov.in

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Dr. Sutanu Behuria Secretary	011-26701710			secretary@ndma.gov.in
Shri Amit Jha, JS (Admn)	011-26701718	011-26109395	09717873412	amitjha@ndma.gov.in
Shri P K Tripathi, Advisor & JS(Mitigation)	011-26701816		09868889697	pktripathi@ndma.gov.in
Sujata Saunik, JS (PP)	011-26701817			jsadm@ndma.gov.in
Control Room	011-26701723 to 728	011-26701729 - 30		

SNOW & AVALANCHE STUDY ESTABLISHMENT (CHANDIGARH) (DRDO) (0172)
(For snow avalanche early warning and related issues)

Name of Officer / Designation and Location of Deployment	Telephone (Office)	Telephone (Res.)	Mobile No.	Email id
A. Ganju Jt. Dir.	2699804-806	2705990	09872083177	2699802
Rajesh Chand Thakur, T.O.(B)			09417049754	

GEOLOGICAL SURVEY OF INDIA
(For landslide related issues)

Name of Officer / Designation and Location of Deployment	Telephone (Office)	Telephone (Residence)	Mobile No.	Email id
N.L. Sharma, Director Geological Survey of India Plot No 3 Dakshin Marg Sector 33B Chandigarh - 160020	0172- 2622529 0172- 2621945 (Fax)	0172-2661002		gsichd@sancharnet.in

INDICATIVE LAYOUT OF THE PLAN

INDIAN METEOROLOGICAL DEPARTMENT (SHIMLA)
(for weather related early warning and data)

Name of Officer / Designation and Location of Deployment	Telephone (Office)	Telephone (Residence)	Mobile No.	Email id
Manmohan Singh, Director	0177-2626211	0177-2626490	9816127668	mm_sandhu@yahoo.co.in
R.K. Lakhnupal, Asstt Meteorologist	0177-2624976	0177-2652408	9418277093	
Ranvir Singh	0177-2624976		9418061077	ranvir_10@yahoo.com
Harminder Dutta, Caretaker (VOR)	0177-2624976		9418119123	harminder.dutta@imd.gov.in

CENTRAL WATER COMMISSION (SHIMLA)
(For floods/flash floods and early warning thereof)

Name of Officer / Designation and Location of Deployment	Telephone (Office)	Telephone (Residence)	Mobile No.	Email id
Director (M&A) CWC, Block 10, First Floor Commercial Complex, Kasumpti Shimla 171009	0177-2624036 0177-2624224 (Fax)	0177-2625307		
Ex, Engineer, Snow Hydrology Divn CWC, Block 9, First Floor Commercial Complex, Kasumpti Shimla 171009	0177-26230260 0177-2623026 (Fax)	0177-2628247		

INDICATIVE LAYOUT OF THE PLAN

AIR HQR (EXCHANGE NO-23010231)
(For requisition of Air force in disasters)

Name of Officer / Designation and Location of Deployment	Telephone (Office)	Telephone (Residence)	Mobile No.	Email id
ACAS (Ops)	23014424 23010231/7528 Fax 23017627	24672974	9871213393	
PD Ops (Off) (T&H)	23110231/7559 23016354 Fax 23016354	24642195	9871097909	
Dir Ops (T)	23010231/7545 2305857	23098030		
Dir Ops (H)	23010231/7551 Fax 23016354	25674906		
JD Ops (LS)	23010231/7546 Fax 23016354		9818220586	
JD Ops (H)	13010231/7552 Fax 23792973		9868468583	

ARMY HQR (EXCHANGE NOS-23010131/23018197)
(For requisition of army during disasters)

Name of Officer / Designation and Location of Deployment	Telephone (Office)	Telephone (Residence)	Mobile No.	Email id
DGMO	23011506 E-33170 Fax 23011506	23011506 E-33172		
ADGMO (A)	23011611 E-33174 Fax 23011617	24615208 E-35251		
ADGMO (B)	23014891 E-33176 Fax 23011617	26142269 E-39124		
Dir MO – 6	23018034 E-33220 Fax 23011617		9818106439	
GSO-I MO - 6	23019739 E-33221 Fax 23011617		E-39823 9810431696	

INDICATIVE LAYOUT OF THE PLAN

DirOL – 2	23335218 23018530 E-35221	23339055		
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ARMY TRAINING COMMAND, SHIMLA
(For Army assistance)

Name	Designation	Contact No.	Address
Army Exchange		0177 2804590 - 92	Shimla - 3

CIVIL MILITARY LIASON FOR DISASTER RELIEF OPERATION (AIR)
CONTACT DETAILS OF AIR FORCE STATION SARSAWA, SAHARANPUR, UTTAR PRADESH
(For Requisition and Deployment of Helicopters in Disasters)

Name	Designation	Contact No.	Address
Mr. Bhanu Johri	Group Captain and Station Incharge	Tel No. 01331 244919-207 Fax No. 01331 - 244822	AF Stn, Sarsawa Saharanpur (UP), PIN – 247232
Mr. Vineet Sharma	Wing Commander, Chief Operations Officer	As Above Cell No. + 91 7599342240	As Above

CENTRAL CRISIS GROUP
(National Level)
(For industrial and chemical disasters)

Name of Officer / Designation and Location of Deployment	Telephone (Office)	Telephone (Residence)	Mobile No.	Email id
Sh. Vijai Sharma, Secretary, Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex, Lodi Road, New Delhi- 110003.	011-24361896 011-24360721 011-24360721 (Fax)	011-26883988		Vijay.sharma@nic.in
Sh. Rajiv Gauba, Joint Secretary, Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex, Lodi Road, New Delhi- 110003.	011-24360634 011-24363577 (Fax)	0177- 26192110	09871374660	

INDICATIVE LAYOUT OF THE PLAN

ALL INDIA RADIO
(For broadcasting services)

Name	Designation	Contact No.	Address
Mr. T K Tawal	Station Director	0177 2801899 (Office); Residence - 2831281 Fax 0177 2801899; email – airshimla@yahoo.com	Ambedkar Chowk, Shimla – 4
Mr. Devinder Mahindru	Programme Executive	0177 2563038 – O; 0177 2831748	As Above

Headquarter, CE DEEPAK PROJECT
(For Maintenance of Border Roads)

Name	Designation	Contact No.	Address
Mr. IR Mathur	Chief Engineer	0177 2830986 (Office); Residence – 2831850	Minto Court, Shimla – 4
Col. SS Pathania	-	0177 2633602 – (O) 0177 2831748	As Above

INDO-TIBETAN BORDER POLICE, TARADEV, SHIMLA – 10
(For Requisition and Deployment in Disasters)

Name	Designation	Contact No.	Address
Sh. A S Chawla	DIG	0177 2830601 (O); 2830602 (R) Email - dighpitbp@sancharnet.in	Taradevi, Shimla – 10
	Staff Officer ADM to DIG	0177 2831010 (O), 2830604	As Above

BHARAT SANCHAR NIGAM LIMITED, HP CIRCLE SHIMLA - 10
(For communication related issues)

Name	Designation	Contact No.	Address
Mr. Rakesh Kapoor	Chief General Manager	0177 2620220 (O); 2625325 (Fax)	SDA Complex, Kasumpti
Mr. A V Chaturvedi	General Manager, Mobiles	0177 2673999 (O), 2673923 (Fax)	As Above
Mr. Prem Singh	General Manager, Telecom	0177 2800666 (O); 2800777 (Fax)	

INDICATIVE LAYOUT OF THE PLAN

INDIAN OIL CORPORATION
(For POL and LPG)

Name	Designation	Contact No.	Address
Mr. Piyush Mittal	Divisional Manager Sales	0177 2625768 (O); 2621706 2623158 (Fax)	Block No. 21, SDA Complex, Shimla
Mr. Mukesh Kumar	Manager, LPG	0177 2623133 (O), 2671350 (R)	As Above
Mr. Rajan Berry	Deputy Manager Sales	0177 2625363 (O)	As Above

CENTRAL PUBLIC WORKS DEPARTMENT
(For road clearance, machinery and manpower)

Name	Designation	Contact No.	Address
Mr. Gurbax Singh	SE	0177 2657531 (O); 2804696 (R), Cell - 9418004466 2652476 (Fax); email – sescshimla@yaoo.com	CPWD, Kennedy Cottage, Shimla - 4
Mr. J K Goel	XEN Planning	0177 2658131 (O), Cell – 09318050506	As Above
Mr. M P Singh	XEN	0177 2652830 (O), 2652412 (R)	As Above

INDICATIVE LAYOUT OF THE PLAN

**CONTACT DETAILS OF NDRF OFFICERS
(For Specialized response during disasters)**

**NDRF Head Quarter
NDRF BATALLIONS**

		Response Force (NDRF) Sector-1 R K Puram, New Delhi -66	Mob: 09871115726 Fax: 011- 26105912	
Shri Rakesh Ranjan	Dy Commandant (Proc)	Directorate General , National Disaster Response Force (NDRF) Sector-1 R K Puram, New Delhi -66	011-26107921, Mob: 08860136649 Fax: 011- 26105912	rakeshbsf@gmail.com
Shri Om Parkash	Inspector Control Room	Directorate General , National Disaster Response Force (NDRF) Sector-1 R K Puram, New Delhi -66	011-26107953, Mob: 08010072169 Fax: 011- 26105912	

Name	Designation	Address	Contact No.	Email Id
Sh.R.K.Verma	Commandant	7th Bn NDRF, Bibiwala Road, Bhatinda(Punjab)	0164-2246030, Fax: 0164- 2246570 Mob: 09417802032	comdt.27thbn@itbp.gov.in, 7thbnndrfbathinda@gmail.com
Sh. Jaipal Yadav	Commandant	8th Bn NDRF, Greater Noida, Distt.G.B.Nagar, UP	0120-2351101, 0120-2351087, Fax: 0120- 2351105, Mob: 09968610011	eighthndrf@yahoo.com, jpyadav1960@yahoo.com

NAME	Designation	Address	Contact No.	Email Id
Sh. PM Nair, IPS	DG	Directorate General, National Disaster Response Force (NDRF) Sector-1	011-26712851 011-26161442, Mob: 09818916161 Fax: 011- 26105912	dg-ndrf@nic.in
Shri Mukul Goel	IG	Directorate General , National Disaster	011-26160252 011-26113014,	-

CHAPTER - 1

INTRODUCTION

1.1) Background

The geographical location of Himachal Pradesh is such that it lies in Himalayan region between latitude 30° 22.40 N to 33° 12.20 N and longitude 75° 45.55 E to 79° 04.20 E. Himalaya being a nascent mountain range and due to the continuous ongoing movement of tectonic plates, the Himalaya is still rising making this region vulnerable to the earthquake. The whole area of Himachal Pradesh falls into two earthquake zones viz. Zone IV and Zone V as per the BIS Zoning map of the Himachal Pradesh. Consequently the Shimla District is also located in the Zone IV and V (about 99.62% area falls in Zone IV and 0.38% falls in Zone V) making the region liable to experience the earthquake of intensity MSK VIII or more. Consequently rendering the human lives and property situated in this district more vulnerable to the disaster. In addition to it, river Satluj, Giri, Pabar and their tributaries flow through this district and hence the population living on the banks of these rivers are susceptible to floods which can occur naturally or due to human activities. Now a days due to the increasing developmental activities like construction of roads, houses and other developmental infrastructural activities like hydropower projects, industrial hubs, big industrial institutions, the unscientific construction methods and ways used for the disposal of debris, the landslides are on the rise causing huge loss to human life and property. Further the Shimla District being enriched with the green cover, during summers the incidents of forest fire have increased manifold and hence irreparable loss is being caused to the natural resources of the state every year. Hence there is a need to prevent, mitigate the danger or threat of such disasters and to prepare the community by way of capacity building to respond in a better way to such disastrous situation if arises at any time. This aspect is further strengthened by the legislation enacted by the Govt. of India in the 56th year of the Republic of India viz. "Disaster Management Act 2005", which makes it mandatory under Chapter IV section 25 to constitute "District Disaster Management Authority" at the district level for the better management of disasters by way of preparation of District Disaster Management Plan as required under section 30(2) (1) of the Act.

Further section 2(e) of this Act defines Disaster management as "Continuous and integrated process of planning, organizing, coordinating and implementing measures which are necessary or expedient for –

- i) Prevention of danger or threat of any disaster
- ii) Mitigation, reduction of risk of any disaster or its severity or consequences
- iii) Capacity building
- iv) Preparedness to deal with any disaster
- v) Prompt response to any disaster situation or disaster
- vi) Assessing the severity or magnitude of effects of the disasters
- vii) Evacuation, rescue and relief
- viii) Rehabilitation and reconstruction

In addition to it section 2(d) defines Disaster as "A catastrophe, mishap, calamity or grave occurrence in any area arising from natural and manmade causes or by accident or negligence which results in the

INTRODUCTION

substantive loss of life or human sufferings or damage to or destruction of the property or damage to or destruction of environment and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area.”

Also the word Capacity Building as defined in section of 2(b) of this Act mean the identification of the existing resources and the resources to be acquired or created ,organizing and training of personnel and coordination of such trainings for effective management of disasters.

Finally section 32 makes it mandatory on the part of every department may be of state Govt. or Govt. of India as well as local authority to prepare disaster management Plans ,setting out the programmes for prevention and mitigation measures as provided in the District Disaster Management Plans .

1.2) Necessity Of the Plan

As per the “Hazard Vulnerability Assessment of Himachal Pradesh” study done by the HP State Council For Environment, Science and Technology, the Shimla District has been assigned the overall hazard vulnerability as “High” as per the following table.

Table 1.1 Hazard vulnerability of District Shimla

HAZARD	EARTH QUAKE	LAND SLIDE	FLOODS	AVALANCHE	INDUSTRIAL	CONSTRUCTION /DENSITY	OV ER AL L RA TI NG
VULNER ABILITY	L	M	M	L	H	M	H

SOURCE : PAGE 8 | HP STATE DISASTER MANAGEMENT POLICY | 2011 |

Historically, also the Himachal Pradesh (being in zone IV and V as per Earthquake zonation map) is experiencing earthquake tremors continuously . Due to climate change and human intervention on large scale with nature because of ongoing unscientific developmental activities , the flash floods, landslides , cloudbursts are on the rise .Being the fragile ecology of Himalayan region, these hazards are causing havoc on the human lives and property as well as environment.

Further the thrust of the H P Government to exploit its Hydro power potential has laid the road map for construction of many big , small and micro hydro power projects in District Shimla making it vulnerable to the industrial hazards also.

However the advent of new technology in predicting the forthcoming metrological events more accurately due to launch of sophisticated satellites and more sophisticated early warning system have made it easier for human beings to plan accordingly to cope up such disasters. This is further supported

by the advanced technologies being developed in India by BMTPC , Ministry Of Housing and Urban Development Govt. Of India to construct houses which are earthquake resilient .

Therefore realizing the need by the Government Of India and H. P Govt. to build safer tomorrow mainly due to the advent of new technologies and the legislation enactment “The Disaster Management Act 2005” resulted in the framing of H. P. Disaster Management Policy 2011 which makes it mandatory on the part of District Disaster management Authority to adopt continuous and integrated process of planning, organizing, coordinating and implementing measures which are necessary and expedient for prevention, mitigation of disasters which are to be incorporated in the developmental plans of the different departments and preparedness to meet the disaster and relief , rescue and rehabilitation thereafter, so as to minimize the loss to be suffered by the communities and document so prepared be made so handy and accessible to the general public. Hence the need of the plan arises due to the empowerment of the human being done by the techno legal regime due to which it is possible to take preventive, mitigation, preparedness measures along with the capacity building of the stakeholders so that the disaster sufferings can be minimized making it necessary to plan accordingly which is the genesis of the Disaster management Plan.

1.3) Changing Context of Disaster Management

Prior to the enactment of the Disaster management Act 2005, disaster management was the activity just to respond to the needs of the affected people i.e. their rescue ,rehabilitation and relief only ,therefore considered to be comprised of following three components :-

- 1) Rescue



Figure 1.1 RELIEF CENTRIC DISASTER MANAGEMENT APPROACH

INTRODUCTION

2) Relief

3) Rehabilitation

There was no emphasis on the prevention ,mitigation , preparedness aspects of the disaster management possibly due to the fact that natural hazards like earthquakes meteorological events like heavy rains, snow, storms were not predictable due to the non advancement of science and technology. However the advancement of technology has empowered the human beings to predict the disaster at its advance or early stage and therefore giving an opportunity to the human beings to take sufficient measures to prevent and mitigate its effects . Further by virtue of this legislation the ambit of the Disaster management has increased manifold as defined in section 2(e) of the Disaster Management Act 2005, from relief and rehabilitation to continuous and integrated process of planning, organizing, coordinating, and implementing measures which are necessary and expedient for prevention of danger or threat of any disaster, mitigation or reduction of risk of any disaster, capacity building, preparedness to deal with any disaster, prompt response to any threatening disaster situation, assessing the severity or magnitude of the effects of disaster, evacuation ,rescue , relief and rehabilitation.

Therefore there is paradigm shift in the disaster management approach from relief centric post disaster approach to proactive disaster prevention, mitigation, preparedness and rehabilitation approach. Thus the components of disaster management comprises of prevention, mitigation, preparedness, capacity building , rescue and relief, rehabilitation ,recovery and reconstruction.



Figure 1.2 COMPONENTS OF PROACTIVE DISASTER MANAGEMENT APPROACH

1.4) Objectives Of The Plan

- 1) To identify the areas vulnerable to different types of the hazards in the district.
- 2) To adopt the proactive measures at distt. level by all the govt. departments may be of state or central govt. as well as local bodies in their departmental plans to prevent disaster and mitigate its effects .
- 3) To enhance the disaster resilience make up of the people in the district by way of capacity building
- 4) To encourage the community to adopt disaster resilient technology in their developmental activities to build up disaster resilient environment
- 5) To assign the different tasks and responsibilities to the different govt. departments may state or central govt. during the pre, disaster and post phases of the disaster.
- 6) To establish the standard pattern/mechanism to deal with any disastrous situation in consonance with the mechanism laid down in the STATE DISASTER MANAGEMENT PLAN.
- 7) To ensure the participation of all the stakeholders i.e. the community based organizations , GO,NGO etc to respond effectively to any disaster situation
- 8) To set up an emergency Operation Centre at the Distt. level to respond effectively to the search, rescue, response plans
- 9) To develop the standardized mechanism to respond the disaster situation so as to manage the disaster efficiently manner
- 10) To set up the early warning system so as to prepare the community psychologically to deal with the disaster and responsive communication system based upon fail-proof proven technology
- 11) To prepare the response plan based upon the guidelines issued in the State Disaster Management Plan so as to provide prompt relief rescue and search support in the disaster affected areas.
- 12) To adopt disaster resilient construction mechanism in the district by way of using Information ,Education and Communication for making the community aware for the need of disaster resilient future development.
- 13) To make the use of media in disaster management.
- 14) Rehabilitation plan of the affected people and reconstruction measures to be taken by different govt departments at district level and local authority.

1.5) HOW THESE ARE TO BE ACHIEVED

- 1) Vulnerability survey of the district to be conducted by the state govt or DDMA and use the study and research already carried out by different govt. departments and NGOs in this regard.
- 2) To assess the resources available in the district and steps/measures taken to acquire more as per the need assessment of the district meaning human resources, material and equipments, services etc.
- 3) To make all the departments to make their developmental plan in consonance of the DDMP.
- 4) To make the local bodies to adopt the bye laws for local planning and construction activities in consonance of the DDMP and State Disaster Management Policy 2011.

- 5) By setting up the standard Operating procedures for the different stakeholders while dealing with the disasters .
- 6) To have the bring storming sessions with the govt. departments and the NGOs working in the district in this field and after consultation develop the strategies for mitigations, prevention, standard operating procedures, emergency support functions etc.

1.6) REVIEW OF THE PLAN

The plan is to be reviewed annually in the month of December and all the information is required to be updates by the ADM (P) who is Nodal Officer Cum chief executive officer of DDMA Shimla .

1.7) DEFINITION OF DIFFERENT TERMS USED IN THE PLAN

All the technical words used in this plan are defined in the Disaster Management Act 2005 or as defined in the annexure A-11.

CHAPTER -2

DISTRICT PROFILE

SHIMLA DISTRICT

2.1) LOCATION

Shimla district of Himachal Pradesh, lies between the longitude 77.00" and 78.19" East and latitude 30.45" and 31.44" North, having its headquarters situated at Shimla. It is surrounded by Mandi and Kullu in the North, Kinnaur in the East, Uttarakhand in the South-East, Solan to the South-West and Sirmour in the South. The elevation of the district ranges from 300mt.(984ft) to 6000mt.(19,685ft).

2.2) CLIMATE

The climate in Shimla district is predominantly cool during winters, and moderately warm during summer. Temperatures typical range from 4 degree to 31 degree centigrade over the course of year. The average temperature during summer is 19 degree and 28 degree centigrade, and in winter 1 degree and 10 degree centigrade. Monthly precipitation varies from 15ml. in November to 434ml. in August. It is typically around 45ml. per month during winter and spring, 175ml. in June. The average total precipitation is 1575ml. which is less than other hill stations. Snowfall in this region, has taken place in the month of December. But it has been happening in January or early February every year for the last fifteen years.

2.3) DEMOGRAPHY

According to the 2011 census Shimla district has a population of 8,13,384 persons with males 4,24,486 and females 3,88,898. The rural population is 6,11,884 and urban population is 2,01,500. The district has a population density of 159 inhabitants per square kilometer.

Shimla district population growth rate over the decade 2001-2011 was 12.58%. (Rural population growth rate over the decade 2001-2011 was 10.20% and Urban population growth rate over the decade 2001-2011 was 20.49%).

Shimla district has sex ratio of 916 females for every 1000 males. (Rural sex ratio of 952 per 1000 males and urban sex ratio of 816 per 1000males). Its literacy rate of 84.55% with males 90.73% ,females 77.80%.

It has highest urban population of all districts in Himachal Pradesh. Percentage of Urban population to total population is 24.77% of district Shimla.

2.4) GEOGRAPHY

Shimla district lies in the North-Western ranges of the Himalayas. It is located 31.6° N 77.10° E with an average altitude of 2397.59 meters (7866.10 ft) above mean sea level. The city is spread on a ridge and its seven spurs. The city stretches nearly 9.2km. from east to west. The highest point in Shimla at 2454 meters is the Jakhoo hill. Shimla is a Zone 4 (High Damage Risk Zone) per the Earthquake hazard zoning

DISTRICT PROFILE

of India. Weak construction techniques and increasing population pose a serious threat to the already earthquake prone region.

There are no bodies of water near the main city and the closest river Sutlej, is about 21 km. away. Other rivers that flow through the Shimla district, although further from the city are Giri,Pabbar(both are tributaries of Yamuna). The green belt in Shimla district planning area is spread over 414 hectares (1023 acres).

The main forest in and around the district are that of Pine, Deodar,Oak and Rhododendron. Environmental degradation due to the increasing number of tourists. Every year without infrastructure to support them has resulted in Shimla losing its popular appeal as an ecotourism spot. Another rising concern in the region are the frequent number of landslides that often take place after heavy rains.

2.5) GEOGRAPHICAL PROFILE OF SHIMLA DISTRICT

2.5.1) LOCATION GEOGRAPHICAL

- (a) Latitude: 30.45" and 31.44" North
- (b) Longitude: 77.00" and 78.19" East
- (c) Height from mean sea level 300 meter to 6000 meter

2.5.2) AREA

Sr no.	Item	Year	Particular
1,	Total area	2011	5131 Sq kms.
2,	Area under forest	2011	3418 Sq Kms.
3,	Area under cultivation	2011	89454 hect.
4,	Total Population	2011	8,13,384 Persons
5,	Density Population	2011	159 person/sq.km
6,	Sex Ratio	2011	916 females/1000 males

2.6) ADMINISTRATIVE DIVISION / SUB-DIVISION/ TEHSIL/ SUB- TEHSIL/VIDHAN SABHA CONSTITUENCIES

District	Sub-Division	Tehsil	Sub-Tehsil	Constituency
Shimla	Shimla(U)	Shimla(U)		Shimla(U)
	Shimla(R)	Shimla(R) Seoni	Junga	Shimla(R) Kasumpti
	Theog	Theog Kotkhai		Theog
	Rampur	Rampur Kumarsain	Nankhari	Rampur
	Chopal	Chopal	Nerwa Cheta(Kupwi)	Chopal
	Rohroo	Rohroo Jubbal Chirgaon	Tikker	Rohroo Jubbal
	Dodra Kawar	Dodra Kawar		

2.7) POPULATION

Tehsil/Sub-Tehsil	Total/ Rural/ Urban	Persons	Population	
			Males	Females
Rampur	Total	77,396	40,568	36,828
	Rural	67,086	34,971	32,115
	Urban	10,310	5,597	4,713
Nankhari	Total	26,216	13,234	12,982
	Rural	26,216	13,234	12,982
	Urban	0	0	0
Kumarsain	Total	43,262	21,987	21,275
	Rural	42,361	21,457	20,904
	Urban	901	530	371
Seoni	Total	35,379	17,611	17,768

DISTRICT PROFILE

	Rural	32,788	16,223	16,565
	Urban	2,591	1,388	1,203
Shimla(R)	Total	84,240	43,883	40,357
	Rural	82,181	42,450	39,731
	Urban	2,059	1,433	626
Shimla (U)	Total	69,758	93,364	76,394
	Rural	0	0	0
	Urban	69,758	93,364	76,394
Junga	Total	13,398	6,832	6,566
	Rural	13,398	6,832	6,566
	Urban	0	0	0
Theog	Total	84,672	43,227	41,445
	Rural	80,321	40,962	39,359
	Urban	4,351	2,265	2,086
Chopal	Total	31,133	15,970	15,163
	Rural	29,277	14,937	14,340
	Urban	1,856	1,033	823
Cheta	Total	19,459	10,085	9,374
	Rural	19,459	10,085	9,374
	Urban	0	0	0
Nerwa	Total	36,490	18,713	17,777
	Rural	36,490	18,713	17,777
	Urban	0	0	0
Jubbal	Total	37,232	19,136	18,096
	Rural	35,596	18,210	17,386
	Urban	1,636	926	710
Kotkhai	Total	39,151	20,020	19,131
	Rural	37,991	19,363	18,628
	Urban	1,160	657	503
Tikar	Total	13,865	7,244	6,621
	Rural	13,865	7,244	6,621
	Urban	0	0	0
Rohru	Total	49,336	25,534	23,802
	Rural	42,458	21,776	20,682

	Urban	6,878	3,758	3,120
Chirgaon	Total	46,027	23,749	22,278
	Rural	46,027	23,749	22,278
	Urban	0	0	0
Dodra-Kwar	Total	6,370	3,329	3,041
	Rural	6,370	3,329	3,041
	Urban	0	0	0

2.8) EDUCATION

2.8.1) PERCENTAGE LITERACY

1.	Males	2011	90.73%
2.	Females	2011	77.80%
3.	Total	2011	84.55%

2.8.2) NUMBER OF SCHOOLS

Blocks	1 st to 8 th	Secondary	Hr. Secondary	Total
Chauhara	162	17	8	187
Chopal	109	9	10	128
Deha	81	5	5	91
Dodrakwar	18	1	2	21
Jubbal	123	6	17	146
Kasumpati	94	14	10	118
Kotkhai	131	10	18	159
Kumarsain	138	8	15	161
Kupvi	64	3	9	73
Mashobra	95	12	17	124
Matiana	72	5	7	84
Nankhari	103	4	12	119
Nerwa	144	14	12	170
Rampur	132	13	12	157
Rampur-2	114	11	9	134

DISTRICT PROFILE

Rohru	118	9	15	142
Shimla-4	144	23	36	203
Suni	127	11	14	152
Theog	99	10	8	117
Tikkar	63	2	7	72

2.9) NO. OF HOSPITALS

2.9.1) Allopathic

Hospitals	=	9
Dispensaries	=	4
PHC / CHC	=	92
Sub Centre	=	251

Sr. No.	Block	Civil Hospital	PHC/CHC	Dispensaries	Sub Centre	Total
1.	Mashobra	0	8	0	38	46
2.	Theog	0	9	0	31	40
3.	Narkanda	1	9	0	20	30
4.	Rampur	1	10	1	20	32
5.	Jubbal Kotkhai	0	13	0	33	46
6.	Rohru	0	8	0	24	32
7.	Chauhara	0	6	0	23	29
8.	Chopal	1	8	0	27	36
9.	Basantpur	1	8	0	18	27
10.	Nankhari	0	5	0	13	18
11.	Teh. Shimla (Urban)	5	8	3	4	20
	Total	9	92	4	251	356

2.9.2) AYURVEDIC

Hospitals = 3

Dispensaries = 144

Sr. No.	Block	Hospitals	Dispensaries
1.	Mashobra	0	28
2.	Theog	0	11
3.	Narkanda	0	5
4.	Rampur	0	22
5.	Jubbal Kotkhai	0	22
6.	Rohru	0	10
7.	Chauhara	0	12
8.	Chopal	0	21
9.	Basantpur	0	5
10.	Nankhari	0	4
11.	Teh. Shimla (Urban)	3	4
	Total	3	144

2.10) NO. OF PANCHAYATS

Sr. No.	Block	Panchyats	Backward Panchyats
1.	Mashobra	45	0
2.	Theog	50	4
3.	Narkanda	26	2
4.	Rampur	31	14
5.	Jubbal Kotkhai	48	2

DISTRICT PROFILE

6.	Rohru	32	5
7.	Chauhara	31	31
8.	Chopal	54	16
9.	Basantpur	29	6
10.	Nankhari	17	3
	Total	363	83

CHAPTER -3

HAZARD, RISK , VULNERABILITY, CAPACITY ANALYSIS

3.1) HAZARD PROFILE OF DISTRICT SHIMLA

Shimla District is prone to various hazards mainly 16 Out of total 25 hazards for which the State of H P is identified to be prone(out of 35 types of hazards in India which are identified by the High Powered committee ,Government of India)and these are categorized into the following five groups:-

3.1.1) NATURAL HAZARDS

A) Meteorological

- | | |
|-----------------|------------------|
| i) Flash Floods | ii) Cloud Bursts |
| iii) Hailstorm | iv) Lightening |
| v) Drought | vi) Forest Fires |

B) Geological

- | | |
|---------------|----------------|
| i) Earthquake | ii) Landslides |
|---------------|----------------|

C) Biological

- i) Epidemics

3.1.2) MAN MADE/HUMAN INDUCED

A) Accidents

- | | |
|----------------------------|-----------------------|
| i) Road/Rail/Air accidents | ii) Building Collapse |
| iii) village house fires | iv) Fall from Hills |

B) Industrial

- | | |
|-----------------------------------|---------------------------------|
| i) Hydro power Reservoir collapse | ii) Northern Grid power failure |
| iii) Industrial accidents | |

The diagrammatical representation of Hazard profile of District Shimla is as follows:-

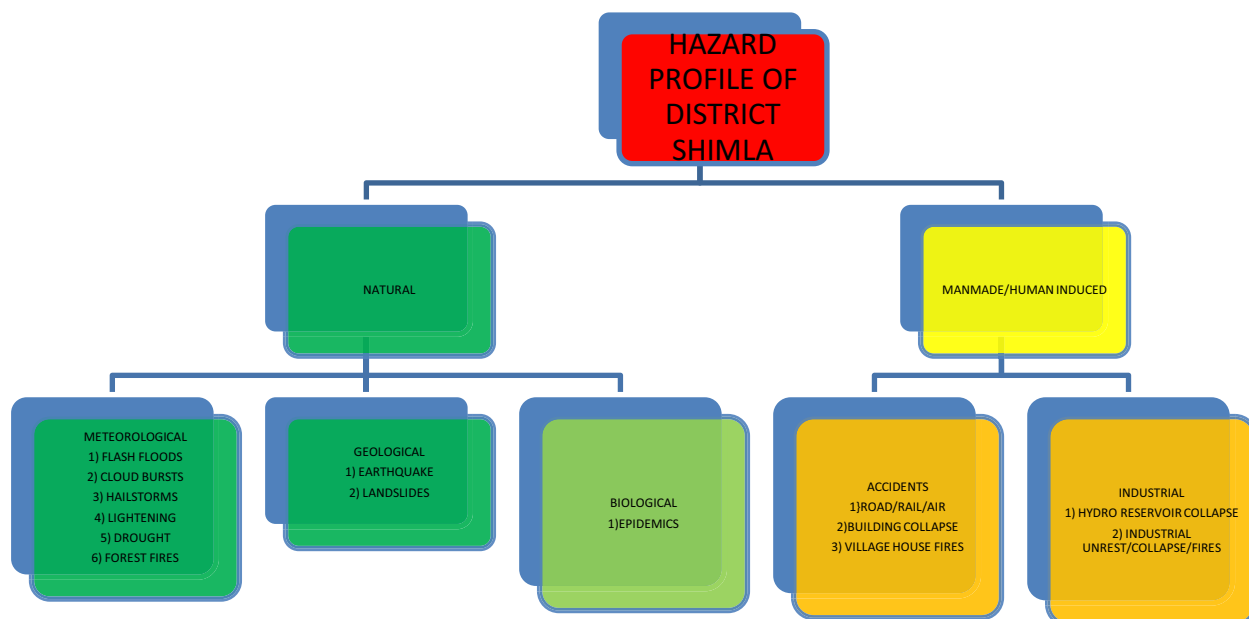


FIGURE 3 : HAZARD PROFILE OF DISTRICT SHIMLA AND CLASSIFICATION OF HAZARDS

SOURCE:- PAGE 10/HPSDMPLAN 2012 AND PAGE 3/H.P. STATE DISASTER MANAGEMENT POLICY 2011

3.2) HISTORY OF HAZARDS IN DISTRICT SHIMLA

3.2.1) FLASH FLOODS :- Shimla district's geographical location is such that it spreads from mid Himalaya to greater Himalaya and the river Satluj , Andhra, Pavvar,Nogali ,Ganaviand other many smaller khuds/rivulets flowing through it makes the area and the people living around these more vulnerable to the floods /flash floods as is evident from the history as narrated below in the table :-

Table 3.2.1 occurrences of flash floods in district Shimla

Sr. No	Occurrence of Major Flash Floods	Extent of Damages Caused
1	8 th July 1973	Lake was formed at Satluj river due to fall of Nathpa rock and caused a loss of property in lacs.

2	24 th Feb 1993, At Jhakari due to major landslide along with fall of rock river Satluj was blocked.	About 1 km of NH-22 was damaged badly along with other forest land causing huge loss to the public property and land owners.
3	31 st July and 1 st August 2000 At Rampur and other areas besides river Satluj	Due to flash flood in the river Satluj the water level rose above 60 feet to the normal level and caused devastating damages to the human life and property located on both banks of the river. At least 140 people died along with 1673 cattle and 12400 sq km area affected in Shimla District. Various roads/bridges were washed away and it took about three months to normalize the human life.
4	26 th June 2005 due to bursting of Parachu Lake in Tibet	Due to the bursting of the artificial lake At Parachu the water level in the Satluj rose about 40 feet high and caused the washing away of various roads, bridges and village bridges.
5	July 2005 Flash floods in Pabbar River	Due to the heavy rains the inundation in Pabbar River caused washing away of SH Rohru to Chirgaon along with various foot bridges, govt buildings and houses causing huge loss to human life and property.

3.2.2) CLOUD BURSTS :- It has been noticed that sudden heavy rains are occurring in some part of the district during the last two decades causing the situation of flash floods, landslides resulting in devastating huge loss to the human life and property which is being attributed to the climate change caused due to the large human interference with the nature activities like deforestation, developmental activities like construction of roads, bridges, hydel projects, buildings etc. The documentation of such incidents in this district is as under :-

Table 3.2.2 occurrence of cloud bursts in District Shimla

Sr.No	Date and place of Occurrence Of the Event	Extent Of Damages caused
	11 th August 1997 At Chirgaon and Rampur.	<p>1) Due to cloud burst at the top of the hill near Rohal village in Chirgaon Tehsil the Andhra river which is originated from the same mountain was inundated in the inordinary way due to the heavy rains i.e. cloud burst ,occurred in the night and the people and property situated along the Andhra River and thereafter Pavvar were washed away till Rohru. About 124 people died alongwith 456 cattles washed away. Roads and bridges houses, fishery tanks and school buildings situated at Chirgaon were completely washed away.</p> <p>2) The above cloud burst also caused damages towards Rampur side and killed 19 people,464 cattles 105 houses damaged and agriculture; land measuring 40 hectare damaged.</p>
2	On 10 th August 2001 at Murali Danda, Devidhar Chirgaon.	The sudden heavy rains i.e. cloud burst occurred in Devidhar area of tehsil Chirgaon causing the complete washing away of the Harizan Basti, village paths, roads, about 8 village bridges, cattlesheds etc causing devastating damages to the humal property.
3	August 2003 and 2007 at Ghanvi Rampur.	The flash floods caused due to the cloud bursts in Ghanvi Area caused the death of 7 human beings and washed away houses, cattlesheds and other human property and damaged the public property.

3.2.3) Hail Storms:- Due to the climatic change the hailstorm is causing threat to the agro/horticulture products of district Shimla. The sub division wise detail of hailstorm alongwith the affected area is mentioned below:-

Table 3.2 .3 :-occurrence of hail storm in district Shimla

YEAR	NAME OF THE SUBDIVISION (APPLE CROP AREA AFFECTED IN HECTARES)						
	SHIMLA(U)	SHIMLA(R)	CHOPAL	ROHROO	THEOG	RAMPUR	DODRAKWAR
2007	-----	-----	473	6202	950	705	-----
2009	-----	-----	231	1231	432	321	32

3.2.4) Lightening:- In this district there are intermittent incidents of the lightening and many lives have been lost in such incidents . Many times it has caused the damages to the live stocks as the people generally rear animals and for grazing them they have to go for higher reaches where the lightening is the common event. However the documentation of such events is not there .

3.2.5) Drought:- Due to the climatic change in the climate the drought is causing threat to the agro/horticulture products of district Shimla . The sub division wise detail of hailstorm alongwith the affected area is mentioned below:-

Table 3.2 .5 Drought occurrence in district Shimla

YEAR	NAME OF THE SUBDIVISION (AGR. CROP AREA AFFECTED IN HECTARES)						
	SHIMLA(U)	SHIMLA(R)	CHOPAL	ROHROO	THEOG	RAMPUR	DODRAKWAR
2002	-----	767	10225	890	7977	8191	79
2006	-----	4278	4630	696	6076	5890	-----

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

Table 3.2.6 : Forest Area/cover of District Shimla.

**District wise Forest in Himachal Pradesh
(As per Forest Survey of India Report – 2009)**

District	Geo. Area	Forest Area	Tree covered area				% of Geo. Area
			<i>Very Dense Forest</i>	<i>Moderate Dense Forest</i>	<i>Open Forest</i>	<i>Total Forest Cover</i>	
Bilaspur	1,167	428	24	171	167	362	31.02
Chamba	6,522	5,030	853	773	810	2,436	37.35
Hamirpur	1,118	219	39	92	114	245	21.91
Kangra	5,739	2,842	310	1,221	531	2,062	35.93
Kinnaur	6,401	5,093	82	263	257	602	9.40
Kullu	5,503	4,952	586	789	583	1,958	35.58
Lahaul & Spiti	13,841	10,133	15	32	146	193	1.39
Mandi	3,950	1,860	373	735	565	1,673	42.35
Shimla	5,131	3,418	739	1,037	608	2,384	46.46
Sirmaur	2,825	1,843	130	568	685	1,383	48.96
Solan	1,936	728	55	404	390	849	43.85
Una	1,540	487	18	298	205	521	33.83
Total	55,673	37,033	3,224	6,383	5,061	14,668	26.35

Forest cover Map of Himachal Pradesh



Figure 3.2.6 : Forest cover In District Shimla

Table 3. 2.6(1) : FOREST FIRE AFFECTED AREA OF SHIMLA DISTRICT

YEAR	NAME OF FOREST DIVISION	NO OF FIRE INCIDENTS	AREA AFFECTED (IN HECT)	ESTIMATED LOSS IN RS LAC
2008-09	SHIMLA	37	1760	10
	THEOG	0	0	0
	ROHROO	11	87	1.5
	CHOPAL	11	165	2.0
	TOTAL	59	2012	13.5
2009-10	SHIMLA	147	3810	67
	THEOG	035	0260	06
	ROHROO	032	0393	23
	CHOPAL	033	0692	03
	TOTAL	247	5165	99
2010-11	SHIMLA	60	555	23
	THEOG	24	055	00
	ROHROO	42	252	04
	CHOPAL	33	256	00
	TOTAL	159	1118	27
2011-12	SHIMLA	15	409	09
	THEOG	0	0	0
	ROHROO	21	060	08
	CHOPAL	02	128	02
	TOTAL	38	597	19
2012-13 (UP TO 30-11-2012)	SHIMLA	147	2050	25
	THEOG	005	0007	00
	ROHROO	020	0062	00
	CHOPAL	006	0023	02
	TOTAL	178	2142	27

SOURCE : REPORT COMPILED BY THE CONSERVATOR OF FOREST SHIMLA

3.2.7) EARTHQUAKE :- The District Shimla as a whole lies between mid Himalaya and greater Himalaya and due to the tectonic movements of the Indo Australian Plate and Eurasian plate the Himalaya is Still rising and giving rise to tremors in the Himalayan region. Further the Jutog thrust ,Kaurik thrust etc made this region more prone to the earthquakes which is also evident from the table below:-

Table 3.2.7 : DISTRICT WISE AREA UNDER SEISMIC ZONE

Sr. No	District	Area under seismic Zone V(%)	Area under seismic Zone IV(%)
1.	Bilaspur	25.30	74.70
2.	Chamba	53.20	46.80
3.	Hamirpur	90.90	9.10
4.	Kangra	98.80	01.20
5.	Kullu	53.10	46.90
6.	Kinnaur	nil	100
7.	Lahaul and Spiti	02.14	97.86
8.	Mandi	97.40	02.60
9.	Shimla	00.38	99.62
10.	Sirmaur	Nil	100
11.	Solan	01.06	98.94
12.	Una	37.00	73.00

DISTRICT WISE AREA UNDER SEISMIC ZONE V AND IV

SOURCE :-STATE DISASTER MANAGEMENT PLAN - 2012

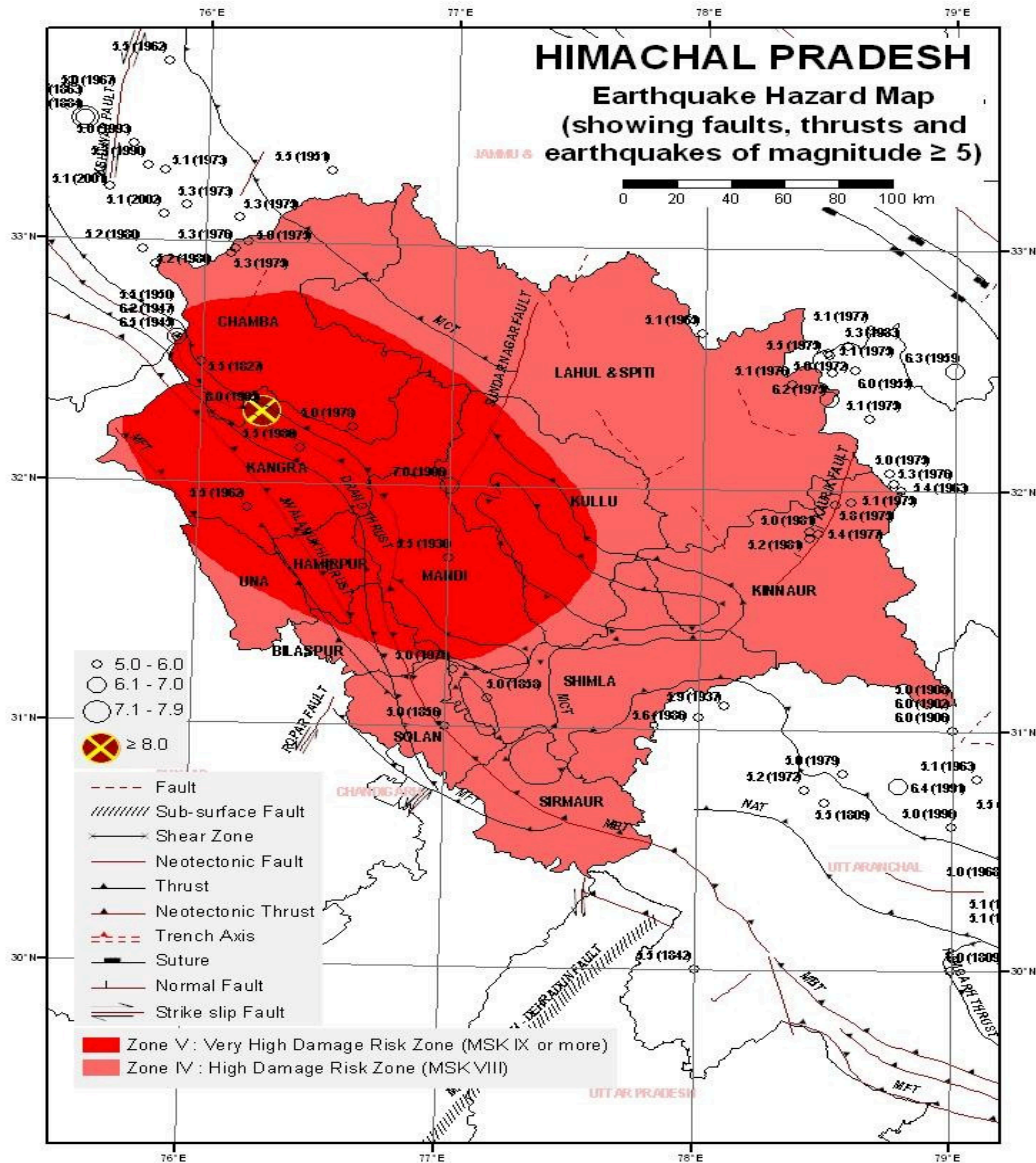
Table 3.2.7(1): DISTRICT WISE OCCURRENCE OF THE EARTHQUAKES

SR .NO	DISTRICT	NO OF EARTHQUAKES	% OF TOAL
1	BILASPUR	001	0.18
2	CHAMBA	186	33.63
3	HAMIRPUR	002	0.36
4	LAHAUL &SPITI	099	17.90
5	KANGRA	039	7.05
6	KINNAUR	093	16.82
7	KULLU	019	3.44
8	MANDI	053	9.58
9	SHIMLA	049	8.86
10	SIRMAUR	008	1.45
11	SOLAN	004	0.72
12	UNA	000	00

SOURCE : (VISHWA,B.S.CHANDEL&KARANJOT KAUR BRAR)

(HIMACHAL PRADESH STATE DISASTER MANAGEMENT PLAN - 2012)

EARTHQUAKE HAZARD MAP OF HIMACHAL PRADESH



BMPIC : Vulnerability Atlas - 2nd Edition; Peer Group, MohSULPA; Map is Based on digitised data of SOI, GOI; Seismic Zones of India Map IS: 1893: 2002; Seismotectonic Atlas of India, GSI, GOI

Figure 3.2.7 : EARTHQUAKE HAZARD MAP OF HIMACHAL PRADESH
SOURCE : BMPIC VULNERABILITY ATLAS OF INDIA

3.2.7.1) HISTORY OF EARTHQUAKE ENCOUNTERED BY DISTRICT SHIMLA**Table 3.2.7.1 : MAJOR EARTHQUAKES IN SHIMLA DISTRICT**

DATE	MAGNITUDE /INTENSITY	DAMAGES
05/03/1842	VI/VII	Houses were damaged
07/04/1856	VII/VIII	Loss to life and property but not exactly reported
09/07/1860	V	Loss not reported
05/10/1869	V	Loss not reported
28/02/1906	6.5	APPROXIMATELY 26 PEOPLE DIED AND 45 INJURED AND 73 DWELLING HOUSES DESTROYED

SOURCE : HP STATE DISASTER MANAGEMENT PLAN - 2012

3.2.8) Landslides :- Landslide is most risk oriented hazard found in district Shimla affecting the human life and property in many ways like damages to the houses , roads , communication network agriculture Etc.

3.2.8.1) LANDSLIDE VULNERABLE AREA IN DISTRICT SHIMLA(IN SQ KM)

DISTRICT	SEVERE TO VERY HIGH	HIGH	MODERATE TO LOW	UNLIKELY	TOTAL AREA
SHIMLA	893	3345	767	14	5019

3.2.8.2) ROADS AND LANDSLIDES

NAME OF THE ROAD	AREAS VULNERABLE	TOTAL LENGTH
NH-22 AMBALA –KALKA SHIMLA – KAURIK	RAMPUR LEORI SECTOR	25 KM
SH-01 LAL DHANK –PAONTA-RAJBAN-	SUNGRI NARKANDA SECTOR	15 KM

SUNGRI-NARKANDA		
SHIMLA –CHAUPAL	THEOG –SAINJ SECTOR	15 KM
SHIMLA –ROHROO-CHIRGAON	ROHROO-CHIRGAON SECTOR	12 KM

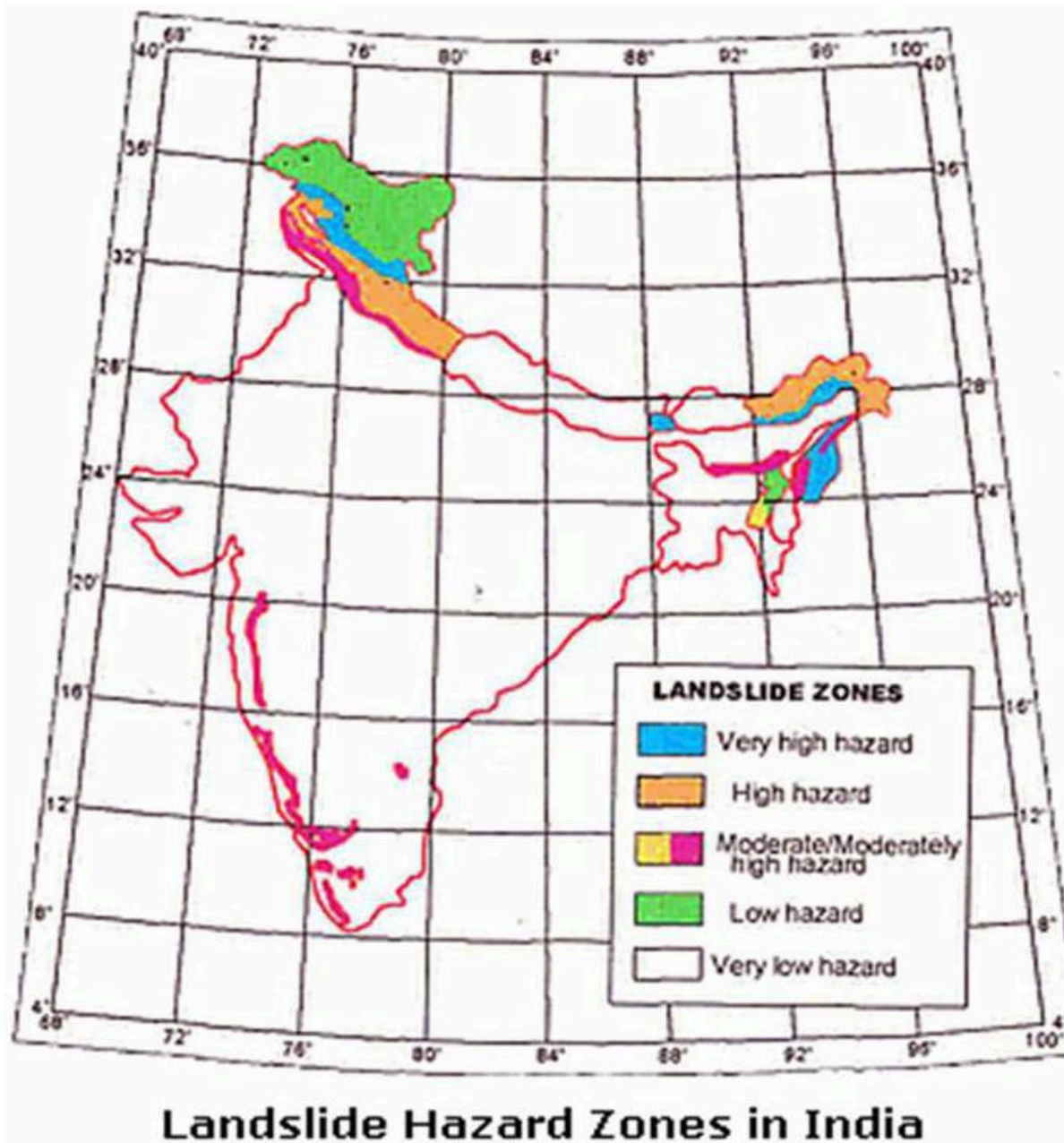
3.2.8.3) Major landslides in district Shimla

Table 3.3.8 : LANSLIDES IN DISTRICT SHIMLA

Place	year	Damages
Jhakari	1993	NH-22 was washed away due to flash floods and could be restored only after two months
Chirgaon	1995	Road Rohroo to chirgaon was wased away due to flash floods and could temporarily restored after 15 days.

SOURCE : H.P STATE DISASTER MANAGEMENT PLAN 2012

Figure 3.2,8 :- LANSLIDE ZONATION MAP OF INDIA.



Source: <http://www.gsi.gov.in/lndslide/lhs.htm>

3.2.9) Epidemics :- In district Shimla in the year 2002 plague broke out in the Rohroo sub division viz. Sarswati Nagar Kuddu area claiming 11 lives which was triggered due to eating of the infected wild meat.

3.2.10) Accidents :- In Shimla district the presence of rail . airport, helipads and roads make it prone to all these types of accidents. The district wise data as tabulated below shows that in the year 2010-11 ,total no of people killed were 430 and injured were 801 in total accidental cases numbering 211. The main causes of the road accidents are :-

- 1) Drunken driving
- 2) Over speeding
- 3) Listening to phone call on mobile while driving
- 4) Poor training
- 5) Bad road conditions.
- 6) Poor maintenance of the vehicles etc

3.2.11) INDUSTRIAL HAZARDS:-

This district has come up as hydro project district with the one mega project Nathpa Jhakari hydro project 1500mw along with Rampur hydro power project 431mw, Luri Power Project mw, Kuddu Sawra Power Project---mw and around 30 mini and micro projects thus making the district prone to bursting of the water reservoir, other accidents .

3.3) HAZARD VULNERABILITY RISK ASSESSMENT

THE Hazards identified above are those hazards which are considered to have the highest degree of impact or the frequency of the occurrence that adversely affect the people, economy, environment and prosperity of this district. While the mitigation and preparedness efforts can lessen the impact and severity of these hazards but the vulnerability and the risk associated with these cannot be eliminated.

However the proper assessment of the vulnerability, risk along with mitigation and preparedness efforts can lead or invite attention towards those hazards which needs proper mitigation and preparedness plans with which the DDMA will be better equipped to prepare and response to the disasters ,limiting their impacts to the people ,economy ,environment and property of this district.

3.3.1) HAZARD VULNERABILTY ASSESSMENT:- According to **UNDP 1994**, “vulnerability, depends upon the degree of loss to a given element at risk at a certain severity level. Generally, it is expressed as the percentage of loss (between 0 : no damage to1: total damage) for the given hazards”

The ESPON hazards project (2005) defines vulnerability as the degree of fragility of a person, a group, a community or an area towards defined hazards. Vulnerability is a set of conditions and processes resulting from physical, social, economic and environmental factors that increases the susceptibility of the community to the impact of the hazards. It also encompasses the idea of response and coping capacity of the community since it is determined by the potential of a community to react and withstand a disaster.

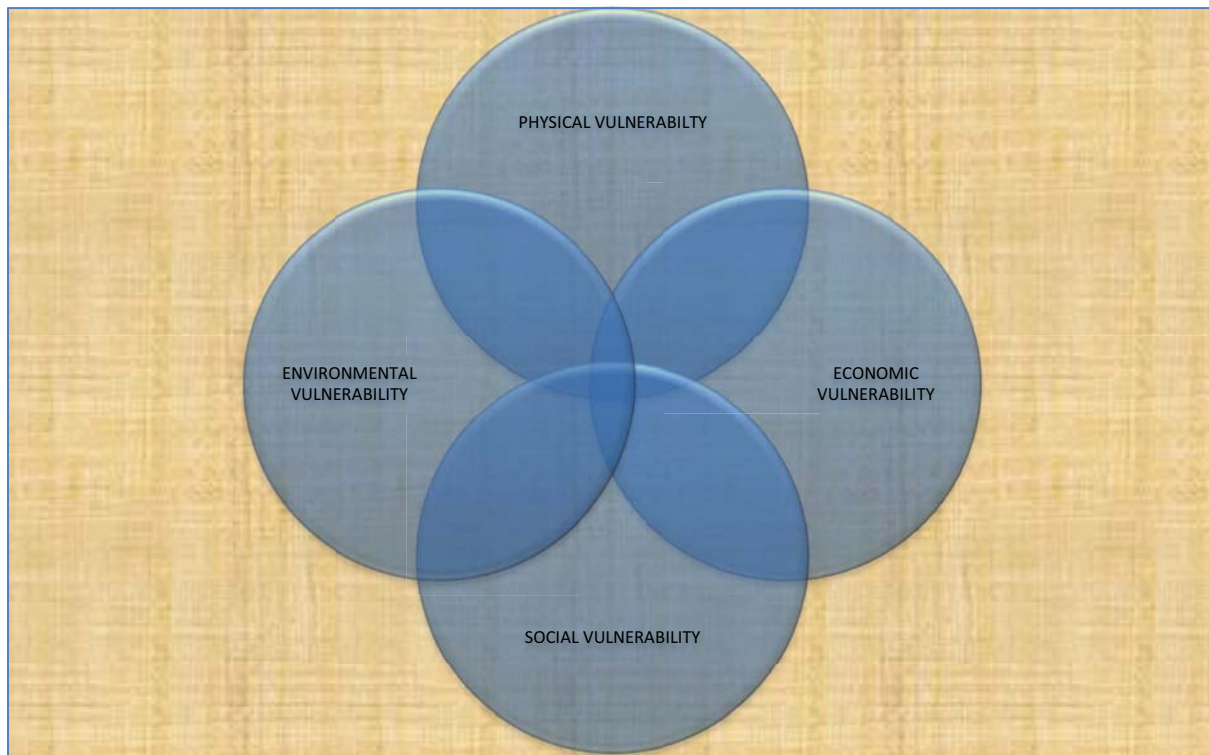


Figure 3.3.1: VIENN DIAGRAM DEPICTING DIFFERENT VULNERABILITIES

further Vulnerability to a given hazard depends upon the following factors:-

- 1) Proximity to a given hazardous event
- 2) Population concentration/density in the area proximal to the hazard.
- 3) Construction styles of the building and buildings code.
- 4) Scientific understanding of the hazards.
- 5) Public education and awareness of the hazards.
- 6) Availability and readiness of the emergency infrastructure.
- 7) Existence or non existence of the early warning system and lines of communication.
- 8) Cultural factors that influence public response to the warnings.

HAZARD, RISK, VULNERABILITY, CAPACITY ANALYSIS

Table 3.3.1 (F) : HAZARD VULNERABILITY ASSESSMENT OF FLOOD IN SHIMLA DISTRICT

HAZARDS SPECIFIC VULNERABILITY ASSESSMENT OF DISTRICT SHIMLA							
HAZARD :- FLOOD	VULNERABILITY OF DIFFERENT ELEMENTS SUB DIVISION WISE (0=NO, 1=LOW, 2=MED, 3=HIGH)						
ELEMENTS AT RISK	SHIMLA (U)	SHIMLA (R)	THEOG	RAMPUR	ROHRU	CHOPAL	DODRA KWAR
A) ESSENTIAL FACILITIES							
EDUCATIONAL INSTITUTES	0	1	0	3	3	0	0
HOSPITALS	0	1	0	3	1	0	0
GOVERNMENT OFFICES	0	0	0	2	3	0	0
COURTS	0	0	0	1	0	0	0
BANKS	0	0	0	1	0	0	0
MARKETS	0	2	0	3	3	0	0
MILITARY AREAS	0	0	0	0	0	0	0
B) INDUSTRIAL AND HIGH POTENTIAL LOSS FACILITIES							
HYDRO POWER PROJECTS	0	3	0	3	3	0	0
INDUSTRIAL UNITS	0	0	0	0	0	0	0
FOOD PROCESSING UNITS	0	0	0	0	0	0	0
C) TRANSPORTATION LIFELINES							
NATIONAL HIGHWAY	0	3	0	3	3	0	0
STATE HIGHWAY	0	3	0	3	3	0	0
BRIDGES	0	3	0	3	3	0	0
D) UTILITY LIFELINES							
POTABLE WATER FACILITIES	0	3	0	3	3	0	0
SEWERAGE SYSTEM	0	0	0	3	3	0	0
ELECTRIC POWER FACILITIES AND DISTRIBUTION LINES	0	3	0	3	3	0	0
COMMUNICATION FACILITIES	0	3	0	3	3	0	0
E) FACILITIES CONTAINING HAZARDOUS FACILITIES							

FUEL RESERVOIR	0	0	0	0	0	0	0
GAS POWER	0	0	0	0	0	0	0
F) STRUCTURAL FEATURES							
BUILDING TECHNIQUES	0	2	0	2	2	0	0
CONSTRUCTION MATERIAL	0	2	0	2	2	0	0
STRUCTURAL COMPONENTS	0	2	0	2	2	0	0
NUMBER OF FLOORS	0	0	0	0	0	0	0
RETROFITTING WORKS	0	0	0	0	0	0	0
G) DEMOGRAPHIC DATA							
HIGH DENISTY AREA	0	3	0	3	3	0	0
PEOPLE WITH DISABILITY	0	0	0	0	0	0	0
SOCIAL BACKWARDNESS	0	1	0	0	0	0	0
H) ECONOMIC FACTORS							
POVERTY	0	1	0	0	0	0	0
GDP AFFECTED	0	3	0	3	3	0	0
I) ENVIRONMENTAL FACTORS							
FRAGILE ECO SYSTEM	0	3	0	3	3	0	0
LOSS HIGH	0	3	0	3	3	0	0
MEDIUM	0	0	0	0	0	0	0
LOW	0	0	0	0	0	0	0

HAZARD, RISK, VULNERABILITY, CAPACITY ANALYSIS

TABLE 3.3.1 (C) : HAZARD VULNERABILITY ASSESSMENT OF CLOUD BURSTS IN SHIMLA DISTRICT

HAZARDS SPECIFIC VULNERABILITY ASSESSMENT OF DISTRICT SHIMLA							
HAZARD :- CLOUD BURSTS	VULNERABILITY OF DIFFERENT ELEMENTS SUB DIVISION WISE (0=NO, 1=LOW, 2=MED, 3=HIGH)						
ELEMENTS AT RISK	SHIMLA A (U)	SHIMLA (R)	THEOG	RAMPUR	ROHRU	CHOPAL	DODRA KWAR
A) ESSENTIAL FACILITIES							
EDUCATIONAL INSTITUTES	0	0	0	3	3	3	0
HOSPITALS	0	0	0	3	3	3	0
GOVERNMENT OFFICES	0	0	0	2	2	2	0
COURTS	0	0	0	1	1	1	0
BANKS	0	0	0	1	1	1	0
MARKETS	0	0	0	3	3	3	0
MILITARY AREAS	0	0	0	0	0	0	0
B) INDUSTRIAL AND HIGH POTENTIAL LOSS FACILITIES							
HYDRO POWER PROJECTS	0	0	0	3	3	3	0
INDUSTRIAL UNITS	0	0	0	0	0	0	0
FOOD PROCESSING UNITS	0	0	0	0	0	0	0
C) TRANSPORTATION LIFELINES							
NATIONAL HIGHWAY	0	0	0	3	3	3	0
STATE HIGHWAY	0	0	0	3	3	3	0
BRIDGES	0	0	0	3	3	3	0
D) UTILITY LIFELINES							
POTABLE WATER FACILITIES	0	0	0	3	3	3	0
SEWERAGE SYSTEM	0	0	0	3	3	3	0
ELECTRIC POWER FACILITIES AND DISTRIBUTION LINES	0	0	0	3	3	3	0

COMMUNICATION FACILITIES	0	0	0	3	3	3	0
E) FACILITIES CONTAINING HAZARDOUS FACILITIES							
FUEL RESERVOIR	0	0	0	0	0	0	0
GAS POWER	0	0	0	0	0	0	0
F) STRUCTURAL FEATURES							
BUILDING TECHNIQUES	0	0	0	2	2	2	0
CONSTRUCTION MATERIAL	0	0	0	2	2	2	0
STRUCTURAL COMPONENTS	0	0	0	2	2	2	0
NUMBER OF FLOORS	0	0	0	0	0	0	0
RETROFITTING WORKS	0	0	0	0	0	0	0
G) DEMOGRAPHIC DATA							
HIGH DENISTY AREA	0	0	0	3	3	3	0
PEOPLE WITH DISABILITY	0	0	0	0	0	0	0
SOCIAL BACKWARDNESS	0	0	0	0	0	0	0
H) ECONOMIC FACTORS							
POVERTY	0	0	0	0	0	0	0
GDP AFFECTED	0	0	0	3	3	3	0
I) ENVIRONMENTAL FACTORS							
FRAGILE ECO SYSTEM	0	0	0	3	3	3	0
LOSS HIGH	0	0	0	3	3	3	0
MEDIUM	0	0	0	0	0	0	0
LOW	0	0	0	0	0	0	0

HAZARD, RISK, VULNERABILITY, CAPACITY ANALYSIS

Table 3.3.1 (H) : HAZARD VULNERABILITY ASSESSMENT OF HAILSTORM IN SHIMLA DISTRICT

HAZARDS SPECIFIC VULNERABILITY ASSESSMENT OF DISTRICT SHIMLA							
HAZARD :- HAILSTORM	VULNERABILITY OF DIFFERENT ELEMENTS SUB DIVISION WISE (0=NO, 1=LOW, 2=MED, 3=HIGH)						
ELEMENTS AT RISK	SHIMLA (U)	SHIMLA (R)	THEOG	RAMPUR	ROHRU	CHOPAL	DODRA KWAR
A) ESSENTIAL FACILITIES							
EDUCATIONAL INSTITUTES	0	0	0	0	0	0	0
HOSPITALS	0	0	0	0	0	0	0
GOVERNMENT OFFICES	0	0	0	0	0	0	0
COURTS	0	0	0	0	0	0	0
BANKS	0	0	0	0	0	0	0
MARKETS	0	0	0	0	0	0	0
MILITARY AREAS	0	0	0	0	0	0	0
B) INDUSTRIAL AND HIGH POTENTIAL LOSS FACILITIES							
HYDRO POWER PROJECTS	0	0	0	0	0	0	0
INDUSTRIAL UNITS	0	0	0	0	0	0	0
FOOD PROCESSING UNITS	0	0	0	0	0	0	0
C) TRANSPORTATION LIFELINES							
NATIONAL HIGHWAY	0	0	0	0	0	0	0
STATE HIGHWAY	0	0	0	0	0	0	0
BRIDGES	0	0	0	0	0	0	0
D) UTILITY LIFELINES							
POTABLE WATER FACILITIES	0	0	0	0	0	0	0
SEWERAGE SYSTEM	0	0	0	0	0	0	0
ELECTRIC POWER FACILITIES AND	0	0	0	0	0	0	0

DISTRIBUTION LINES							
COMMUNICATION FACILITIES	0	0	0	0	0	0	0
E) FACILITIES CONTAINING HAZARDOUS FACILITIES							
FUEL RESERVOIR	0	0	0	0	0	0	0
GAS POWER	0	0	0	0	0	0	0
F) STRUCTURAL FEATURES							
BUILDING TECHNIQUES	0	0	0	0	0	0	0
CONSTRUCTION MATERIAL	0	0	0	0	0	0	0
STRUCTURAL COMPONENTS	0	0	0	0	0	0	0
NUMBER OF FLOORS	0	0	0	0	0	0	0
RETROFITTING WORKS	0	0	0	0	0	0	0
G) DEMOGRAPHIC DATA							
HIGH DENISTY AREA	0	0	0	0	0	0	0
PEOPLE WITH DISABILITY	0	0	0	0	0	0	0
SOCIAL BACKWARDNESS	0	0	0	0	0	0	0
H) ECONOMIC FACTORS							
POVERTY	0	0	0	0	0	0	0
GDP AFFECTED	0	0	0	0	0	0	0
AGRICULTURE	0	1	1	2	2	2	2
HORTICULTURE	0	2	3	3	3	3	3
SERVICES	0	0	0	0	0	0	0
I) ENVIRONMENTAL FACTORS							
FRAGILE ECO SYSTEM	0	0	0	0	0	0	0
LOSS HIGH	0	0	0	0	0	0	0
MEDIUM	0	0	0	0	0	0	0
LOW	0	0	0	0	0	0	0

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Table 3.3.1 (L) : HAZARD VULNERABILITY ASSESSMENT OF LIGHTENING IN SHIMLA DISTRICT

HAZARDS SPECIFIC VULNERABILITY ASSESSMENT OF DISTRICT SHIMLA							
HAZARD :-LIGHTENING	VULNERABILITY OF DIFFERENT ELEMENTS SUB DIVISION WISE (0=NO, 1=LOW, 2=MED, 3=HIGH)						
ELEMENTS AT RISK	SHIMLA (U)	SHIMLA (R)	THEOG	RAMPUR	ROHRU	CHOPAL	DODRA KWAR
A) ESSENTIAL FACILITIES							
EDUCATIONAL INSTITUTES	0	0	0	0	0	0	0
HOSPITALS	0	0	0	0	0	0	0
GOVERNMENT OFFICES	0	0	0	0	0	0	0
COURTS	0	0	0	0	0	0	0
BANKS	0	0	0	0	0	0	0
MARKETS	0	0	0	0	0	0	0
MILITARY AREAS	0	0	0	0	0	0	0
B) INDUSTRIAL AND HIGH POTENTIAL LOSS FACILITIES							
HYDRO POWER PROJECTS	0	0	0	0	0	0	0
INDUSTRIAL UNITS	0	0	0	0	0	0	0
FOOD PROCESSING UNITS	0	0	0	0	0	0	0
C) TRANSPORTATION LIFELINES							
NATIONAL HIGHWAY	0	0	0	0	0	0	0
STATE HIGHWAY	0	0	0	0	0	0	0
BRIDGES	0	0	0	0	0	0	0
D) UTILITY LIFELINES							
POTABLE WATER FACILITIES	0	0	0	0	0	0	0
SEWERAGE SYSTEM	0	0	0	0	0	0	0
ELECTRIC POWER FACILITIES AND DISTRIBUTION LINES	0	0	0	0	0	0	0

COMMUNICATION FACILITIES	0	0	0	0	0	0	0
E) FACILITIES CONTAINING HAZARDOUS FACILITIES							
FUEL RESERVOIR	0	0	0	0	0	0	0
GAS POWER	0	0	0	0	0	0	0
F) STRUCTURAL FEATURES							
BUILDING TECHNIQUES	0	0	0	0	0	0	0
CONSTRUCTION MATERIAL	0	0	0	0	0	0	0
STRUCTURAL COMPONENTS	0	0	0	0	0	0	0
NUMBER OF FLOORS	0	0	0	0	0	0	0
RETROFITTING WORKS	0	0	0	0	0	0	0
G) DEMOGRAPHIC DATA							
HIGH DENISTY AREA	0	0	0	0	0	0	0
PEOPLE WITH DISABILITY	0	0	0	0	0	0	0
SOCIAL BACKWARDNESS	0	0	0	0	0	0	0
H) ECONOMIC FACTORS							
POVERTY	0	0	0	0	0	0	0
GDP AFFECTED	0	0	0	0	0	0	0
SHEEP	0	1	1	2	2	2	2
GOAT	0	2	3	3	3	3	3
COW/BUFFALO/OX	0	1	2	2	2	2	2
I) ENVIRONMENTAL FACTORS							
FRAGILE ECO SYSTEM	0	0	0	0	0	0	0
LOSS HIGH	0	0	0	0	0	0	0
MEDIUM	0	0	0	0	0	0	0
LOW	0	0	0	0	0	0	0

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Table 3.3.1 (D) : HAZARD VULNERABILITY ASSESSMENT OF DROUGHT IN SHIMLA DISTRICT

HAZARDS SPECIFIC VULNERABILITY ASSESSMENT OF DISTRICT SHIMLA							
HAZARD :-DROUGHT	VULNERABILITY OF DIFFERENT ELEMENTS SUB DIVISION WISE (0=NO, 1=LOW, 2=MED, 3=HIGH)						
ELEMENTS AT RISK	SHIMLA (U)	SHIMLA (R)	THEOG	RAMPUR	ROHRU	CHOPAL	DODRA KWAR
A) ESSENTIAL FACILITIES							
EDUCATIONAL INSTITUTES	0	0	0	0	0	0	0
HOSPITALS	0	0	0	0	0	0	0
GOVERNMENT OFFICES	0	0	0	0	0	0	0
COURTS	0	0	0	0	0	0	0
BANKS	0	0	0	0	0	0	0
MARKETS	0	0	0	0	0	0	0
MILITARY AREAS	0	0	0	0	0	0	0
B) INDUSTRIAL AND HIGH POTENTIAL LOSS FACILITIES							
HYDRO POWER PROJECTS	0	0	0	0	0	0	0
INDUSTRIAL UNITS	0	0	0	0	0	0	0
FOOD PROCESSING UNITS	0	0	0	0	0	0	0
C) TRANSPORTATION LIFELINES							
NATIONAL HIGHWAY	0	0	0	0	0	0	0
STATE HIGHWAY	0	0	0	0	0	0	0
BRIDGES	0	0	0	0	0	0	0
D) UTILITY LIFELINES							
POTABLE WATER FACILITIES	0	0	0	0	0	0	0
SEWERAGE SYSTEM	0	0	0	0	0	0	0
ELECTRIC POWER FACILITIES AND DISTRIBUTION LINES	0	0	0	0	0	0	0
COMMUNICATION FACILITIES	0	0	0	0	0	0	0

E) FACILITIES CONTAINING HAZARDOUS FACILITIES							
FUEL RESERVOIR	0	0	0	0	0	0	0
GAS POWER	0	0	0	0	0	0	0
F) STRUCTURAL FEATURES							
BUILDING TECHNIQUES	0	0	0	0	0	0	0
CONSTRUCTION MATERIAL	0	0	0	0	0	0	0
STRUCTURAL COMPONENTS	0	0	0	0	0	0	0
NUMBER OF FLOORS	0	0	0	0	0	0	0
RETROFITTING WORKS	0	0	0	0	0	0	0
G) DEMOGRAPHIC DATA							
HIGH DENISTY AREA	0	0	0	0	0	0	0
PEOPLE WITH DISABILITY	0	0	0	0	0	0	0
SOCIAL BACKWARDNESS	0	0	0	0	0	0	0
H) ECONOMIC FACTORS							
POVERTY	0	0	0	0	0	0	0
GDP AFFECTED	0	0	0	0	0	0	0
AGRICULTURE	0	1	1	2	2	2	2
HORTICULTURE	0	2	3	3	3	3	3
SERVICES	0	0	0	0	0	0	0
I) ENVIRONMENTAL FACTORS							
FRAGILE ECO SYSTEM	0	0	0	0	0	0	0
LOSS HIGH	0	0	0	0	0	0	0
MEDIUM	0	0	0	0	0	0	0
LOW	0	0	0	0	0	0	0

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Table 3.3.1 (F F) : HAZARD VULNERABILITY ASSESSMENT OF FOREST FIRES IN SHIMLA DISTRICT

HAZARDS SPECIFIC VULNERABILITY ASSESSMENT OF DISTRICT SHIMLA							
HAZARD :-FOREST FIRES	VULNERABILITY OF DIFFERENT ELEMENTS SUB DIVISION WISE (0=NO, 1=LOW, 2=MED, 3=HIGH)						
ELEMENTS AT RISK	SHIMLA (U)	SHIMLA (R)	THEOG	RAMPUR	ROHRU	CHOPAL	DODRA KWAR
A) ESSENTIAL FACILITIES							
EDUCATIONAL INSTITUTES	0	0	0	0	0	0	0
HOSPITALS	0	0	0	0	0	0	0
GOVERNMENT OFFICES	0	0	0	0	0	0	0
COURTS	0	0	0	0	0	0	0
BANKS	0	0	0	0	0	0	0
MARKETS	0	0	0	0	0	0	0
MILITARY AREAS	0	0	0	0	0	0	0
B) INDUSTRIAL AND HIGH POTENTIAL LOSS FACILITIES							
HYDRO POWER PROJECTS	0	0	0	0	0	0	0
INDUSTRIAL UNITS	0	0	0	0	0	0	0
FOOD PROCESSING UNITS	0	0	0	0	0	0	0
C) TRANSPORTATION LIFELINES							
NATIONAL HIGHWAY	0	0	0	0	0	0	0
STATE HIGHWAY	0	0	0	0	0	0	0
BRIDGES	0	0	0	0	0	0	0
D) UTILITY LIFELINES							
POTABLE WATER FACILITIES	0	0	0	0	0	0	0
SEWERAGE SYSTEM	0	0	0	0	0	0	0
ELECTRIC POWER FACILITIES AND DISTRIBUTION LINES	0	0	0	0	0	0	0

COMMUNICATION FACILITIES	0	0	0	0	0	0	0
E) FACILITIES CONTAINING HAZARDOUS FACILITIES							
FUEL RESERVOIR	0	0	0	0	0	0	0
GAS POWER	0	0	0	0	0	0	0
F) STRUCTURAL FEATURES							
BUILDING TECHNIQUES	0	0	0	0	0	0	0
CONSTRUCTION MATERIAL	0	0	0	0	0	0	0
STRUCTURAL COMPONENTS	0	0	0	0	0	0	0
NUMBER OF FLOORS	0	0	0	0	0	0	0
RETROFITTING WORKS	0	0	0	0	0	0	0
G) DEMOGRAPHIC DATA							
HIGH DENISTY AREA	0	0	0	0	0	0	0
PEOPLE WITH DISABILITY	0	0	0	0	0	0	0
SOCIAL BACKWARDNESS	0	0	0	0	0	0	0
H) ECONOMIC FACTORS							
POVERTY	0	0	0	0	0	0	0
GDP AFFECTED	0	0	0	0	0	0	0
AGRICULTURE	0	1	1	2	2	2	2
HORTICULTURE	0	2	3	3	3	3	3
SERVICES	0	0	0	0	0	0	0
I) ENVIRONMENTAL FACTORS							
FRAGILE ECO SYSTEM	0	2	3	3	3	3	1
LOSS HIGH	0	3	3	3	3	3	2
MEDIUM	0	0	0	0	0	0	0
LOW	0	0	0	0	0	0	0

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Table 3.3.1 (E) : HAZARD VULNERABILITY ASSESSMENT OF EARTHQUAKE IN SHIMLA DISTRICT

HAZARDS SPECIFIC VULNERABILITY ASSESSMENT OF DISTRICT SHIMLA							
HAZARD :-EARTHQUAKE	VULNERABILITY OF DIFFERENT ELEMENTS SUB DIVISION WISE (0=NO, 1=LOW, 2=MED, 3=HIGH)						
ELEMENTS AT RISK	SHIMLA (U)	SHIMLA (R)	THEOG	RAMPUR	ROHRU	CHOPAL	DODRA KWAR
A) ESSENTIAL FACILITIES							
EDUCATIONAL INSTITUTES	3	3	3	3	3	3	3
HOSPITALS	3	3	3	3	3	3	3
GOVERNMENT OFFICES	3	3	3	3	3	3	3
COURTS	3	3	3	3	3	3	3
BANKS	3	3	3	3	3	3	3
MARKETS	3	3	3	3	3	3	3
MILITARY AREAS	3	3	3	3	3	3	3
B) INDUSTRIAL AND HIGH POTENTIAL LOSS FACILITIES							
HYDRO POWER PROJECTS	0	0	0	0	0	0	0
INDUSTRIAL UNITS	0	0	0	0	0	0	0
FOOD PROCESSING UNITS	0	0	0	0	0	0	0
C) TRANSPORTATION LIFELINES							
NATIONAL HIGHWAY	3	3	3	3	3	3	3
STATE HIGHWAY	3	3	3	3	3	3	3
BRIDGES	3	3	3	3	3	3	3
D) UTILITY LIFELINES							
POTABLE WATER FACILITIES	3	3	3	3	3	3	3
SEWERAGE SYSTEM	3	3	3	3	3	3	3
ELECTRIC POWER FACILITIES AND DISTRIBUTION LINES	3	3	3	3	3	3	3
COMMUNICATION FACILITIES	3	3	3	3	3	3	3

E) FACILITIES CONTAINING HAZARDOUS FACILITIES							
FUEL RESERVOIR	2	2	2	2	2	2	2
GAS POWER	2	2	2	2	2	2	2
F) STRUCTURAL FEATURES							
BUILDING TECHNIQUES	3	3	3	3	3	3	3
CONSTRUCTION MATERIAL	3	3	3	3	3	3	3
STRUCTURAL COMPONENTS	3	3	3	3	3	3	3
NUMBER OF FLOORS	3	3	3	3	3	3	3
RETROFITTING WORKS	0	0	0	0	0	0	0
G) DEMOGRAPHIC DATA							
HIGH DENISTY AREA	3	3	3	3	3	3	3
PEOPLE WITH DISABILITY	2	2	2	2	2	2	2
SOCIAL BACKWARDNESS	1	1	1	1	1	1	1
H) ECONOMIC FACTORS							
POVERTY	1	1	1	1	1	1	1
GDP AFFECTED	2	2	2	2	2	2	2
I) ENVIRONMENTAL FACTORS							
FRAGILE ECO SYSTEM	2	2	2	2	2	2	2
LOSS HIGH	3	3	3	3	3	3	3
MEDIUM	0	0	0	0	0	0	0
LOW	0	0	0	0	0	0	0

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Table 3.3.1 (L) : HAZARD VULNERABILITY ASSESSMENT OF LANDSLIDES IN SHIMLA DISTRICT

HAZARDS SPECIFIC VULNERABILITY ASSESSMENT OF DISTRICT SHIMLA							
HAZARD :-LANDSLIDE	VULNERABILITY OF DIFFERENT ELEMENTS SUB DIVISION WISE (0=NO, 1=LOW, 2=MED, 3=HIGH)						
ELEMENTS AT RISK	SHIMLA (U)	SHIMLA (R)	THEOG	RAMPUR	ROHRU	CHOPAL	DODRA KWAR
A) ESSENTIAL FACILITIES							
EDUCATIONAL INSTITUTES	0	1	0	3	3	0	0
HOSPITALS	0	1	0	3	1	0	0
GOVERNMENT OFFICES	0	0	0	2	3	0	0
COURTS	0	0	0	1	0	0	0
BANKS	0	0	0	1	0	0	0
MARKETS	0	2	0	3	3	0	0
MILITARY AREAS	0	0	0	0	0	0	0
B) INDUSTRIAL AND HIGH POTENTIAL LOSS FACILITIES							
HYDRO POWER PROJECTS	0	3	0	3	3	0	0
INDUSTRIAL UNITS	0	0	0	0	0	0	0
FOOD PROCESSING UNITS	0	0	0	0	0	0	0
C) TRANSPORTATION LIFELINES							
NATIONAL HIGHWAY	0	3	0	3	3	0	0
STATE HIGHWAY	0	3	0	3	3	0	3
BRIDGES	0	3	0	3	3	0	0
D) UTILITY LIFELINES							
POTABLE WATER FACILITIES	0	3	0	3	3	0	0
SEWERAGE SYSTEM	0	0	0	3	3	0	0
ELECTRIC POWER FACILITIES AND DISTRIBUTION LINES	0	3	0	3	3	0	0

COMMUNICATION FACILITIES	0	3	0	3	3	0	0
E) FACILITIES CONTAINING HAZARDOUS FACILITIES							
FUEL RESERVOIR	0	0	0	0	0	0	0
GAS POWER	0	0	0	0	0	0	0
F) STRUCTURAL FEATURES							
BUILDING TECHNIQUES	0	2	0	2	2	0	0
CONSTRUCTION MATERIAL	0	2	0	2	2	0	0
STRUCTURAL COMPONENTS	0	2	0	2	2	0	0
NUMBER OF FLOORS	0	0	0	0	0	0	0
RETROFITTING WORKS	0	0	0	0	0	0	0
G) DEMOGRAPHIC DATA							
HIGH DENISTY AREA	0	3	0	3	3	0	0
PEOPLE WITH DISABILITY	0	0	0	0	0	0	0
SOCIAL BACKWARDNESS	0	1	0	0	0	0	0
H) ECONOMIC FACTORS							
POVERTY	0	1	0	0	0	0	0
GDP AFFECTED	0	3	0	3	3	0	0
I) ENVIRONMENTAL FACTORS							
FRAGILE ECO SYSTEM	0	3	0	3	3	0	0
LOSS HIGH	0	3	0	3	3	0	0
MEDIUM	0	0	0	0	0	0	0
LOW	0	0	0	0	0	0	0

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Table 3.3.1 (EP) : HAZARD VULNERABILITY ASSESSMENT OF EPIDEMIC IN SHIMLA DISTRICT

HAZARDS SPECIFIC VULNERABILITY ASSESSMENT OF DISTRICT SHIMLA							
HAZARD :-EPIDEMIC	VULNERABILITY OF DIFFERENT ELEMENTS SUB DIVISION WISE (0=NO, 1=LOW, 2=MED, 3=HIGH)						
ELEMENTS AT RISK	SHIMLA (U)	SHIMLA (R)	THEOG	RAMPUR	ROHRU	CHOPAL	DODRA KWAR
A) ESSENTIAL FACILITIES							
EDUCATIONAL INSTITUTES	0	1	0	3	3	0	0
HOSPITALS	0	1	0	3	1	0	0
GOVERNMENT OFFICES	0	0	0	2	3	0	0
COURTS	0	0	0	1	0	0	0
BANKS	0	0	0	1	0	0	0
MARKETS	0	2	0	3	3	0	0
MILITARY AREAS	0	0	0	0	0	0	0
B) INDUSTRIAL AND HIGH POTENTIAL LOSS FACILITIES							
HYDRO POWER PROJECTS	0	3	0	3	3	0	0
INDUSTRIAL UNITS	0	0	0	0	0	0	0
FOOD PROCESSING UNITS	0	0	0	0	0	0	0
C) TRANSPORTATION LIFELINES							
NATIONAL HIGHWAY	0	3	0	3	3	0	0
STATE HIGHWAY	0	3	0	3	3	0	0
BRIDGES	0	3	0	3	3	0	0
D) UTILITY LIFELINES							
POTABLE WATER FACILITIES	0	3	0	3	3	0	0
SEWERAGE SYSTEM	0	0	0	3	3	0	0
ELECTRIC POWER FACILITIES AND DISTRIBUTION LINES	0	3	0	3	3	0	0
COMMUNICATION FACILITIES	0	3	0	3	3	0	0

E) FACILITIES CONTAINING HAZARDOUS FACILITIES							
FUEL RESERVOIR	0	0	0	0	0	0	0
GAS POWER	0	0	0	0	0	0	0
F) STRUCTURAL FEATURES							
BUILDING TECHNIQUES	0	2	0	2	2	0	0
CONSTRUCTION MATERIAL	0	2	0	2	2	0	0
STRUCTURAL COMPONENTS	0	2	0	2	2	0	0
NUMBER OF FLOORS	0	0	0	0	0	0	0
RETROFITTING WORKS	0	0	0	0	0	0	0
G) DEMOGRAPHIC DATA							
HIGH DENISTY AREA	0	3	3	3	3	3	2
PEOPLE WITH DISABILITY	0	3	3	3	0	0	2
SOCIAL BACKWARDNESS	0	3	3	3	3	3	1
H) ECONOMIC FACTORS							
POVERTY	3	3	3	3	3	3	3
GDP AFFECTED	0	1	1	1	1	1	1
I) ENVIRONMENTAL FACTORS							
FRAGILE ECO SYSTEM	0	0	0	0	0	0	0
LOSS HIGH	0	0	0	0	0	0	0
MEDIUM	0	0	0	0	0	0	0
LOW	0	0	0	0	0	0	0

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Table 3.3.1 (A) : HAZARD VULNERABILITY ASSESSMENT OF ACCIDENTS IN SHIMLA DISTRICT

HAZARDS SPECIFIC VULNERABILITY ASSESSMENT OF DISTRICT SHIMLA							
HAZARD :-ACCIDENTS	VULNERABILITY OF DIFFERENT ELEMENTS SUB DIVISION WISE (0=NO, 1=LOW, 2=MED, 3=HIGH)						
ELEMENTS AT RISK	SHIMLA (U)	SHIMLA (R)	THEOG	RAMPUR	ROHRU	CHOPAL	DODRA KWAR
A) ESSENTIAL FACILITIES							
EDUCATIONAL INSTITUTES	0	1	0	3	3	0	0
HOSPITALS	0	1	0	3	1	0	0
GOVERNMENT OFFICES	0	0	0	2	3	0	0
COURTS	0	0	0	1	0	0	0
BANKS	0	0	0	1	0	0	0
MARKETS	0	2	0	3	3	0	0
MILITARY AREAS	0	0	0	0	0	0	0
B) INDUSTRIAL AND HIGH POTENTIAL LOSS FACILITIES							
HYDRO POWER PROJECTS	0	3	0	3	3	0	0
INDUSTRIAL UNITS	0	0	0	0	0	0	0
FOOD PROCESSING UNITS	0	0	0	0	0	0	0
C) TRANSPORTATION LIFELINES							
NATIONAL HIGHWAY	0	3	0	3	3	0	0
STATE HIGHWAY	0	3	0	3	3	0	0
BRIDGES	0	3	0	3	3	0	0
D) UTILITY LIFELINES							
POTABLE WATER FACILITIES	0	3	0	0	3	0	0
SEWERAGE SYSTEM	0	0	0	3	3	0	0
ELECTRIC POWER FACILITIES AND DISTRIBUTION LINES	0	3	0	3	3	0	0
COMMUNICATION FACILITIES	0	3	0	3	3	0	0

E) FACILITIES CONTAINING HAZARDOUS FACILITIES							
FUEL RESERVOIR	0	0	0	0	0	0	0
GAS POWER	0	0	0	0	0	0	0
F) STRUCTURAL FEATURES							
BUILDING TECHNIQUES	0	2	0	2	2	0	0
CONSTRUCTION MATERIAL	0	2	0	2	2	0	0
STRUCTURAL COMPONENTS	0	2	0	2	2	0	0
NUMBER OF FLOORS	0	0	0	0	0	0	0
RETROFITTING WORKS	0	0	0	0	0	0	0
G) DEMOGRAPHIC DATA							
HIGH DENISTY AREA	0	3	0	3	3	0	0
PEOPLE WITH DISABILITY	0	0	0	0	0	0	0
SOCIAL BACKWARDNESS	0	1	0	0	0	0	0
H) ECONOMIC FACTORS							
POVERTY	0	1	0	0	0	0	0
GDP AFFECTED	0	3	0	3	3	0	0
I) ENVIRONMENTAL FACTORS							
FRAGILE ECO SYSTEM	0	3	0	3	3	0	0
LOSS HIGH	0	3	0	3	3	0	0
MEDIUM	0	0	0	0	0	0	0
LOW	0	0	0	0	0	0	0

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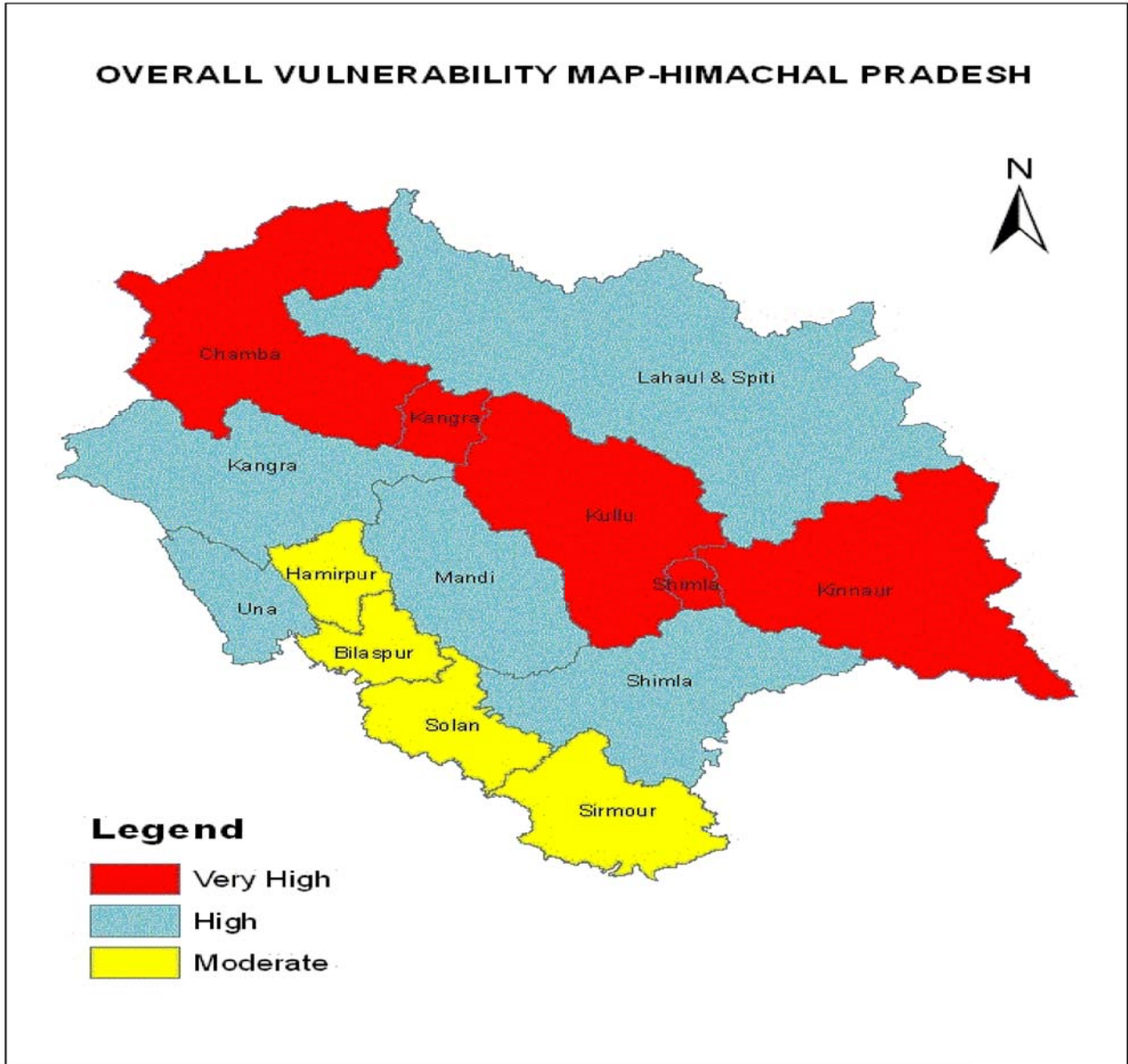
Table 3.3.1 (I) : HAZARD VULNERABILITY ASSESSMENT OF INDUSTRIAL IN SHIMLA DISTRICT

HAZARDS SPECIFIC VULNERABILITY ASSESSMENT OF DISTRICT SHIMLA							
HAZARD :-INDUSTRIAL	VULNERABILITY OF DIFFERENT ELEMENTS SUB DIVISION WISE (0=NO, 1=LOW, 2=MED, 3=HIGH)						
ELEMENTS AT RISK	SHIMLA (U)	SHIMLA (R)	THEOG	RAMPUR	ROHRU	CHOPAL	DODRA KWAR
A) ESSENTIAL FACILITIES							
EDUCATIONAL INSTITUTES	0	1	0	3	3	0	0
HOSPITALS	0	1	0	3	1	0	0
GOVERNMENT OFFICES	0	0	0	2	3	0	0
COURTS	0	0	0	1	0	0	0
BANKS	0	0	0	1	0	0	0
MARKETS	0	2	0	3	3	0	0
MILITARY AREAS	0	0	0	0	0	0	0
B) INDUSTRIAL AND HIGH POTENTIAL LOSS FACILITIES							
HYDRO POWER PROJECTS	0	3	0	3	3	0	0
INDUSTRIAL UNITS	0	0	0	0	0	0	0
FOOD PROCESSING UNITS	0	0	0	0	0	0	0
C) TRANSPORTATION LIFELINES							
NATIONAL HIGHWAY	0	3	0	3	3	0	0
STATE HIGHWAY	0	3	0	3	3	0	0
BRIDGES	0	3	0	3	3	0	0
D) UTILITY LIFELINES							
POTABLE WATER FACILITIES	0	3	0	3	3	0	0
SEWERAGE SYSTEM	0	0	0	3	3	0	0
ELECTRIC POWER FACILITIES AND DISTRIBUTION LINES	0	3	0	3	3	0	0
COMMUNICATION FACILITIES	0	3	0	3	3	0	0

E) FACILITIES CONTAINING HAZARDOUS FACILITIES							
FUEL RESERVOIR	0	0	0	0	0	0	0
GAS POWER	0	0	0	0	0	0	0
F) STRUCTURAL FEATURES							
BUILDING TECHNIQUES	0	2	0	2	2	0	0
CONSTRUCTION MATERIAL	0	2	0	2	2	0	0
STRUCTURAL COMPONENTS	0	2	0	2	2	0	0
NUMBER OF FLOORS	0	0	0	0	0	0	0
RETROFITTING WORKS	0	0	0	0	0	0	0
G) DEMOGRAPHIC DATA							
HIGH DENISTY AREA	0	3	0	3	3	0	0
PEOPLE WITH DISABILITY	0	0	0	0	0	0	0
SOCIAL BACKWARDNESS	0	1	0	0	0	0	0
H) ECONOMIC FACTORS							
POVERTY	0	1	0	0	0	0	0

HAZARD, RISK, VULNERABILITY, CAPACITY ANALYSIS

GDP AFFECTED	0	3	0	3	3	0	0
I) ENVIRONMENTAL FACTORS							
FRAGILE ECO SYSTEM	0	3	0	3	3	0	0
LOSS HIGH	0	3	0	3	3	0	0
MEDIUM	0	0	0	0	0	0	0
LOW	0	0	0	0	0	0	0



MAP 3.3 SHOWING OVER ALL VULNERABILITY OF DISTRICT SHIMLA

HAZARD, RISK, VULNERABILITY, CAPACITY ANALYSIS

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

Therefore risk =probability of hazard magnitude * vulnerability

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

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

THE CALCULATION OF ABOVE RISK ASSESSMENT IS BASED UPON THE FOLLOWING ASSUMPTIONS:-							
Evaluate every potential event in each of the three categories of probability, risk, and preparedness.							
Add additional events as necessary.							
Issues to consider for probability include, but are not limited to:							
	1. Known risk						
	2. Historical data						
	3. Manufacture/vendor statistics						
Issues to consider for risk include, but are not limited to:							
	1. Threat to life and/or health						
	2. Disruption of services						
	3. Damage/failure possibilities						
	4. Loss of community trust						
	5. Financial impact						
	6. Legal issues						
Issues to consider for preparedness include, but are not limited to:							
	1. Status of current plans						
	2. Training status						
	3. Insurance						
	4. Availability of back-up systems						
	5. Community resources						

HAZARD, RISK, VULNERABILITY, CAPACITY ANALYSIS

Below each main header for "Probability", "Risk" and "Preparedness", on each worksheet, write in Only						
one score that you feel applies to each of those three categories. For example, on the Natural Events						
Worksheet under Severe Thunderstorm, you may put a "3" in the High Probability column, a "5" under						
the Life Threat Risk column, and a "1" under the Good Preparedness column, and the spreadsheet will						
maximum Probability, as the spreadsheet will then inaccurately calculate the total as "25".						
Multiply the ratings for each event in the area of probability, risk and preparedness.						

CHAPTER -4

INSTITUTIONAL MECHANISM

The institutional mechanism for disaster management at the district level will be as follow :-

- 1) District Disaster Management Authority
- 2) District Disaster Management Advisory Committee
- 3) District Disaster Management Committee
- 4) Sub Divisional Disaster Management Committee
- 5) Village level Disaster Management Committee
- 6) Crisis Management Group/Incident Command System
- 7) Setting up of Emergency Operation Centre and its operation
- 8) Establishment of Site operation centre
- 9) Modalities and procedures
- 10) Linkages with the Sub Plans

4.1) 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 Shimla with the following officers as its members:-

- 1) Superintendent Of Police Shimla
- 2) Chief Medical Officer Shimla
- 3) Superintending Engineer (PWD) Shimla
- 4) Superintending Engineer (IPH) Shimla
- 5) Superintending Engineer (MPP &Power) Shimla
- 6) Chairperson Zila Parishad Shimla
- 7) Additional District Magistrate (Protocol) Shimla as Chief Executive Officer of the Authority.

4.1.1) 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.

- 6) Lays down guidelines at the district level to be followed by the departments for integration of measures in their developmental plans for prevention and mitigation of the disasters.
- 7) Review the state of capabilities for responding to the disasters and give direction to the departments for their up gradation as may be necessary.
- 8) Organize and coordinate the specialized training programmes for different level officers ,employees and voluntary rescue workers in the district along with the community training programmes.
- 9) Set up maintain and review the mechanism for early warnings and dissemination of the information to the general public.
- 10) To ensure that departments prepare their response plans in accordance with the district response plan.
- 11) Examine the construction in any area in the district and if it is of the opinion that the standards for prevention, mitigation are not being complied with may direct the concerned authority to take such actions being necessary to secure such compliances.
- 12) Identify buildings and places which could in the event of disaster can be used as shelter/relief camps and make arrangements for sanitation and water supply in such places.
- 13) Ensure the communication systems are in order and disaster management drills are carried out periodically.

4.2) DISTRICT DISASTER MANAGEMENT ADVISORY COMMITTEE

As per section 28 of the District Disaster Management Act 2005, an advisory committee may be constituted by DDMA for efficient discharge of the functions.

4.3) DISTRICT DISASTER MANAGEMENT COMMITTEE

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

- 1) Superintendent Of Police Shimla
- 2) Additional Deputy commissioner Shimla
- 3) Additional District magistrate (L& O) Shimla
- 4) Conservator Of Forest Shimla
- 5) General Manager (Telecommunication) Shimla
- 7) Chief Medical Officer Shimla
- 8) Superintending Engineer (PWD) Shimla
- 9) Superintending Engineer (IPH) Shimla
- 10) Superintending Engineer (MPP &Power) Shimla
- 11) Chirperson Of Zila Parishad Shimla
- 12) District Food and supplies controller Shimla
- 13) Commandant Home Guards Shimla
- 14) Commandant ITB P(Hqrs) Shimla
- 15) District/Divisional Fire Officer Shimla
- 16) Divisional manager HRTC Shimla
- 17) District public Relation Officer Shimla
- 18) District Town Planner Shimla
- 19) District Revenue Officer Shimla

- 20) Commissioner Municipal Corporation Shimla.
- 21) Deputy Director (Higher Education)
- 22) Deputy Director (Elementary Education)
- 23) Medical Superintendent IGMC Shimla
- 24) Medical Superintendent KNH
- 25) District Coordinator NYK
- 26) Additional District Magistrate (Protocol) Shimla ----- Member Secretary

Non Official Members

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

Any other member can be included as desired by the chairman.

This committee will ensure that the functions assigned to the different departments are being implemented properly while dealing with the disastrous situation.

4.4) SUB DIVISIONAL DISASTER MANAGEMENT COMMITTEE

This committee shall be constituted at every sub division under the Chairmanship of Concerned SDO (C) and the following members :-

- 1) Dy SP
 - 2) Tehsildar
 - 3) Block Development Officer
 - 4) Block Medical Officer
 - 5) Executive Engineers PWD, IPH, Electricity
 - 6) Divisional Forest Officer
 - 7) Sub divisional fire officer
- All other Sub Divisional Officers

Non Official Members

- 1) Chairman /Vice chairman Panchayat Samiti
- 2) All members of Panchayat Samiti
- 3) All NGO/Volunteers /CBO in the sub division.

This Committee will prepare the Sub divisional disaster management Plans may be block wise if More than two one block is there and response plans in accordance with the District Disaster management plans and identify the hazards encountered by the people in past and send the data so collected to the District Disaster Management Authority for further updation in the disaster plan.

4.5) VILLAGE DISASTER MANAGEMENT COMMITTEE

This committee will function at the village levels and will be headed by the Pradhan Gram Panchyat with all the village/Panchyat level officers its members and the secretary Gram Panchayat as member Secretary. This will prepare the panchyat ward wise disaster management plans in accordance with the District Disaster Management Plan .

4.6) CRISIS MANAGEMENT MECHANISM

For the management of any disaster in the District the mechanism Followed will be “INCIDENT COMMAND SYSTEM” Which was being followed in the early 1970 to manage rapid wildfires in the USA. Incident Command System is a standardized on scene incident management concept designed specifically to allow responders to adopt an integrated organizational structure equal to the complexity and demands of the single or multiple incidents without being hindered by any jurisdictional or multifunctional drawbacks. An ICS enables the integrated planning, communication and having the manageable span of control ranging from 3- 7 people in one task force. An ICS divides the emergency response into five/six manageable function essential for emergency response operation viz, command , operation, planning, logistics, finance and administration and intelligence.

BASIC FUNCTIONAL STRUCTURE OF AN INCIDENT COMMAND SYSTEM

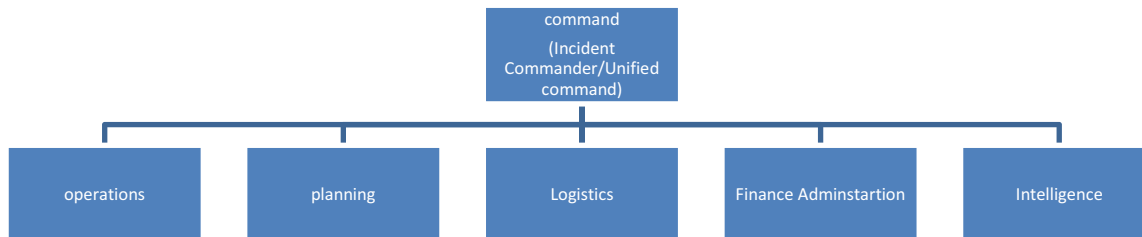


Figure 4.6 :FUNCTIONAL STRUCTURE OF ICS

Each functional area under command is called Section. The leaders of the individual sections are known as chiefs and collectively called as General Staff, reports directly to the IC/UC

4.6.1)RESPONSIBILITIES IN EACH FUNCTIONAL AREA INCLUDE

- 1) **Command** :- Provide on scene management and control authority.
- 2) **Operation** :- Direct incident tactical operations.
- 3) **Planning** :- Prepare Incident Action Plan
- 4) **Logistics** :- Provides services and support to the incident
- 5) **Finance and Administration** :- Tracks incident costs and account for reimbursements.

6) **Intelligence** :- Provide analysis and sharing of information and intelligence during the incident .

4.6.2) FUNCTIONS OF COMMAND

Command represents a function and not the person. The command function is carried out by an Incident Commander (IC) or Unified command (UC) . For large scale incidents ,the IC or UC is supported by the COMMAND STAFF. The IC or UC performs the duties exclusive to command and if necessary establish command staff position to delegate specific management tasks that do not pertain to any individual sections . These position can include the Public Information officer, Safety officer and liaison officer . The Command staff is called Officer.

4.6.3) ORGANISATIONAL STRUCTURE OF THE SECTIONS

Sections are further divided into the Branch, Division/groups/ Units, strike Teams/Task Forces as mentioned below:-

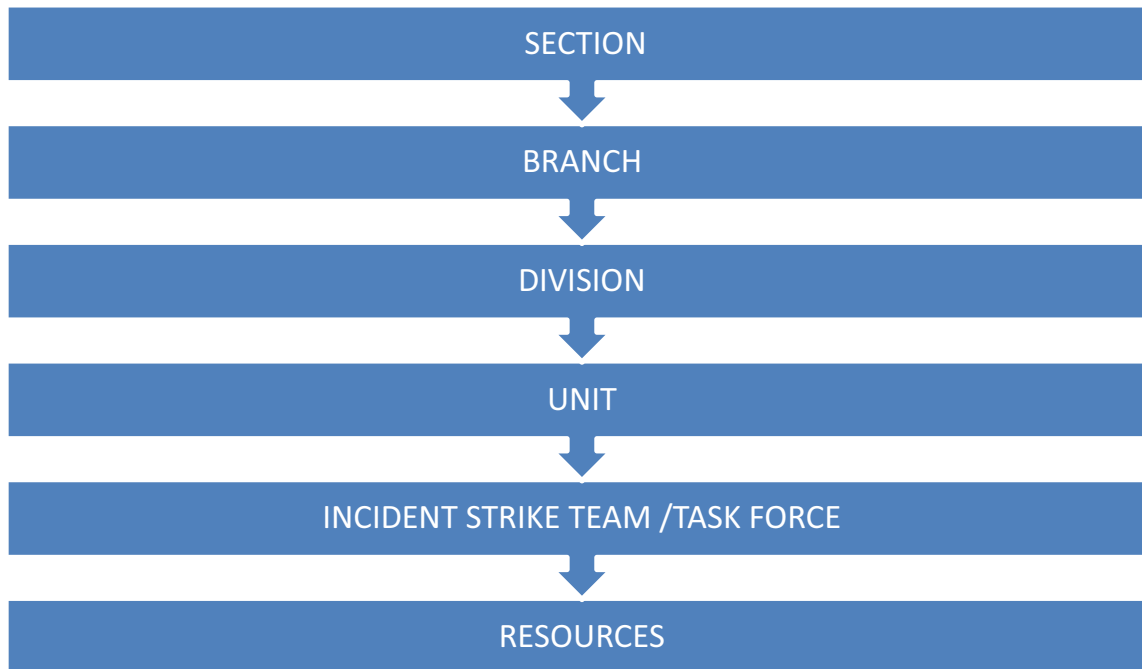


FIG 4.6.3 :ORGANISATIONAL STRUCTURE OF SECTION

4.6.4) THE CORRESPONDING LEADERSHIP TITLES ASSIGNED IN THE INCIDENT COMMAND SYSTEM ARE MENTIONED BELOW

Table 4.6.4: LEADERSHIP TITLES IN ICS

ORGANISATIONAL ELEMENT	LEADERSHIP TITLE
INCIDENT COMMAND	INCIDENT COMMANDER IN CASE OF SINGLE AGENCY INVOLVEMENT UNIFIED COMMAND IN CASE OF MULTIFUNCTIONAL OR MULTI JURISDICTION INCIDENT
COMMAND STAFF	OFFICER e .g. PUBLIC INFORMATION OFFICER, LIAISON OFFICER, SAFETY OFFICER
SECTION	CHIEF
BRANCH	DIRECTOR
DIVISION	SUPERVISOR
UNIT	LEADER
STRIKE TEAM/STRIKE FORCE	LEADER

4.6.5) RESPONSIBILITY OF IC/UC

® ASSUMES AND ANNOUNCES COMMAND	MANAGE PLANNING MEETING AS REQUIRED
® POSSESS CLEAR AUTHORITY AND KNOWLEDGE OF AGENCY POLICY	APPROVE IMPLEMENT AND EVALUATE THE INCIDENT ACTION PLAN
® ENSURE INCIDENT SAFETY	® COORDINATE ACTIVITIES FOR ALL COMMAND AND GENERAL STAFF.
® ESTABLISH AN INCIDENT COMMAND POST	® APPROVE REQUEST FOR ADDITIONAL RESOURCES OR FOR THE RELEASE OF THE RESOURCES
® ESTABLISH IMMEDIATE PRIORITIES	® APPROVE THE USE OF VOLUNTEER AND AUXILIARY PERSONNEL
® INITIATE AND CONTROL THE COMMUNICATION PROCESS WITHIN THE ICS ORGANISATION	® AUTHORIZE THE RELEASE OF INFORMATION THROUGH PUBLIC INFORMATION OFFICER
® ANALYZE THE INTELLIGENCE INFORMATION	® ESTABLISH THE SIZE OF THE INCIDENT COMMAND SYSTEM ORGANISATION AS PER THE NEED OF THE INCIDENT
® COORDINATE MULTI JURISDICTION TRAFFIC MANGEMENT AND CONTROL OPERATION	® ORDER DEMOBILIZATION OF THE OPERATION WHEN NEEDED

4.6.6) COMMAND METHODS

The duties and responsibilities of the command function can be performed either as single command or unified command . The selection of one method over other depends upon the legal or functional jurisdiction. Command function can be conducted under single command if the incident does no overlap the geographic jurisdiction or functional jurisdiction of one agency.

The Unified Command method is employed only when multiagency involvement to manage the incident is there or multi geographical jurisdiction are involved.

4.6.7) OPERATION SECTION

This section performs all the function which are required for the disaster /incident to manage properly. The key priorities of response are life safety, incident stability, property safety and restoration of normal way of life of the people in the area. The operation section 's organizational structure depends upon the complexity of the incident and span of control consideration and guides the IC/UC whether it will directly manage the Branch/division/unit/resource. The organizational structure of the operation section is described below:-

Table 4.6.7 : RESPONSIBILITY OF OPERATION SECTION

Ensure interagency coordination and collaboration	Supervise the execution of the Incident action plan
Assemble and disassemble the task forces and strike teams	Ensure safety of the operation section personnel
Maintain close contact with the subordinate position	Ensure that the operation section operates effectively and within span of control limits

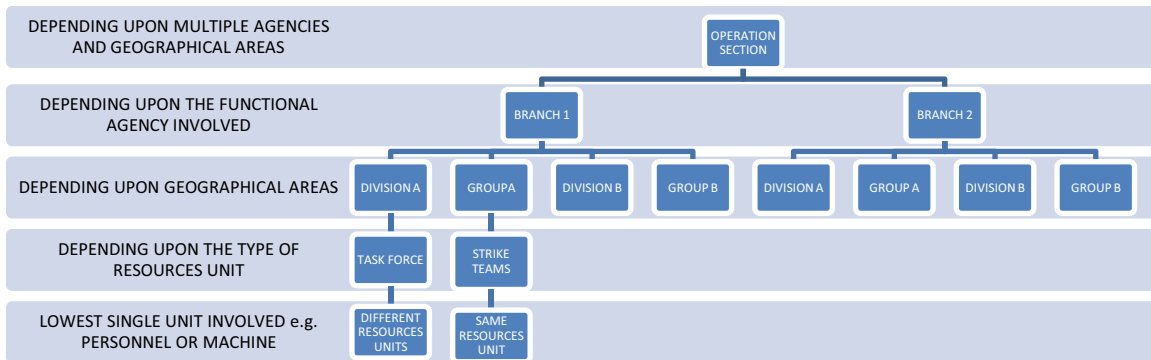


FIG 4.6.7 :USE OF GEOGRAPHICAL DIVISION AND FUNCTIONAL GROUPS

4.6.8) INCIDENT RESPONSE TEAMS

Every department at district level will constitute the Incident response teams which will be properly trained and sensitized about their roles and responsibilities and the leader heading those teams.

4.6.9) INCIDENT COMMAND POST

It will be established at the place where the incident took place so as to monitor and coordinate the operation work efficiently and effectively.

4.7) EMERGENCY OPERATION CENTRE AND ITS OPERATION:- The central coordination point between the departments involved in the management of disaster and the resources along with the other agencies is called the emergency operation centre. It is basically the offsite management ,communication and coordination between different agencies involved in the incident management. In Distt Shimla the EOC will be set up at District and Sub divisional headquarters as well as one at the municipal corporation headquarter.

- 1) **District Emergency operation Centre:-** It will be established in the District Collectorate building and will be manned by the relief branch personnel under the administrative control of the ADM (P).
- 2) **Sub Divisional Emergency Operation Centres:-** In district Shimla at every Sub divisional head quarter one emergency operation centre will be established under the control of respective Sub Divisional Magistrate Viz Theog, Rampur, Rohroo, Dodrakwar, Chopal. However for subdivision Shimla (U) and Shimla (R) the district emergency Operation Centre will cater. An emergency Operation Centre is allocation where the Government Department and other agencies at the time of Disaster meet to formulate the Incident Action Plan along with the centralized coordination between the field incident commanders and the other agencies.

DISTRICT EMERGENCY OPERATION CENTRE

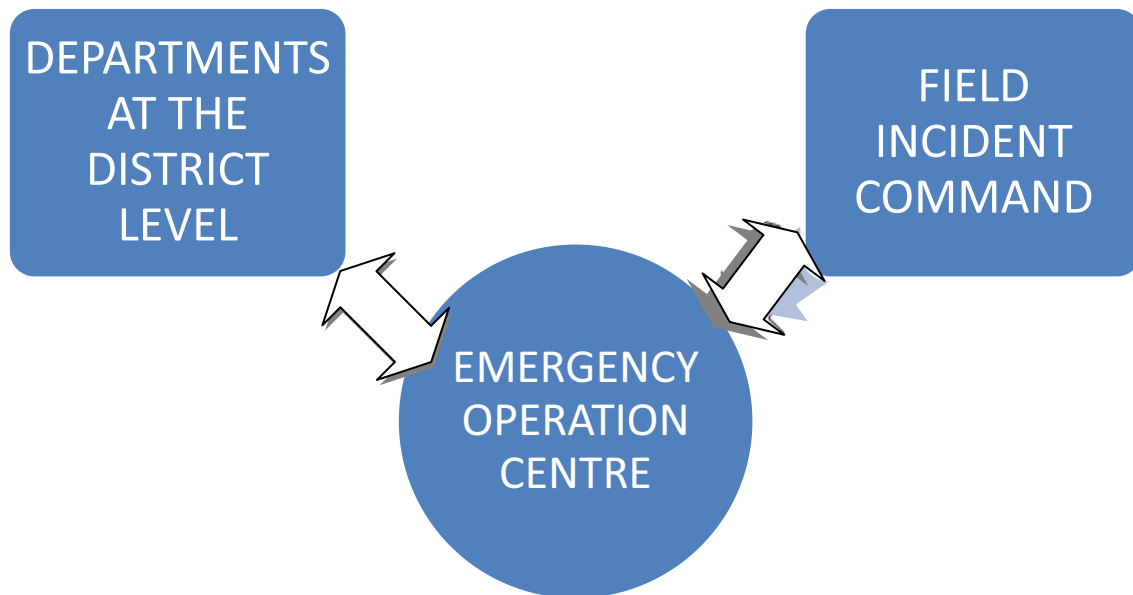


Figure 4.7 : DEOC COORDINATION

4.7.1) 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 ADM (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.

4.7.2) ORGANIZATION OF DISTRICT EMERGENCY OPERATION CENTRE

The internal organization of the DEOC is modeled upon the job terminology used in the Incident Command System however with the response at the DEOC and the ICs will be different as the main function at the DEOC level will be to coordinate between different agencies involved in the disaster management and proper management of the disaster.

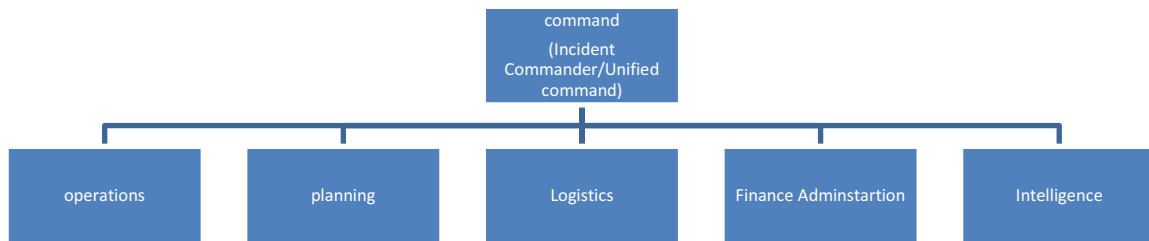


FIG 4.7.1 :ORGANISATION STRUCTURE OF THE DEOC

INSTITUTIONAL MECHANISM

However there will difference in the functions of different sections as well as the command as compared with the functions of the Incident Command Post which is established on site for management of Disaster which are mentioned below:-

Table 4.7.2 : RESPONSIBILITIES OF DIFFERENT SECTION OF IC

ICS FUNCTIONS	AT DEOC LEVEL	AT ICP LEVEL
COMMAND (INCIDENT COMMAND OR UNIFIED COMMAND)	Is responsible for overall emergency policy and coordination through the different nodal departments as well as other agencies	Is responsible for directing ,ordering and controlling of resources by virtue of legal or delegated authority
OPERATION	Responsible for coordinating all jurisdictional operations required for managing the disaster through the authorized government departments and the agencies by getting implementing the departments action plans as well as enacting the Incident Action Plan.	Responsible for coordinating the tactical of all field operations in accordance with the Incident Action Plan and reporting the shortcomings to the DEOC
PLANNING	Responsible for coordinating the collection, evaluation of the information about the disaster and developing the departmental action plan with the help of other departments and agencies which is called as Incident Action Plan.	Responsible for the proper coordination of the resources and the evaluation of the incident Action Plan
LOGISTICS	Responsible for providing and coordinating with the different departments at the district level along with other agencies for mobilization of the resources, services personnel, equipment etc.	Responsible for providing the resources as per the requirement on the site and reporting the deficiency if any to the DEOC.
FINANCE/ADMINISTRATION	Responsible for coordinating all the financial and administrative aspects of the disaster management.	Responsible for managing the financial aspect of the Incident in a effective and efficient manner.
INTELLIGENCE	To evaluate the Incident Action plan on the basis of the information received from ICP and deviation approval if required.	To gather the information about the IAP implementation and any deficiency found to be reported to the DEOC

4.7.3) STANDARD OPERATING PROCEDURE DURING DISASTER

During disaster the emergency meeting will be held at DEOC and upon the information received from the Incident location the Incident Action Plan will be devised immediately and the Incident Response Teams will be rushed to the site as needed keeping in view the magnitude of the disaster.

4.8) TRIGGER MECHANISM

It is necessary that for suo -moto activation of the agencies involved in the disaster management the institutional trigger mechanism should be there so that every agency takes its assigned role at the time of such disaster. There will be three types of the Trigger mechanism set up depending upon the warning signals availability as mentioned below:-

4.8.1) Warning Signal Availability :- In such case the govt. of India / State Govt. has certain authorized agency monitoring such early warning signals before some disaster and communicating these to the respective state governments. After such warning/advisory received by the State govt. ,The SEOC will communicate it to the DEOC through the Chairman of DDM A who through the DEOC will communicate such warning to the departments at the district level and through respective SDM’s to the departments at the Sub division level down to the village level and the respective agencies whom such mitigation functions assigned will swing into action . the information flow in such cases will be as follow:-

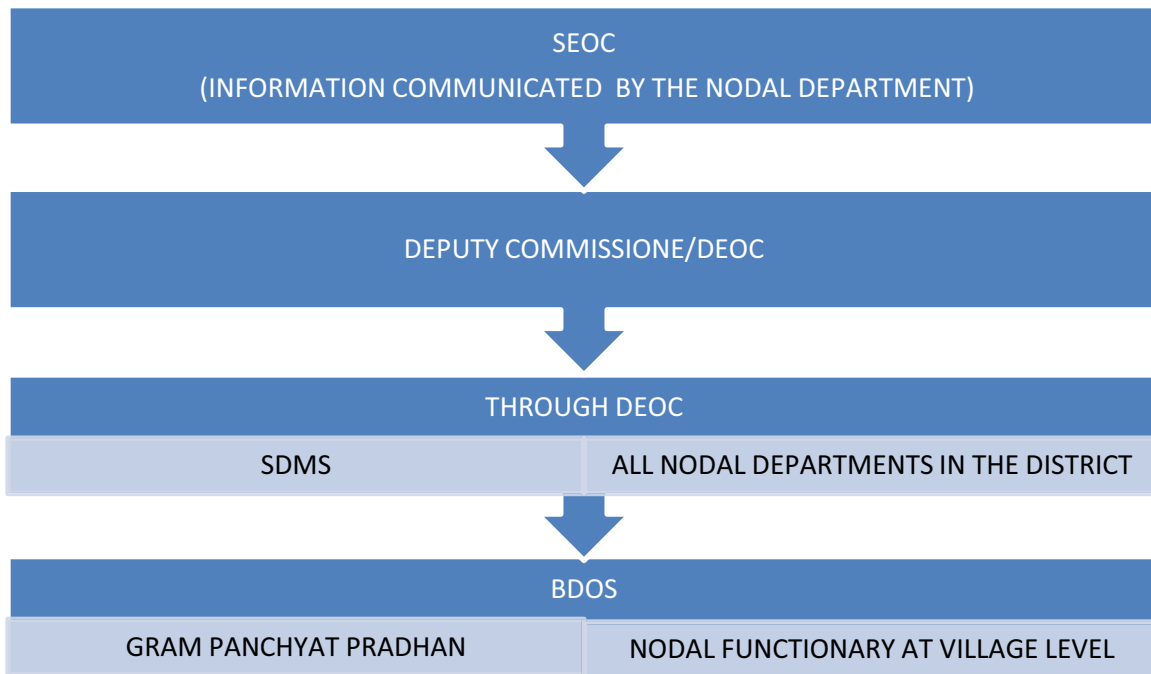


Figure 4.8.1 : INFORMATION FLOW

4.8.2) WITHOUT EARLY WARNING SYSTEM

When disaster occurs without any early warning in that case the information starts from the place of incident through government agency or otherwise and the institutional mechanism in such cases will be as follow:-

- 1) The concerned village will report to the Panchayat, block, police station/ SDM and the information will reach to the Deputy Commissioner.
- 2) DDMA will assess the information and declare the disaster to be of the level L0,L1,L2,L3.
- 3) DEOC will be activated and if required the SEOC will be kept at alert if assistance needed otherwise information of the Incident will be passed to SEOC.
- 4) DDMA will convene the meeting of DEOC and plan the management of the disaster as IAP.
- 5) The respective Incident response teams will be rushed to the site for effective management.

The information in this case will flow in the following way:-

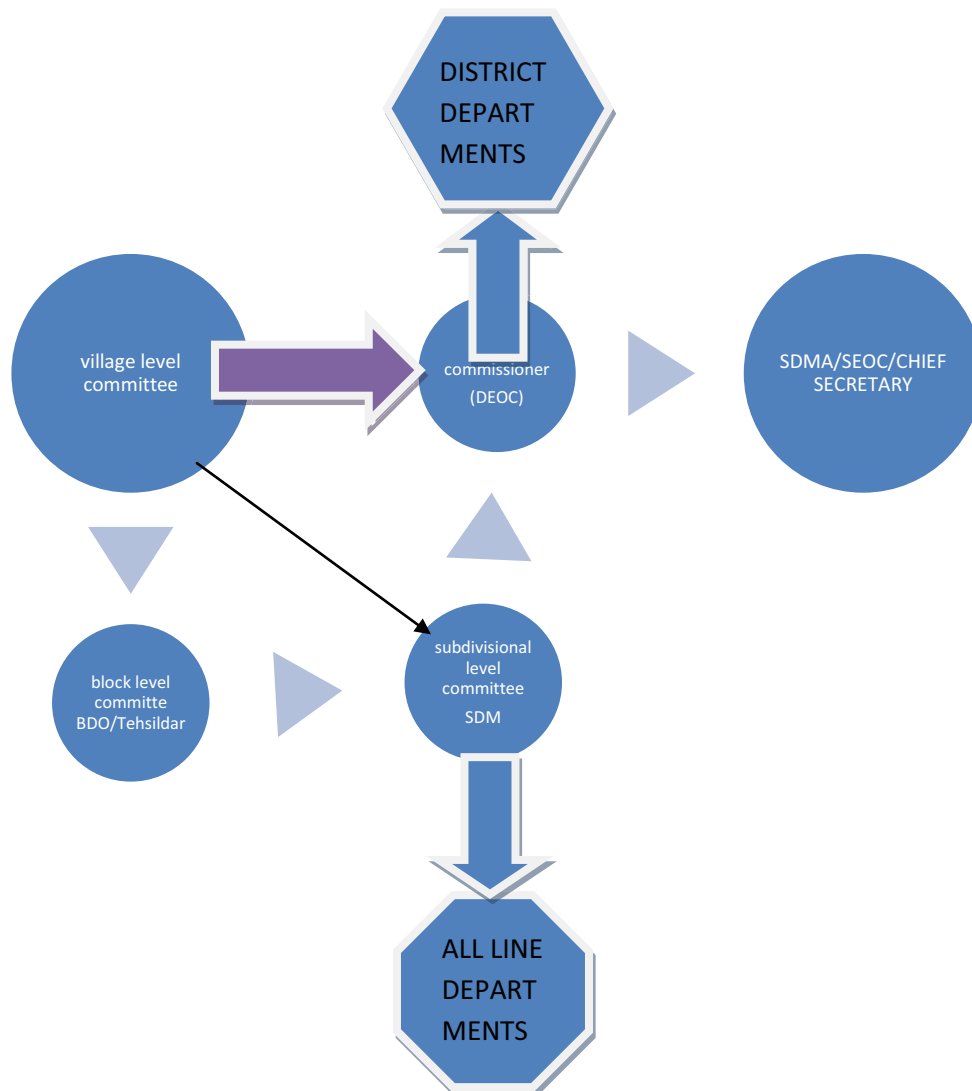


Figure 4.8.2 : INFORMATION FLOW

CHAPTER – 5

MITIGATION PLAN

Shimla district is prone to 16 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.

5.1) SPECIFIC HAZARDS AND THE NODAL DEPARTMENTS IN HIMACHAL PRADESH

Table 5.1 : HAZARDS AND NODAL DEPARTMENT IN HP

Sr. No	SPECIFIC HAZARD	NODAL DEPARTMENTS IN HP	SUPPORTING AGENCIES /DEPARTMENT FOR EARLY WARNING SYSTEM
1	EARTHQUAKE	DEPARTMENT OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY	IMD,GEOLOGICAL SURVEY OF INDIA,WADIA INSTITUTE OF HIMALAYAN STUDIES
2	LANDSLIDE	PUBLIC WORKS DEPARTMENT	IMD,GEOLOGICAL SURVEY OF INDIA,WADIA INSTITUTE OF HIMALAYAN STUDIES
3	FLASH FLOODS	IRRIGATION AND PUBLIC HEALTH	IMD,CWC,DEPARTMENT OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY
4	FOREST FIRES	FOREST DEPARTMENT	FIRE DEPARTMENT,HOME,ADMINISTRATION
5	LIGHTENING	DISTRICT ADMINISTRATION	HEALTH, VETERINARY .
6	CLOUD BURSTS	IPH	DISTRICT ADMINISTRATION, PWD
7	HAILSTORM	AGRICULTURE/HORTICULTURE	REVENUE DEPARTMENT/ KVK/IMD
8	DROUGHT	AGRICULTURE/HORTICULTURE	REVENUE DEPARTMENT /KVK/IMD
9	ROAD ACCIDENTS	DISTRICT ADMINISTRATION	HEALTH, FIRE , POLICE,TRANSPORT, PWD
10	RAIL ACCIDENTS	INDIAN RAILWAY	DISTRICT ADMINISTRATION,HEALTH, HOME , FIRE , POLICE, TRANSPORT
11	AIR CRASH	CIVIL AVIATION/GAD	DISTRICT ADMINISTRATION, REVENUE, HEALTH, POLICE,FIRE ,GAD, CIVIL AVIATION
12	VILLAGE FIRES	FIRE DEPARTMENT	HOME ,REVENUE, HEALTH, IPH
13	EPIDEMICS	HEALTH DEPARTMENT	HEALTH, REVENUE, IPH,
14	DAM/WATER RESERVOIR BURSTS	MPP&POWER,HPSEB	IPH,DISTRICT ADMINISTRATION, HEALTH, POLICE, FIRE
15	INDUSTRIAL ACCIDENTS	FIRE DEPARTMENT	DISTRICT ADMINISTRATION, POLICE, HEALTH
16	FALL FROM ROCK	POLICE DEPARTMENT	REVENUE, HEALTH, FIRE

5.2) EARLY WARNING AND DISSEMINATION SYSTEMS

5.2.1) NODAL AGENCIES FOR EARLY WARNINGS:-

The nodal agencies identified at the government of India level and state level for issuing early warning system in case of natural hazards are mentioned below:-

Table 5.2 : AGENCY FOR EARLY WARNINGS

DISASTER	AGENCY/DEPARTMENT AT GOVT. OF INDIA LEVEL	AGENCY/DEPARTMENT AT GOVT. OF INDIA LEVEL
EARTHQUAKE	IMD	DEPARTMENT OF SCIENCE AND TECHNOLOGY
LANDSLIDES	GEOLOGICAL SURVEY OF INDIA	GEOLOGICAL WING OF INDUSTRY DEPARTMENT
FLASH FLOODS	CENTRAL WATER COMMISSION	IPH
DROUGHT	IMD	REVENUE DEPARTMENT
HAILSTORMS	IMD	REVENUE DEPARTMENT

5.3) INFORMATION FLOW MECHANISM AT DEOC LEVEL

The nodal departments at state level will coordinate with the Govt of India nodal departments and any signal or message received through them will be disseminated to the general public in the following manner:-

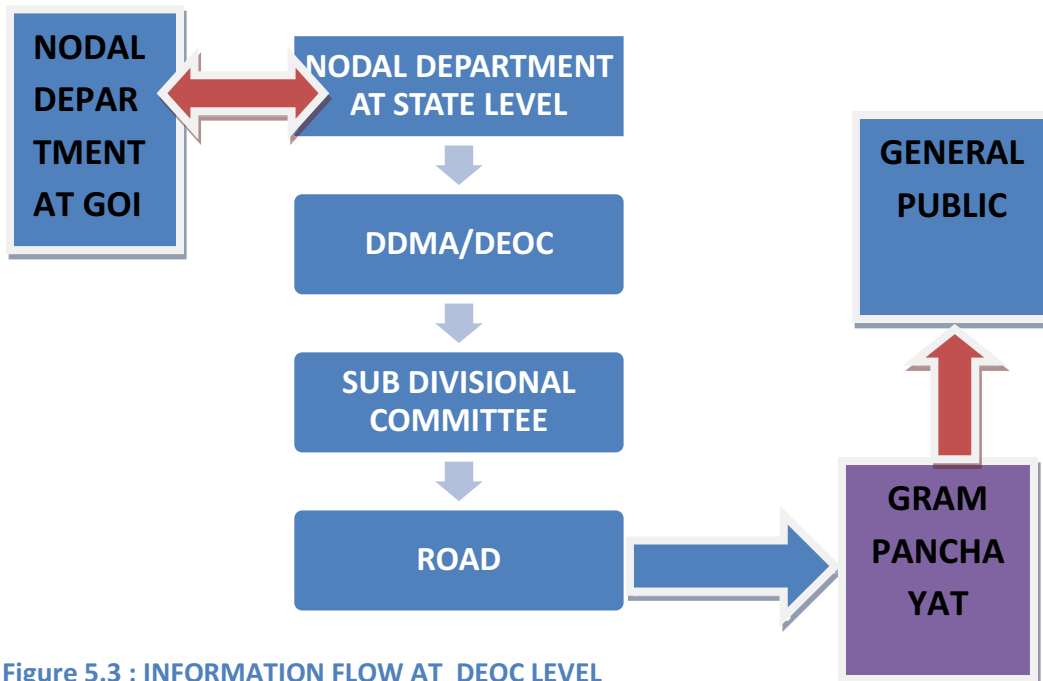


Figure 5.3 : INFORMATION FLOW AT DEOC LEVEL

5.3.1) EARTHQUAKE :- Science is not developed till date to the extent to predict early the occurrence of the earthquake and hence early warning system is not possible in this natural hazard.

5.3.2) FLOODS:- Central Water Commission has established a network of the flood forecasting stations and issues daily flood bulletins to the Govt of India as well as to the State Governments during the monsoon season in the category form which is mentioned below:-

- 1) category IV :- Low Flood(water level between warning level and danger level)
- 2) Category III :- Moderate Flood (Water level 0.5m. less than HFL and above danger level)
- 3) Category II :- High Flood(water still less than the HFL but within limits of 0.5m)
- 4) Category I :- Unprecedented flood(Water vlevel equal and above the HFL)

5.3.3) Land slides :- Geological Survey of India issue warning to The GOI and state govts for landslides in the following formats:-

- 1) Category IV :- Landslides of small dimensions that occur away from habitations and do not affect either the human or their property.
- 2) Category III:- Landslides which are fairly large and affect the infrastructure like roads, water supply installations , electricity etc
- 3) Category II:- Landslides which occurs on the fringes of the inhabitations and affects human life and property to small extent in addition to the infrastructural losses.
- 4) Category I :- Landslides of the large extent which can affect the human life and property to the large extent.

5.3.4) Hail Storms:- Hailstorms create havoc every year on an average in district Shimla and causes loss upto 40% on an average every year to the horticulture and agriculture produce. Now the department of Horticulture has installed Anti hail guns at Tumdoo near Kharapathar, Jubbal Rohroo and Kotkhai areas.

5.4) MITIGATION PLAN

The main objective of the mitigation plan is “To identify the existing and potential risks and to reduce potential casualties and damage from disasters”.

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

In view of the risk and the vulnerabilities identified in the earlier section, the mitigation measures proposed have been categorized into seven major headings:

1. Risk assessment
2. Construction work
3. Repair and maintenance
4. Research and technology transfer
5. Training and capacity building

6. Land Use Planning and Regulations

7. Resources for Mitigation

District Shimla is vulnerable to different disasters. 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.

5.4.1) THE ROLES OF TRAINING IN ORDER TO ENSURE THE IMPLEMENTATION AND SUSTAINABILITY OF THE MITIGATION STRATEGIES.

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

The District 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 will identify 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 EOC.

4.2) GOALS OF MITIGATION STRATEGY

- To substantially increase public awareness of disaster risk so that the public demands safer communities in which to live and work; and
- To significantly reduce the risks of loss of life, injuries, economic costs, and destruction that result from disasters

The main elements of mitigation strategy are:

1. Risk Assessment and Vulnerability Analysis

- Improve understanding, of the locations potential impacts, and linkages between hazards, vulnerability, and measures needed to protect life safety and health.
- Provide updated information about hazards, vulnerabilities, and mitigation processes to the district Collector and local agencies.

The department of Environment and scientific technologies will be the prime department responsible for developing and upgrading risk assessment and vulnerability analysis district level. Special focus will be given to areas highly vulnerable to disaster triggered by climate change. The department will engage the local bodies, NGOs and local community in order to develop a realistic base ground assessments. Working with Panchayats Governments and the Zila Parishads, the District Administration may periodically hold meetings to review local vulnerabilities or any signs of early warning of a potential disaster.

5.4.3) CONSTRUCTION WORK

Building by law

The techno-legal regime in the District recognizes the vulnerability of the District to natural disaster and the potential of strong laws to control developmental activities that can undermine the safety of people. Earthquake resistant features should will be incorporated in the building by-laws of the District. Likewise, adequate zoning laws will be put in place to regulate development away from unsafe locations.

5.4.4) INFRASTRUCTURE AND HOUSING REPAIR AND MAINTENANCE

I) Transportation

Roads and Bridge

Provision of special corridors for Fire Brigade, Ambulances, and Police

II) Housing

- **Retrofitting and renovation of lifeline buildings**

Lifeline buildings represent critical infrastructure for the state, such as schools and hospitals. The public works department will be the primary agency responsible of conducting structural assessment, retrofitting and renovation of lifeline buildings. Existing development programmes may be examined to incorporate disaster resistant technologies in all existing and new public buildings.

- **Embankments/Banks/Dams and water resources**

Construction , strengthening of micro level protection features need to be identified and taken on priority in areas with recurrent threat of floods, and other water related disasters.

III) Maintenance

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 will coordinate with the district authorities to ensure that mitigation measures are included.

5.4.5) RESEARCH AND TECHNOLOGY TRANSFER

The department of Environment and Scientific Technologies and works department will be the primary agencies responsible of :

- Research, develop, and promote adoption of cost-effective building and development laws, regulations, and ordinances exceeding the minimum levels needed for life safety.
- Establish and maintain partnership 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.

- Report on changes in hazards, agency progress toward achieving mitigation goals ongoing projects, and new opportunities arising through advancements in technology, knowledge, or completed work.
- Identify, recognize and incorporate, after suitable scientific validation, community based traditional coping capacities against natural disasters.

5.4. 6) TRAINING AND CAPACITY BUILDING

(i) Training and Capacity Building of Government Official

It is proposed the establishment of a District Disaster Management Institution as part of overall mitigation strategy. The Institute will organize training for state level and district level officials, Officials from line departments, as well as the private sector organizations.

The Himachal Institute of public Administration and DIDM will be the primary agency for conducting training to all government officials involved in the planning and implementation of the mitigation strategies in the district at district level.

At the district level, training programmes will be conducted coordination with NGOs, and government training/ research institutions.

(ii) Community Level, training and public Awareness Activities

The community awareness and training activities will basically be carried out in the form of training programmes through NGOs, Private Sector, and Government Training community capacity building.

Special focused 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 and ensures that in the long term, contractors and mason ensure safe construction practices.

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 well, in turn, organize training and simulation exercises at the district and community level, in order to ensure preparedness from the grass-roots.

(iii) Mobilizing Community Efforts for mitigation Measures

The community needs to 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 Collector/NGOs/Community. This should prioritize buildings like village offices, primary health centres, 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.

5.4.7) LAND USE PLANNING AND REGULATIONS

The 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 in future disaster. This office should also ensure proper enforcement of existing regulations and acts.

5.4.8) INCENTIVES AND RESOURCES FOR MITIGATION

It is proposed to create a District 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. The District Disaster Management Authority will be the authority in-charge of the District Disaster Mitigation Funds.

5.5) HAZARDS SPECIFIC MITIGATION PLAN

5.5.1) EARTHQUAKE MITIGATION:- For mitigation of earthquake in district Shimla the following strategies are to be adopted:-

- i) All the developmental plan conceptualized by the different departments in the districts shall adopt the earthquake prone technology w.e.f 2013-14 financial year so that the future constructions are earthquake resistant.
- ii) 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.
- iii) The departments which are enshrined with the responsibility of approval of house/building maps shall adhere these codes while according approval to the maps.
- iv) 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 such agency or engineers so that general public can have easy access to such technical knowhow.
- iv) 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.
- v) The DDMA shall carry out an extensive exercise village wise for identification of the critical lifeline buildings and steps shall be taken through existing developmental plans for their retrofitting and making them earthquake resistant. This survey should be completed by 30th June 2013 and shall be carried out by BDOs in consultation with the respective SDMs by involving the local bodies at ward level.
- vi) The dissemination of the building codes and the importance of the adopting the earthquake resistant technology among the general masses by involvement of Mahila Mandals, Yuvak Mandals, Village Sudhar Samitis and other NGOS working at the village level.
- vii) 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.

viii) Also the organization /samitis at the ward level of Panchayat are to be trained for immediate response to the earthquake incident occurrence. Such capacity building shall be ensured by the DDMA at village level.

ix) strengthening the medical preparedness for effective earthquake response.

x) Conducting of mock drills up to the block level /village level so that the rural masses should have a safe plan in case of such disaster.

5.5.2) LANDSLIDE MITIGATION

i) 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.

ii) The local bodies which are administering the approval of map shall ensure while according approval that no such approval be given in the land slide zone areas.

5.5.3) FLASH FLOODS

i) The DDMA shall ensure that every local body shall identify the flood prone areas in their jurisdiction and shall ensure that no construction of residential or commercial type be allowed in that area.

ii) The IPH department at the district level shall map the areas subdivision wise upto 30th September 2013 and prepare the vulnerable inhabitations .

iii) The mitigation plan shall be prepared by the IPH department to safeguard such inhabitations from flash floods.

5.5.4) HAILSTORM

i) The agriculture department at district level shall prepare a plan to take preventive action /measures to lesser the impact of hailstorm and prevent such occurrence.

ii) Such plan shall be prepared block wise.

iii) Necessary measures shall be taken for mitigation the impact of such incident.

5.5.5) DROUGHT

i) The agriculture department at the district level shall prepare the mitigation plan for such occurrence block wise.

ii) Agriculture department shall use the remote sensing and GIS technology while providing inputs to the DDMA.

iii) A sound data base shall be prepared by the agriculture department o weather .crop conditions, input supply to assist the DDMA.

iv) The techniques of rain water harvesting technology will be disseminated among the farmers in the rural areas.

v) The agriculture department take preventing measures such as insurance of the crops to mitigate the impacts of such incidents.

5.6) LINKAGE OF THE DEVELOPMENTAL PLANS WITH THE MITIGATION PLANS

The developmental plan of the different departments at the district level shall have the linkage with the mitigation plans meaning thereby that the developmental plans should be critically analyzed at each department level to find out whether the mitigation element pertaining to different hazards to which this district is vulnerable have been included in the plans or not.

5.6.1) PURPOSE FOR MAINSTREAMING

The linkage have the following three purposes to achieve:-

- i) To make the future environment free from construction risk.**
- ii) To utilize the funds of the govt. to mitigate the vulnerability to any disaster , thus progressing towards physical, socio-economoc.and environmental vulnerability free era.**
- iii) To make sure that all the govt. plans should be integrated with disaster risk reduction programmes by integrating such elements in these plans so that disaster risk free environment can be created.**

5.6.2)PROCEDURE FOR LINKING THE PLANS

There are three suggested approaches for linkage of the developmental plans with the mitigation plans :-

- 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.

5.7) PREPAREDNESS PLANNING

The mitigation planning is incomplete if the preparedness element is not taken into consideration. Therefore all the departments at the district level shall have the preparedness plans to respond to any disaster incident. The preparedness shall be insured by the DDMA trough the respective departments in the following ways:-

5.7.1) CAPACITY BUILDING :- It includes :-

- i) Identification of the existing resources and the resources to be acquired or created.**
- ii) Acquiring or creating resources identified as above(i).**
- iii) Organization and training of personnel and coordination of such training for effective management of disasters.**

5.7.2) COMMUNITY AND 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.

5.7.3) SUSTAINABLE DEVELOPMENT PRACTICES AND THE CLIMATE CHANGE

The community should be trained on the sustainable developmental techniques so that the negative impacts of the disaster on the social , economical environmental factors can be reduced and covered up immediately.

5.7.4) DISTRICT DISASTER RESPONSE FORCE

The DDMA shall create the DDRF from the existing resources i.e. police forces, home guards, NSS volunteers, NCC cadets and the other NGO and volunteer organizations and this force shall be made ready at the Sub divisional level so that the response time to any incident is reduced considerably.

The training and equipping of such force is mandatory to be done by the DDMA.

5.7.5) MOCK DRILLS

The mock drills at every level is mandatory and DDMA shall ensure that mock drills be conducted regularly /periodically upto panchayat level.

CHAPTER-6

RESPONSE PLAN

During the disaster period the situation needs an immediate response but the emergency situation has already created the chaotic conditions on the site of incidence. The situation warrants the time sensitive actions to save life and property , reduce hardships and sufferings and restore the essential life support and community system, to mitigate further damage or loss and provide the foundation for further recover and reconstruction. Effective response planning requires realistic identification of the likely response functions, assignment of specific tasks to the individual response departments/agencies, identification of the equipments, supplies and personnel required for performing the assigned task.

6.1) OPERATIONAL DIRECTION AND COORDINATION

Deputy Commissioner Shimla being the Chairman of DDMA shall direct and coordinate all responses in the district to manage the disaster . Immediate upon receiving the information of the Disaster he will assess the magnitude of the Disaster and after such assessment if its magnitude and extent is limited to the jurisdiction of the Subdivision and is manageable at the Sub division level then he will direct the SDM concerned to coordinate all the responses in the area with the responding teams and will monitor the measures being taken at district level and guide and direct the SDM to take further measures if necessary.

6.2) EMERGENCY WARNING AND DISSEMINATION

On receipt of information either from the SEOC or from the other nodal department regarding any warning of the ensuing natural Hazard , DDMA shall issue alerts to the general masses through the SDMS and BDOs along with press release through the public Information Department and alert all the nodal departments at the district level to take preventing measures immediately and be ready for providing the Emergency Support Functions (ESFS).

Meanwhile the meeting of the DDMA shall be convened and the stock of the situation will be taken and report in this regard shall be forwarded to the SDMA for information.

6.3) DISASTER WITHOUT EARLY WARNINGS

In such cases where the disaster occurs without early warnings ,DDMA upon the receipt of first report/information shall assess the stock of the situation and in such scenario where the disaster has caused the damages which is beyond the capabilities/ capacity of the local authority/SDM level to cope up with immediately it will be declared as district level Disaster and such Information will be sent to the SEOC. Immediately thereafter the information shall be disseminated to the Nodal departments at the district level and meeting of the DDMA will be convened and the District Emergency Operation Centre will be activated.

6.4) RAPID DAMAGE ASSESSMENT AND REPORTING

A team headed by Tehsildar/Naib Tehsildar of the area concerned and officers from PWD ,IPH, HPSEB, not below the rank of SDO and Health department BMO along with SHO and Fire officer if available locally ,will immediately rush to the spot and first hand assessment of damages and loss so done shall be forwarded to the SDM concerned for further dissemination to the DEOC. Thereafter this team will assess daily the situation and send its report on the proforma annexed as Annexure-VI. The organization of rapid assessment damage team will be as follow:-



Figure 6.4: RAPID DAMAGES ASSESSMENT TEAM

The DDMA shall review each such report daily and send report to SDMA on daily basis.

6.5) INCIDENT COMMAND SYSTEM

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

6.6) ESTABLISHMENT OF INCIDENT COMMAND POST

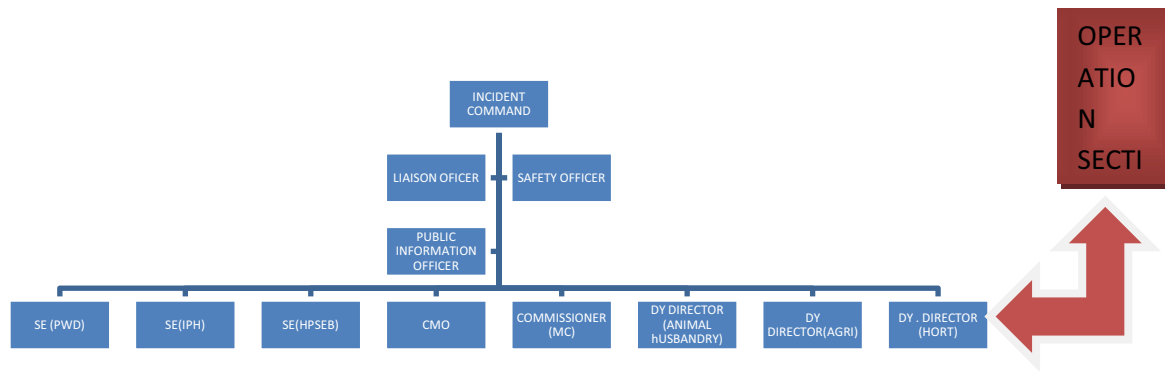
To execute the Incident Action Plan , the Incident Command Post shall be established on site to execute the operation under unified command system when the no agencies involved in the operations are more than one department/agency. Every team will operate under the field incident command who will SDM for revenue, BDO for Rural Development, the Xen of the concerned department if departments

involved are PWD, IPH, HPSEB, and District Fire Officer for fire Department, Commandant Home Guards , Dy. Sp for police department, RM for HRTC etc These field incident commands will monitor the work of all their respective teams and SDM will also work as coordinating command between different departments /agencies involved.

6.7) COMPOSITION OF VARIOUS INCIDENT RESPONSE TEAMS

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

6.8) ORGANISATION OF DEOC IN SUCH DISASTER



OTHER SECTIONS OF DEOC

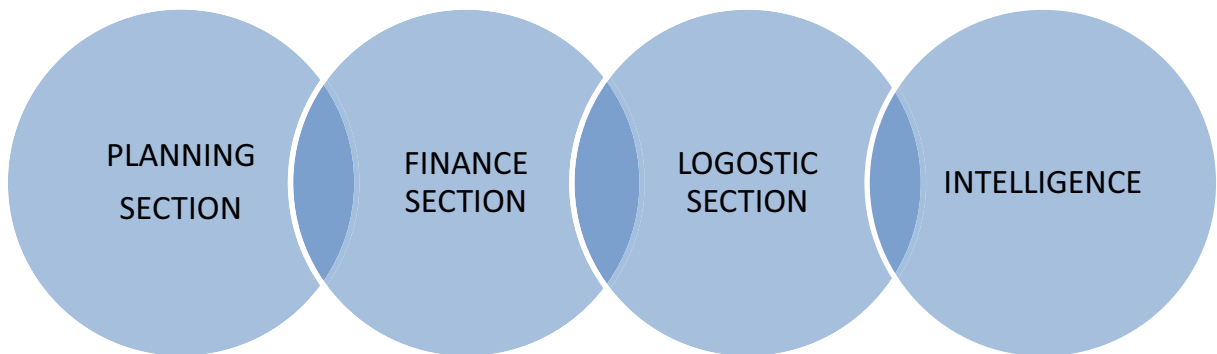


Figure 6.8 : OPERATION OF DEOC DURING DISASTER

6.9) ROLES AND RESPONSIBILITIES OF NODAL DEPARTMENTS AND AGENCIES AT DISTRICT LEVEL

Table 6.9

NAME OF THE DEPARTMENT	ROLES AND RESPONSIBILTY ASSIGNED
REVENUE	IMMEDIATE ASSESSMENT OF LOSS, DISBURSEMENT OF RELIEF, COORDINATION BETWEEN DIFFERENR DEPARTMENTS FOR MANAGEMENT OF DISASTER, COMPILATION OF DATA ,REPORTS AND FORWARDING THE SAME TO DDMA .
PUBLIC WORKS DEPARTMENT	PRIMARILY ENSTRUSTED TO MAINTAIN THE INFRASTRUCE VIZ ROADS , BRIDGES, CRITICAL BUILDINGS, IDENTIFICATION OF ALTERNATE ROUTES AND DEMOLITION OF DANGEROUS BUILDINGS, HAZARDS RESISTANT FEATURES DURING CONSTRUCTION AND ALL THE BUILDING LAWS.
TOWN AND COUNTRY PLANNING	ENSURING PROPER LAND USE IN THE DISTRICT,HAZARDS WISE ZONATION OF THE DISTRICT AND ENSURING THE IMPLEMENTATION OF THE BUILDING LAWS.
URBAN DEVELOPMENT	ENSURE THE ADOPTION OF BUILDING BYE LAWS WHICH COORESponds TO THE EARTQUAKE RESISTANT STRUCTURES BY THE LOCAL BODY, ZONATION OF THE LOCAL URBAN AREAS BY BTHE TOWNA AND COUNTRY DEPARTMENTA S PER THE HAZARD AND STRICT IMPLEMENTATION OF THE CONSTRUCTION PLANS AND DOVETAILING THE HAZARDS RESISTANT TECHNOLOGY IN THEIR PLANS.
HIMUDA	ENSHRINED WITH THE RSPONSIBILITY OF RECONSTRUCTION OF THE HOUSES IN THE DISASTER AFFECTED AREAS
EDUCATION	PREPARE THE CURRICULUM FOR DISASTER MANAGEMENT AND CONDUCT TRAINING PROGRAMMES FOR THE TEACHERS AND STUDENTS REGARDING HAZARDS RESISTANT TECHNOLOGY , MOCK DRILLS ETC.
IRRIGATION AND PUBLIC HEALTH	PRIMARY AGENCY FOR FLOODS,WATER SUPPLY, DROUGHT AND ISUE OF ARNINGS FOR FLOODS,ARRANGEMNTS OF PUMPS ETC FOR DELOGGED WATER ETC. REPAIR AND RESTORATION OE WATER SUPPLY IN THE DISASTER AFFECTED AREAS IMMEDIATELY.

FOREST	PRIMARY AGENCY FOR MANAGEMENT OF FOREST FIRES ITS PREVENTION, MITIGATION AND DURING RECONSTRUCTION PHASE RESPONSIBLE FOR SUSTAINING THE ENVIRONMENT.
HEALTH	PRIMARY AGENCY FOR BIOLOGICAL AND EPIDEMIC ,DISASTERS, FIRST AND SECONDARY MEDICAL AIDS TO BE GIVEN ON THE SPOT AND THE HEALTH CENTRES,PREVENTIVE MEASURES FOR WATER BORNE DISEASES ETC.
INFORMATION AND PUBLIC REACTION	ALL AWARENESS PROGRAMMES , DISASTER WARNINGS, AND DURING DISASTER PRESS RELEASES STC AND MEDIA MANAGEMENT.
RURAL DEVELOPMENT AND PANCHAYATI RAJ	PRIMARY AGENCY TO DEVELOPE THE VULNERABILITY PROJECTS WITH THE POVERTY ALLEVIATION PROGRAMMES TO CONSTRUCT THE RURAL AREAS HAZARD RESISTANT TRAINING TO THE PANCHAYATI RAJ INSTITUTIONS AND SENSITISATION OF THE MASSES AT THE VILLAGE LEVEL ABOUT THE DISASTER AND TECHNOLOGIES AVAILABLE FOR HOUSE BUILDINGS ETC.
AGRICULTURE	HAILSTORMS, DROUGHTS,PEST ATTACKSAND CONSERVATION OF ORGANIC FARMING TO SUSTAIN THE ENVIRONMENTFROM PESTICIDE USE ETC.
HORTICULTURE	HAILSTORM ,DROUGHT ,PEST ATTACK IN CASE OF HORTICULTURE PRODUCE.
ANIMAL HUSBANDRY	ANIMAL EPIDEMIC, FODDER ASSESSMENT, DURING DISASTER ANIMAL RESCUE AND RELIEF , FIRST AID AND MEDICAL TREATMENT ETC.
POLICE	MAINTAIN LAW AND ORDER, RESCUE, PROPER RECORDS OF THE HUMAN LOSSES ,RESTORATION OF TRAFFIC , CONTROL OF MASSES ETC.
HOME GUARDS	RESCUE TEAMS, SEARCH , ETC
FIRE	RESCUE , VILLAGE FIRES EXTINGUISHMENT, TRAINING OF VILLAGERS

6.10) EMERGENCY SUPPORT FUNCTIONS ASSIGNED TO DIFFERENT DEPARTMENT IN THE DISTRICT

During the disaster the emergency functions assigned to the different departments in the district shall be as follow:-

Table 6.10

EMERGENCY SUPPORT FUNCTION	RESPONSIBILITY	DEPARTMENT
Communications	Will ensure the provision of state wide telecommunication, support to the state, and district in response efforts	BSNL. HOMEDEPARTMENT
Public health and sanitation	Provide coordinated assistance to supplement state and local resources in response to public health and medical care needs following significance natural or man made disaster. Resources will be furnished when the state and district resource are overwhelmed and medical and public health assistance is requested from the State government.	HEALTH AND FAMILY WELFARE, URBAN , RURAL DEPARTMENT
Power	To facilitate restoration of energy systems after a natural Disaster	HPSEB
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 emergency response, recovery and assistance missions. It will works with outside agencies for transportation, coordination and preparedness resource request for assistance when needed.	TRANSPORT
Search and Rescue	Provide specialized life saving assistance to state and local authorities. In the event of a major disaster or emergency. Its operational activities include locating, extricating and providing on site medical treatment to victims trapped in collapsed Structures.	FIRE, HOME GUARDS, POLICE
Donations	Donation management is necessary to control the flow of goods and services into a disaster area. if trucks, trains, and planes are allowed into the disaster area to draw their donations, they can easily interfere with other ongoing disaster response operation. Uncontrolled donations can also put undue burden on disaster response operations as they required scarce response resources. Above all it is necessary to manage the flow of donated goods to be sure that the needs of disaster victims are being met as effectively as possible.	REVENUE

	Expedite delivery of voluntary goods and services to support relief effort in a coordinated manner.	
Public works and Engineering	Provides technical advice and evaluation engineering services, contracting for construction management and inspection, contracting for emergency repair of water, and waste water treatment facilities, potable water, emergency power, real state support to assist the states in meeting the goals related to life sustaining actions, damage mitigation and recovery activities following a major disaster. Provide PW and engineering support to assist need related to life saving or protecting prior to, during and immediately following an event perform immediate damage assessment of the infrastructure.	PWD
Information and Planning	To collect, process and disseminate information about an actual or potential situation. To facilitate the overall activities of all responders in providing assistance to an effected area. Should maintain a data base of all related disaster related information inform of GIS that will allow easy access and retrieval of information during a disaster.	REVENUE
Relief supplies	Coordinate activities with emergency provisions of temporary shelters, emergency mass feeding, and bulk distribution of coordinated relief supplies for victims of disasters, In some instances services may also be provided to disaster workers and logistical and recovery efforts, shelter, food and emergency first aid following a disaster, Operate disaster well fare information, to collect receive and report the status of victims and assist family reunification, and accrdinate bulk distribution of emergency relief supplies.	REVENUE
Food	To identify the basic needs of food in the aftermath of a disaster or emergency. To obtain appropriate supplies and transporting such supplies to the disasters area and identify secure, and arrange to transport food assistance to the affected areas and authorize food stamp assistance following a major disaster of emergency requiring state response.	FOOD AND SUPPLY
Drinking water	To provide a minimum quantity of clean drinking water and to reduce the spread of disease through water during disaster times allow to people to perform daily task.	IPH
Shelter	To meet the physical needs of individuals, families and Communities for safe. Secure and comfortable living space.	PWD

RESPONSE PLAN

	To meet primary social needs incorporating self management in the process.	
Media	To provide and collect reliable information on the status of disaster and district victims for effective coordination of relief work at state level.	INFORMATION AND PUBLIC RELATION
Help lines	To collect, process and disseminate about of the welfare of citizens of the affected area and managing the tremendous flow of information. The speed with which information is received with which it changes requires that assistance be developed to ensure accuracy as well as easy access. The help lines will be responsible for providing, directing, and coordinating logistical resource operations .	DISTRICT ADMINISTRATION, REVENUE

6.11) DISPOSAL OF DEAD BODIES

District administration will coordinate to arrange the mass cremation/burial of the dead bodies with support of police and forest department after observing all codal formalities and maintain the video recording of such unclaimed dead body and other after properly handing over the same to his kith or kin.

6.12) DISPOSAL OF CARCASSES

Department of animal husbandry in association with the local administration shall be responsible for disposal of the carcasses in case of mass destruction.

CHAPTER-7

RECOVERY AND RECONSTRUCTION PLAN

This is a very important aspect of the district disaster Management Plan to restore the incident affected area back to its normalcy by way of taking up the restoration and reconstruction activities in the area. The strategy adopted for this as per the emergency functions assigned to the department at the district level and nodal departments will be as below:-

- 1) Short Terms Reconstruction activities
- 2) Long Term Reconstruction Planning

7.1) SHORT TERM RECONSTRUCTION ACTIVITIES

The nodal departments which are assigned the responsibilities of reconstruction and restoration activities shall perform these activities and restore the minimum basic infrastructure in the area which is vital for sustaining human life in the area. These departments are PWD, IPH , HPSEB ,HIMUDA and RD departments. The following construction /restoration activities shall be taken on priority :-

i) Restoration Of Basic Infrastructure :- This include the restoration of roads, bridges , drinking water supply, electricity, communication network and roads/ paths leading to the villages on priority basis taking minimal time so that other activities be taken on the priority. The above departments and the other nodal agencies which have been assigned these activities shall prepare their departmental plans for such restoration and reconstruction.

ii) Restoration/ Repair of the lifelines/critical buildings :- The another short term activities shall be to repair /reconstruct the life lines buildings /critical buildings which are necessary for treating the affected people or rehabilitating in these buildings as shelters. These buildings shall be identified by the concerned Village level Disaster Management committees and list shall be forwarded to the DDMA. Mainly these buildings shall be the hospitals. Schools, community centres, mahila mandal bhawan . offices of SDMS, BDOS , Courts Buildings etc.

iii) Restoration of the Damaged Houses :- The govt will assist the people to get their houses repaired by the agencies In the minimum time span so that they are able to return to their normal life cycle.

7.2) LONG TERM RECONSTRUCTION PLAN

Once the minimum basic infrastructure and the buildings repaired or restored the departments at the district level shall take immediate action for long term reconstruction of the area and all the elements which are necessary to minimize the vulnerability of the fresh construction shall be incorporated in the plan and implemented properly. This will include the reconstruction of whole basic infrastructure if it has been damaged completely or beyond repair.

7.3) FINANCIAL GRANTS AND PROVISION

For restoration of the damaged buildings /houses either the sate govt. has to make provisions for financial grants or the following strategy can be adopted :-

i) Insurance of the Buildings :- Either the houses or the buildings should be insured in the district Shimla either by the owner or through the state govt. and on damage the return so received from the Insurance companies shall be utilized for reconstruction.

ii) Short Term Loans:- The govt. should extend the facility of short term loans to the affected families on subsidized interest rates.

iii) Assistance/financial aid:- The govt. may provide the assistance /aid to the affected families may be through the existing schemes like Indira A Was Yojna/ Rajiv Awas Yojna /Atal Awas Yojna etc or another special aid to the affected families schemes so the families under stress can be helped out in the reconstruction their houses.

iv) Grants :- Another grants can be given to the affected families so that the person in distress can be helped out.

7.4) MEDICAL REHABILITATION

The persons who have witness the disaster might have been passing through the trauma or agony of losing their near and dear ones as well as the wounds they have received and the mental stress through which they are passing through can't be imagined by the other persons. Therefore their physiological and psychological rehabilitation is must.

i) Physiological Rehabilitation :- The Chief medical officer Shimla shall constitute the appropriate teams which will visit the specific areas and regularly medically examine the persons so affected and will give the treatment.

ii) Psycho-social interventions :-The another intervention required on behalf of the CMO shall be the psychological treatment to the affected persons who have witnessed the trauma of the disaster.

CHAPTER -8

STANDARD OPERATING PROCEDURES

The vulnerability of District Shimla to various hazards is HIGH. Therefore to reduce the risk associated with these hazards it is imperative on all the govt. departments, agencies and people at the district level to work out in a planned and integrated manner to reduce/mitigate the affect of such disaster. The planned and integrated approach is only possible when we have clear cut roles to play during different cycles of Disaster management Cycle i.e. Pre disaster Phase, disaster phase, post disaster phase. Therefore keeping in view the SOP assigned to the different departments by the SDMA, the sops for departments at the district level shall be as follow:-

8.1) DEPARTMENT OF REVENUE

Department of Revenue will be nodal department for interacting with the SDMA through DDMA and compiling all data for the disaster through DEOC and declaring the disaster level whether it is the district level disaster or the sub divisional level.

8.1.1) PREPAREDNESS FUNCTION

Establish the infrastructure of DEOC and maintain it in a state of readiness through the Relief branch.

Train personnel for the management of the DEOC.

Ensure the basic facilities for the personnel who will work at the DEOC.

To coordinate the preparedness function of all the departments.

Annual report to the SDMA.

Establish communication link with all the stakeholders at all levels for the purpose of receiving and sending the warning and information exchange through DEOC.

8.1.2) MITIGATION

Ensure that the funds allocated under District Disaster Mitigation Fund are being utilized properly for the said purpose.

Ensure that the structural and non structural measures are being taken by all the line departments.

Establish the warning system between the DEOC and the high risk zones.

Monitor implementation of the construction norms for all types of construction and building

Ensure that the departmental plans at the district levels are prepared by all the departments.

8.1.3) ALERT AND WARNING STAGE

® Maintain contact with the warning agencies and gather all possible information regarding the alert.

® Ensure activation of the DEOC.

® All the ESFs to be activated and advised to remain in the state of readiness.

® All assessment reports to be prepared and sent to the SDMA.

8.1.4) RESPONSE

- ® To activate the DEOC during the emergency situation .
- ® To ensure the presence of all the departments in the DEOC.
- ®To declare the disaster as District Level keeping in view the damage assessment report received from the Rapid Damage Assessment Team.
- ®To distribute the relief to the affected families and rehabilitation in the shelter homes.
- ® Coordinate with the GREF, Army deployed for search and rescue .
- ® Convene meeting with NGO for coordinating the relief search and rescue operations.

8.1.5) RECOVERY AND REHABILITATION

- ® Ensure preparation of the recovery and rehabilitation plan as per the Guidelines issued by the SDMA.
- ® Keep the SDMA informed of the situation through DEOC.
- ® To disburse the District Disaster mitigation Fund to different agencies for regenerating the infrastructure resilient to disaster.

8.1.6) CHECKLIST : ATTACHED AS ANNEXURE -10

8.2) HOME DEPARTMENT

8.2.1) PRIMARY TASK

- ®To maintain Law and order in the affected area.
- ® To help and coordinate the search and rescue operation with Civil defense and other agencies.
- ®To ensure protection of the property and valuables of the affected families.

8.2,2) PREPAREDNESS FUNCTIONS

- ®To prepare the district plan for responding to any type of disaster.
- ® To constitute the Rescue and Search Teams and train these teams effectively in collaboration with the DDMA.
- ® To prepare the inventory of human resources and other equipments available within the district with police, Civil Defense and Home guards and to position it geographically in such a way that less transportation time be taken to get these resources available for Search and rescue operations.

8.2.3) MITIGATION FUNCTION

- ® Make mitigation plan at the district level with respect to positioning of the resources.

8.2.4) ALERTS AND WARNINGS

- ® To issue alert to the resources to prepared for movement to the affected areas for search and rescue.
- ® To check that the police communication network be in operative form during disaster.

8.2.5) RESPONSE

- ® To attend the emergency meeting at the DEOC.
- ® Send the search and rescue teams as per the Incident Action Plan.
- ® maintain law and Order in the affected areas.
- ® To ensure the safety of the people and property of the affected areas.
- ® To manage and restore traffic movement in the area.

8.2.6) RECOVERY AND REHABILITATION

- ® To assist the local administration in removing the dead bodies and the debris in the affected area.
- ® Participation in the reconstruction and rehabilitation operation if situation so warrants.

8.2.7) CHECKLIST:- ATTACHED AS ANNEXURE -10

8.3) TRANSPORT DEPARTMENT

8.3.1) PRIMARY TASK

- ® Arrange and organize the transport for the movement of the emergency support functions teams to the affected teams.
- ® Organize and facilitate the supply of the essential commodities and evacuation of the affected people to the safer places.
- ® Organize transportation for the supply of relief material to the affected areas.

8.3.2) PREPAREDNESS

- ® Designate one of the officer as nodal officer for management of the disaster in the district.
- ® Prepare the Disaster Management Plan of the department at the District level.
- ® To identify and designate the buses bunches which can be plied in response to the specific disasters.
- ® Issue standing instructions to the private bus and truck operators and assign the responsibilities for them in case of disaster situation.

8.3.3) MITIGATION

- ® To prepare the departmental plan at district level and ensure its implementation.
- ® to conduct mock drills during non disaster time so that at the time of disaster plan does not fail.

8.3.4) ALERT AND WARNING

- ® To depute the officer to DEOC at the time of warning.
- ® Ensure the transportation teams along with the resources is ready to respond.

8.3.5) RESPONSE

- ® Disaster Transportation teams are deputed to transport the ESF teams to the disaster affected areas.
- ® To depute the relief transportation teams to the affected areas.
- ® To depute the evacuation transport teams.

8.3.6) RECOVERY AND REHABILITATION

- ® To assist in the transportation of the reconstruction materials.

8.4) PUBLIC WORKS DEPARTMENT

8.4.1) PRIMARY TASK

- ® To ensure the roads are constructed and maintained in such a way to have less vulnerability to disaster.
- ® To ensure that the construction codes as evolved by the BMTPC be complied with in all construction activities.
- ® To identify the critical and lifelines building and their retrofitting so as to be made earthquake resistant compliant.

8.4.2) PREPAREDNESS

- ® To designate one officer as liaison officer for DEOC.
- ® To dovetail the mitigation measures in all construction activities so as to make the infrastructure to be developed less vulnerable to the disasters.
- ® To prepare the departmental disaster management Plan at the district level and conduct mock drills accordingly.
- ® To make the resources inventory of the person and equipments of the PWD department and position it in such a way that time is optimized to reach the affected areas.
- ® To procure the resources which are needed for the better management of the disaster evacuation of the people from the damaged building.
- ® To use the budget provided to the department for mitigation purposes.

8.4.3) MITIGATION

- ® To implement the mitigation strategy criterion in the developmental plans of department at the district level to make the future construction earthquake and other disaster resistant.
- ® To identify the equipments required for mitigation of the impact of the disaster and its acquisition in a systematic way.

8.4.4) ALERTS AND WARNINGS

- ® Issue warning and alert to the resources of the PWD to be ready to respond.
- ® Position the resources in such a way to optimize the transportation time to the affected area.
- ® To send the nodal officer to attend the meeting of DEOC for preparation of IAP.

8.4.5) RESPONSE

- ® To send the Infrastructure restoration teams to the affected areas so as to make the other teams reach the affected areas without any loss of time.
- ® To send the resources to assist the search and rescue teams in order to expedite the evacuation of the affected peoples .
- ® To restore the roads to the motor able conditions.

8.4.5) RECOVERY AND REHABILITATION

- ® Carry out the detail technical assessment of the affected areas and prepare the recovery plan and implement it.
- ® To construct the temporary shelters in the affected areas.
- ® Repair the buildings and reconstruction of the buildings.

8.5) IRRIGATION AND PUBLIC HEALTH DEPARTMENT

8.5.1) PRIMARY TASK

- ® To act as nodal agency for floods warnings.
- ® To ensure the water supply in the affected areas.
- ® To take necessary action for mitigation of the vulnerability to water supply schemes so that at the time of disaster the drinking water supply not be disturbed.
- ® To prepare the Disaster Management plan of the Department at the district level.

8.5.2) PREPAREDNESS

- ® To designate one officer for DEOC .
- ® To manage the effective management of the flood forecasting and dissemination of the early warning system.
- ® To identify the flood prone areas in the district and take mitigation measures ,
- ® To constitute the dedicated team in every subdivision for the management of proper water supply in case of the disaster.

8.5.3) MITIGATION

- ® make district mitigation plan and dovetail all the measures.

8.5.4) ALERTS AND WARNINGS

- ® Alert DEOC and the district teams of the IPH .
- ® Watch the behavior of the flood pattern and be in touch with the DEOC.

8.5.4) PREPAREDNESS

- ® To ensure the water supply through the dedicated teams.
- ® To start the repair and restoration works immediately .

8.5.5) RECOVERY AND REHABILITATION

- ® Carry out the EIA of the disaster.
- ® Repair and restore the drinking water supply and sewerage system.

8.6) DEPARTMENT OF AGRICULTURE

8.6.1) PRIMARY TASK

- ® To act as nodal departments for hailstorms and drought.
- ® To undertake the rapid damage assessment of the crops.
- ® To assist the farmers in restoration of the loss.

8.6.2) PREPAREDNESS

- ® To prepare the district disaster management Plan.
- ® To study the areas which are prone to the drought and hailstorms.
- ® To identify the equipments and the other resources to deal with the such situations.

8.6.3) ALERTS AND WARNINGS

- ® Check and procure the materials which are required after the disaster.
- ® provide information to the farmers regarding dos and don'ts.

8.6.4) RESPONSE

- ® Depute one responsible officer for DEOC
- ® Estimate the requirements of the seeds and material required to mitigate the loss.

8.6.5) RECOVERY AND RESTORATION

- ® Quantify the losses of the crops and the measures to be taken to recoup the same.
- ® assist the farmers to sow the less time period crop to recover the loss.
- ® Execute the schemes to eliminate the drought effects.

8.7) DEPARTMENT OF ANIMAL HUSBANDRY

8.7.1) PRIMARY TASKS

- ® To prepare the plan for the safety of the live stocks in the districts.

- ® Prepare protocol for the disposal of the bodies and carcasses of the animals.

8.7.2) PREPAREDNESS

- ® Identify the areas which are likely to be affected with the disasters.
- ® Prepare the inventories of the resources available and to be acquired for the disaster management.
- ® Capacity building of the hospitals and train the veterinary health team in every dispensary.
- ® Identify the places for camping of the animal along with the method /procedure for disposal of the dead animals.

8.7.3) WARNING AND ALERTS

- ® To alert all the veterinary health teams in the dispensary along with the resources.
- ® To arrange the equipment in such a way to reach the sites at the shortest possible time.

8.7.4) RESPONSE

- ® Depute one liaison officer In the DEOC.
- ® Take action as per the IAP.
- ® Ensure the proper medicines and check up of the animals along with the proper disposal of the dead animals.

8.7.5) AFTER DISASTER

- ® Proper assessment of the losses.
- ® Make available the good quality animals to the farmers.

8.8) FOREST DEPARTMENT

8.8.1) PRIMARY TASK

- ® Plantation of fodder trees .
- ® Prevention of forest fires.
- ® Provide the wood and bamboos for reconstruction purpose.

8.8.2) PREPAREDNESS

- ® Prepare the disaster management plan.
- ® forest fires prone areas are to be identified and the measures taken for its mitigation and prevention.
- ® Organize community awareness programmes for forest fire prevention.

8.8.3) DISASTER PERIOD

- ® Depute one officer for DEOC.

®Rush the forest fire teams to the affected areas.

8.8.4) POST DISASTER

®Assessment of the disaster.

Ensure plantation of the fodder and other trees in the affected areas.

8.9) DEPARTMENT OF HEALTH AND FAMILY WELFARE

8.9.1) PRIMARY TASK

®To provide overall medical and health services in the district

® To provide the trauma services .

®To maintain all the hospitals in the district with respect to the availability of Medicines and health human resources

8.9.2) DURING PREPAREDNESS

® To prepare the departmental Health disaster management Plan.

® To designate the nodal officer to attend the DEOC.

®To identify the areas which are prone to epidemics may be the water borne diseases or the air borne etc.

® Ensure the mock drills of the plan so prepared above.

® To train the human resources involved in providing the medical aid in the trauma centers and the hospitals as well as on the spot.

®To identify the likely diseases associated with each type of disaster and ensure the procurement of resources to deal with such scenario.

®To take necessary resources for prevention of any epidemic spread.

®To constitute the medical health teams which will rush to the site of disaster to provide first aid medical support and other teams which will manage the trauma centers and hospitals and to conduct such mock drills to train them properly.

8.9.3) NON DISASTER TIME –MITIGATION

®In accordance with the DDMA conduct the structural and non structural survey of the life lines buildings i.e. hospitals which will serve trauma centers in case of disaster and take all measures to mitigate the effect of such disasters on these buildings.

®Ensure that budget be allocated in the annual budget of the department for such measures and the work is completed before wasting much time.

8.9.4) ALERT AND WARNINGS

®As per the warning received from the DEOC , to activate the all teams in the district for the movement to the site of disasters

® To activate the resources which can be used at such disaster.

8.9.5) DURING DISASTER –RESPONSE

® Immediately attend the DEOC for Incident Action Plan.

® Mobilize medical teams along with resources to the suite of disasters.

® Provide immediate first aid medical treatment on the spot and refer the affected persons to the trauma centres coordination there of.

® Ensure adequate supply of blood in the hospitals by activating the Volunteers blood donors services as per the lists maintained in the hospitals.

® Ensure the generator based power supply in the trauma centres .

8.9.5) AFTER DISASTER

® To ensure the prevention of epidemic .

® To ensure the establishment of the check posts at the entry and exit points of the area to prevent the spread of the epidemic.

® Establish the public health helpline to answer the queries of the public.

8.10) DEPARTMENT OF FOOD, CIVIL SUPPLIES AND CONSUMER AFFAIRS

8.10.1) PRIMARY TASK

® To arrange the uninterrupted supply of the food and other essential items in the district.

® To make the inventories of such supplier who will make such supply in case of disaster.

® To ensure that no hoardings and profiteering of the commodities take place in the district during such disaster.

8.10.2) PRE DISASTER -PREPAREDNESS

® To prepare the district Disaster management plan of the department and updation of it quarterly.

® To train the staff regarding putting up of the stalls for distribution of essential items in the disaster affected areas.

® To prepare and train the teams which will manage such camp office for distribution of the food grains, LPG, Kerosene oil etc for the daily consumption of the affected public.

® To train the Food preparation teams in the community messes .

To coordinate with NGO in preparation of food in the community messes

® To assess the quantity of food grains and other essential items required for sustaining life in the disaster affected area along with its procurements.

8.10.3) NON DISASTER PERIOD –MITIGATION PLAN

® Prepare and implement the mitigation plan of the department in the district.

8.10.4) DURING DISASTER – RESPONSE

® To assess the quantity of food grains along with the other essential items required for sustaining life in the area and supply thereof.

® To assess the need of running the community messes and coordination hereof with the local community and NGO.

® To ensure the supply of LPG and other resources which are required for mobilization of the resources to the affected areas be sufficient and maintained properly.

8.10.5) AFTER DISASTER

®To establish the new PDS points as per the changed scenario.

®To issue the duplicate ration cards to the affected families.

STANDARD OPERATING PROCEDURES FOR DIFFERENT DISTRICT DISASTER MANAGEMENT TEAMS

8.11) DISTRICT DISASTER MANAGEMENT COMMITTEE

This is Crisis management group established at the district level comprising of such officers from all the nodal departments who are head of the offices /departments and are capable of taking decision on behalf of the departments at the district level .

8.11.1) PRIMARY TASKS

® To prepare the district Disaster Management plans of every department in consultation with District Disaster manage plan of the district.

® To constitute the different disaster management teams at the department level and their proper capacity building.

®To incorporate all the mitigation measures in the departmental developmental plans and allocation of annual budget for such measures and implementation of such developmental projects on the priority basis.

®To participate and conduct the mock drills for the disaster management practices and awareness programmes for the community.

®To give suggestion on the disaster management techniques and issues which are to be taken in the meeting of DDMA.

8.11.2) DURING NON DISASTER PERIOD-PREPAREDNESS

® To train all the teams of the district.

®To update the resources available within the district.

® To get the mitigation plans of the different departments prepared and its implementation.

8.11.3) DURING PRE DISASTER PERIOD - ALERTS AND WARNING

- ® To meet in the DEOC for preparing for the disaster.
- ® To alert all the departmental teams to be ready for such eventualities.
- ® To prima facie evaluate the situation and allocate the resources accordingly.
- ® To disseminate the warning to the level of general public and issue advisory accordingly.

8.11.4) DURING DISASTER PERIOD – RESPONSE

- ® To participate in the DEOC meeting and preparation of the Incident Action Plan.
- ® To send the different operation teams as per the situation to the affected areas and their monitoring as per the Incident Command System.
- ® To mobilize the resources as per the need of the hour to the affected areas.

9.11.5) Post Disaster Period – Recovery and Rehabilitation :-

- ® To participate in the recovery and reconstruction of the affected areas as per the plan.
- ® To participate in the process of psycho-social recovery of the community.

8.12) DISTRICT DISASTER INFORMATION MANAGEMENT TEAMS

These teams are constituted under the SDMs, Tehsildar/N Tehsildar and members from the Public Information departments, and other line departments, revenue kanungos and patwari, Secretary gram panchayat and the local bodies members at the village level / block level / Tehsil / Sub division which will be operating in coordination to each other and disseminating information to the DEOC where the district Information teams headed by the DRO and members from the Public Information department will process these information and take further orders from the Incident Commander/ Deputy Incident commander as the case may be.

8.12.1) PRIMARY TASKS

- ® To establish the communication among the teams at different levels.
- ® To participate and conduct the mock drills for the disaster management practices and awareness programmes for the community.

8.12.2) DURING NON DISASTER PERIOD - PREPAREDNESS

- ® To train all the teams at different levels of the district.
- ® To update the resources available within the district.
- ® To get the mitigation plans of the different departments prepared and its implementation.

8.12.3) DURING PRE DISASTER PERIOD - ALERTS AND WARNING

- ® To immediately meet at the different levels and set up the communication among different levels team.
- ® To alert all the departmental teams to be ready for such eventualities.

- ® To prima facie evaluate the situation and allocate the resources accordingly.
- ® To disseminate the warning to the level of general public and issue advisory accordingly.

9.12.4) During Disaster period - Response :-

- ® To send the information of losses and the other resources required to the DEOC and advise the public accordingly.
- ® To mobilize the resources as per the need of the hour to the affected areas.

8.12.5) POST DISASTER PERIOD – RECOVERY AND REHABILITATION

- ® To participate in the recovery and reconstruction of the affected areas as per the plan and dissemination of the information on daily basis to the DEOC/DDMA.
- ® To participate in the process of psycho-social recovery of the community.

8.13) SEARCH AND RESCUE TEAMS

8.13.1) These teams will consists of the police, home guards, civil defense and volunteers from NSS, NYK , Local villagers etc. These teams will be deployed at the village level of the disaster prone areas and will primarily be entrusted the work of search , rescue operation with evacuation, shifting of the affected persons to the First Aid centres and shelter homes.

8.13.2) During pre disaster period these teams shall be trained properly and mock drills will be conducted to respond them hassle free during disaster period.

8.14) EMERGENCY HEALTH TEAMS

8.14.1) These teams shall be constituted by the CMO at the civil Hospital levels and shall be assigned the areas of operation . During pre disaster phase these teams will be trained properly and will strengthen further by deploying further teams from the district level in the disaster prone Areas.

8.14.2) The other Health teams shall be deployed at each hospital in the district to attend the affected and shifted persons from the disaster prone areas for treatment.

8.14.3) The other teams shall be deployed for doing post mortem as required for the legal purposes.

8.14.4) The other teams shall be deployed during recovery and reconstruction period for psycho-social reconstruction of the society/community.

These teams during disaster period will take up their responsibilities as assigned to them either on site or in the hospitals and thereafter during recovery and reconstruction period .

8.15) RAPID DAMAGE ASSESSMENT TEAMS

These teams shall be constituted by the revenue department with members from the line departments to assess the damages done by the disaster and sending immediate report to the DEOC.

8.15.1) DURING PRE DISASTER PHASE

In this period these teams will be trained properly and communication between these teams and DEOC will be strengthened.

8.15.2) DURING DISASTER

These teams will rush to the affected areas and send the immediate report of the extent of damages.

8.16) RAPID RELIEF DISTRIBUTION TEAMS

These teams will be constituted by the revenue departments with official from the revenue department only and will distribute the necessary relief as per the relief manual.

8.17) FOOD AND OTHER ESSENTIAL ITEMS DISTRIBUTION TEAM

These teams will be constituted by the DFSC and will be deployed in the areas to manage the essential supply of food grains and other essential commodities during the disaster phase .

8.18) FODDER MANAGEMENT TEAMS

These will be constituted by the Deputy Director animal Husbandry village wise to assess the demand of fodder and distributing the fodder to the families affected.

8.19) ANIMAL HEALTH AND CARE TEAMS

Dy Director Animal Husbandry will constitute the village wise such teams which will during the pre disaster phase will liaise with the local community . During disaster period these teams will visit every village and treat the affected animals.

8.20) TRANSPORTATION MANAGEMENT TEAMS

These teams will be constituted by the Transport Department for effective movements of the IRT members to the affected areas as well as the transportation of the other relief related material.

8.20.1) During pre disaster period these teams will be properly trained so that at the time of the disaster these can without any panic can transport the resources.

8.21) INFRASTRUCTURE RESTORATION TEAMS

These teams will be constituted by the PWD department for immediate restoration of the affected infrastructure i.e. roads, bridges, lifeline buildings etc. These teams will be trained properly before pre disaster phase and during disaster period immediately deployed in the restoration work.

8.22) WATER SUPPLY RESTORATION TEAMS

These teams will be constituted by the IPH departments and immediately restore the drinking water supply to the affected inhabitation . During pre disaster phase these will be trained properly.

8.23) POWER SUPPLY RESTORATION TEAM

These teams will be constituted by the Electricity department village wise and during the pre disaster phase these will be trained properly and will liaise with the local community . While during disaster these will come into action at once and restore the power supply to the affected areas as well as to the life line buildings . Also will make arrangements for the power supply to the temporary shelter homes.

8.24) RECONSTRUCTION OF INFRASTRUCTURE TEAMS

These teams will be constituted by each department like PWD, IPH, HPSEB, HIMUDA etc for initiating the reconstruction activities in the areas.

8.25) PSYCHO- SOCIAL RECONSTRUCTION OF COMMUNITY TEAMS

These teams will be constituted by the health, social welfare department including NGO for the psycho treatment of the society so that they can overpower the trauma of the disaster. These teams will come into action once the SAR is over and reconstruction and rehabilitation programme is started.

CHAPTER -9

FINANCIAL ARRANGEMENTS

With change of paradigm shift in DM from the relief-centric to proactive approach of prevention, mitigation, capacity building, preparedness, response, evacuation, rescue, relief, rehabilitation and reconstruction, effort would be made to mainstream and integrate disaster risk reduction and emergency response in development process, plans and programmes of the Government at all levels. This would be done by involving all the stakeholders – Government organisations, research and academic institutions, private sector, industries, civil society organization 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 weight age 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.

9.1) DISASTER RESPONSE AND MITIGATION FUNDS

District Disaster Response Funds and District Disaster Mitigation funds would be created at the District Level as mandated under section 48 of the Act . The disaster response funds at the district level would be used by the DDMA towards meeting expenses for emergency response, relief, rehabilitation in accordance with the guidelines and norms laid down by the Government of India and the State Government. The mitigation funds shall be used by the DDMA for the purpose of mitigation as per the HP State Disaster Management Rules 2011.

9.2) RESPONSIBILITIES OF THE STATE DEPARTMENTS AND AGENCIES

All State Government Departments, Boards, Corporations, PRIs and ULBS will prepare their DM plans including the financial projections to support these plans. The necessary financial allocations will be made as part of their annual budgetary allocations, and ongoing programmes. They will also identify mitigation projects and project them for funding in consultation with the SDMA/DDMA to the appropriate funding agency. The guidelines issued by the NDMA vis a vis various disasters may be consulted while preparing mitigation projects.

9.3) TECHNO-FINANCIAL REGIME

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

CHAPTER -10

GO-NGO COORDINATION

10.1) INSTITUTIONAL AND LEGAL FRAMEWORK

The DM Act 2005 recognizes that sometimes the development patterns that do not recognise disaster risk and vulnerability in the specific geographic areas may induce disasters. The proactive approach in the DM Act 2005 to address disaster risk and vulnerability through pre-disaster preparedness and mitigation activities also envisage accountability and multi stakeholder participation, including coordination of the activities of the NGOs at various levels. Sections 30 (2) (xix) of the Act mandate the DDMA for collaboration with stakeholder agencies including NGOs for the purpose of improving the effectiveness of DM. Similarly the Act mandates NGOs to act in an equitable and non-discriminatory manner for the purpose of assisting or protecting the disaster affected communities or for providing relief to the affected communities or while dealing with any effects of threatening disaster situations and has fixed the responsibility to monitor this on DDMA's side section 34 (I). The above provisions ensure that the concerned DM interventions being addressed are supported and facilitated by the civil society organisations working at the grass roots and also takes care of the ground realities.

Section 30 (2) (xix) of the Act stipulates that the DDMA shall "advise, assist and coordinate the activities of the Departments of the Government at the district level, statutory bodies and other governmental and non-governmental organisations in the district engaged in the disaster management" and Section 24 (I) lays down that the DDMA shall "ensure that the non-governmental organisations carry out their activities in an equitable and non-discriminatory manner". The Act also directs the State Government under Section 38 (2) (a) to coordinate "actions of different departments of the Government of the State, the State Authority, District Authorities, local authority and other non-governmental organisations".

Sections 35 and 38 specifically emphasize the coordination of actions with NGOs. The National Policy on Disaster Management (NPDM) also states the national vision for community mobilization and participation in DM and aims to provide momentum and sustenance through the collective efforts of all government agencies and NGOs. There is emphasis on community based disaster management, including last mile integration of the policy, plans and execution and early warning dissemination. Promoting a productive partnership with NGOs is a prominent thrust area in the National and State policies for Disaster Management-2011.

There is a large scope for improving the engagement of NGOs in DM and on efficiently utilizing their unique advantages and core competencies by strengthening humanitarian coalitions, alliances and NGO networks. There is also need to strengthen public awareness, capacity building and knowledge management through CBOs and NGOs. Institutional mechanisms for the advocacy and engagement of NGOs with government agencies on DM concerns requires to be strengthened. Replication and scaling up of community level good practices has to be promoted.

10.2) ADVANTAGES OF INVOLVING NGOS

- i. NGOs can play a very important role in mobilizing communities and in linking PRIs/ULBs with corporate sector entities for initiating DRR related activities.
- ii. The strong linkages which NGOs have with grassroots communities can be effectively harnessed for creating greater public awareness on disaster risk and vulnerability, initiating appropriate strategies for strengthening the capacity of stakeholder groups to improve disaster preparedness, mitigation and improving the emergency response capacities of the stakeholders.
- iii. In addressing the emerging concerns of climate change adaptation and mitigation, NGOs can play a very significant role in working with local communities and introducing innovative approaches based on the good practices followed in other countries.
- iv. NGOs can bring in the financial resources from bi-lateral and multilateral donors for implementing pragmatic and innovative approaches to deal with disaster risk and vulnerability, by effectively integrating and converging the various government programmes, schemes and projects to create the required synergy in transforming the lives of at-risk communities.

10.3) Actions to be taken by the DDMA

- i. Developing a database of NGOs, CBOs and Faith Based Organisations at all levels working in the field of disaster management and emergency response and other others focusing on geographic outreach and thematic capacities of the organisations.
- ii. Developing the capacity of identified NGOs, CBOs and organisations in disaster management and emergency response.
- iii. Constitution of Inter-Agency Group (IAG) for the district with an objective to:-
 - ☐ Promote and institutionalize unified response strategy in humanitarian crisis.
 - ☐ Mainstream the emergency preparedness as in integrated development strategy.
 - ☐ Systematize the emergency response mechanism.
 - ☐ Bringing in the culture of “working together” in emergencies and normalcy.
 - ☐ Engagement in activities that will build the capacities of stakeholders and local communities to cope with calamities.
- iv. Development of Criteria for membership of IAG: Any of the following criteria is proposed to become a member of the District IAG:-
 - ☐ District Level agencies working in emergency response and preparedness for minimum of five years.
 - ☐ International and national funding agencies supporting emergency preparedness and community led risk reduction initiatives for a minimum period of three years.
 - ☐ Academic and /or research institutions actively involved on disaster related knowledge management and practices.

Membership claim may be scrutinized by a committee of the District IAG for authentication of the prospective member organization.

**Table -10.3:-
Action Points**

No.	ISSUES	ACTION POINTS
1.	Geographic spread of NGOs	<p>Develop a database of NGOs at all levels working on disaster management focusing on geographic outreach and thematic capacities of the organisations.</p> <p>(Action: DDMA with the help of NGOs)</p>
2.	Volume of support provided by NGOs	<p>Compile statistics on quantum of support provided by NGOs at all levels, both international and national.</p> <p>(Action: DDMA)</p>
3.	Coordination	<p>Establishing inter agency mechanisms for coordination and networking activities (information and knowledge management, training and capacity building, collaborative advocacy, quality and accountability) at all levels.</p> <p>(Action: DDMA)</p>
4.	Accessibility	<p>Establish protocols for cooperation and ensure access to the affected areas with support from government agencies at respective levels like NDRF and SDRF that have good logistics base to reach inaccessible areas.</p> <p>(Action: DDMA, NGOs, CBOs)</p>
5.	Hazard and vulnerability based planning	<p>Conduct community centric hazard and vulnerability analysis at all levels, and develop disaster management plans in accordance.</p> <p>(Action: DDMA, NGOs)</p>

GO-NGO COORDINATION

6.	Community participation	<p>Ensure community participation in assessment, planning, implementation and monitoring of activities at all levels.</p> <p>(Action: DDMA, NGOs, CBOs)</p>
7.	Mainstreaming of Disability Issues in DM	<p>Support the most vulnerable groups through mitigation activities as well as disaster preparedness and response, with a particular focus on the special needs of the Persons with Disabilities (PWDs).</p> <p>(Action: DDMA, NGO)</p>
8.	Gender Mainstreaming	<p>Make women’s as well as men’s concerns and experiences an integral dimension in the design, implementation, monitoring and evaluation of policies and programs such that inequalities between men and women are not perpetuated through the routine operations of DM.</p> <p>(Action: DDMA)</p>
9.	Focus on most vulnerable rather than only on epicenter	<p>National level: Advocate with all actors to reach out to gap areas State level: Coordinate among actors to identify gap Areas District and Local level: Ensure targeting with equity and outreach to all excluded areas.</p> <p>(Action: District NGO Task Forces in DM)</p>

10.	Rural-urban diversity	<p>Develop the capacities of NGOs or specialized civil society agencies at all levels to manage urban as well as rural disasters and accordingly make investments.</p> <p>(Action: DDMA)</p>
11.	Adherence to standards	<p>National level: Develop minimum standards for India State level: Develop minimum standards for the state District and Local level: Develop capacities for adherence to minimum standards through collective and coordinated efforts of all stakeholders</p> <p>(Action: DDMA, NGOs, CBOs)</p>
12.	Transparency and accountability	<p>Develop an agreed framework of accountability for all levels and mechanisms to bring in transparency.</p> <p>(Action: DDMA)</p>
13.	Do No Harm	<p>Advocacy at all levels on Do No Harm through disaster response and development interventions.</p> <p>(Action: District NGO Task Forces in DM)</p>
14.	Exit strategy	<p>Ensure that the NGO programmes have an exit strategy to link with long term recovery/rehab/development programs of other NGOs or the government.</p> <p>(Action: District NGO Task Forces in DM)</p>

(Source: NDMA Guidelines on the Role of NGOs in Disaster Management)

10.4) COORDINATION OF ACTIONS OF OTHER ACTORS

Disasters affect all aspect of human life and all aspects of development. Therefore, Disaster Management is a multi-agency function. It involves actions by all departments, organization and agencies. In short, it involves all departments of the State Government, Central Government, Armed Forces, civil society and commercial organization (NGOS, CBOs, Faith Based Organization, Traders Organisations, Corporate Sector), international organisations working in the field of disaster response, UN Agencies etc. It is therefore, important that roles and responsibilities of each stakeholder is laid down during normal time and coordination mechanism worked out so that the same works during emergencies. It is must that regular meetings with all the stakeholders are held at least once in six months or a year. And all stakeholders are also associated in the mock drills to test their preparedness and clarity of roles and responsibility.

CHAPTER 11

MONITORING AND EVALUATION

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

- a) The DDMA shall regularly review the implementation of the plan.
- b) In order to improve the plan the DDMA would check the efficacy of the plan after any major disaster/emergency in the district and see what did work and what did not work and make amendments to the plan accordingly.
- c) As per Sub Section (4) of Section 31 of the Disaster Management Act, 2005 the plan would be reviewed and updated annually and the year in which the plan has been reviewed would be clearly mentioned in shape of header in each page of the plan.
- d) Resource inventory of the district fed into the IDRN would be regularly updated and appended to the plan.
- e) Names and contact details of the officers/officials who are the nodal officers or the incharge of resources to be updated on regular basis.
- f) A soft copy of the plan would always be kept in the DDMA website for reference by all concerned.
- g) A Copy of the plan would be sent to all the stakeholder departments, agencies and organisations so that they know their role and responsibilities and they are also prepare their own plans.
- h) Regular Mock Drills should be conducted to test the efficacy of the plan and check the level of preparedness of various departments and other stakeholders.
- i) Regular training and orientation of the officers/officials responsible to implement the plan should be done so that it becomes and useful document to the district administration.
- j) Regular interaction and meetings with the CPMFs and Army or any other central government agency would be done by the DDMA should that there is no problem of coordination during disasters. The representatives of these organisations should be invited as expert for the DDMA meeting. A copy of the DDMP should also be shared with them.
- k) The DEOC would assist the DDMA in keeping the plan in updated form and collecting, collating and processing the information.
- l) The DDMP would be comprehensively reviewed in the year 2013 latest by December and incorporating feedback from the departments and field officers.



ANNEXURE

ANNEXURE -1

RESOURCES

SR. NO	EQUIPMENT/RESOURCES/VALUE	No/SPECIFICATIONS	DEPARTMENT/ LOCATION	REMARKS
A	DDMA(MACHINERY /EQUIPMENT)			
1	DCH Concrete Cutter	To cut angle iron and steel	District Fire office Shimla Ridge	Purchased By DDMA in the year 2012 and handed over to DFO Shimla
2	GENERATOR	DISEL AND KEROSENE RUN	District Fire office Shimla Ridge	Purchased By DDMA in the year 2012 and handed over to DFO Shimla
3	SEARCH LIGHT 2 KM RANGE	2KM 10 HRS BATTERY BACKUP	ALL SDM	PROCURED BY DDMA
4	PA SYSTEM AHUJA BATTERY	SPEAKER AND MIKE	ALL SDMS AND TEHSILDAR	PROCURED BY DDMA
5	PA SYSTEM 16 AMP	CORDLESS SYSTEM	ALL SDMS	PROCURED BY DDMA
6	DCH BREAKER	CONCRETE BREAKER	District Fire office Shimla Ridge	PROCURED BY DDMA
7	DCH BOLT	DIFFERENT SIZES	District Fire office Shimla Ridge	PROCURED BY DDMA
8	DCH DISC	DIFFERENT SIZES	District Fire office Shimla Ridge	PROCURED BY DDMA
9	DCH 13" DISC	DIFFERENT SIZES	District Fire office Shimla Ridge	PROCURED BY DDMA
10	BREAKER ACCESSORIES	DIFFERENT SIZES	District Fire office Shimla Ridge	PROCURED BY DDMA
11	LADDER	7* 10 FEET	DDMA	PROCURED BY DDMA
12	DRILLER	BOSCH	DDMA	PROCURED BY DDMA
13	TARPAULIN	100 NO	DDMA	PROCURED BY DDMA

ANNEXURE

B SUB DIVISION SHIMLA (U)				
	Snow cutter			----
14	JCB	one	Div 1 PWD	-----
15	Bulldozer	one	Div 1 PWD	-----
16	Recovery vehicle	Two	SP Shimla	-----
17	Trucks	6	MC, Div 1	-----
18	Tata 407/pick up	1	MC	-----
19	Fire Tender	4	Fire office	-----
20	Generator	2	Fire office	-----
21	Ladders	4	Fire Office	-----
22	Ropes	10	Fire Office	-----
23	Public Address System	2	SDM (U)	-----
24	Search Lights	2	SDM (U)	-----
25	Manual digging equipments	12	Div 1 PWD	-----
26	masons	10	Div 1 PWD	-----
27	labour	20	Div 1 PWD	-----
28	Concrete cutter	2	Fire office	-----
29	Tree cutter	2	Fire office	-----
30	Home guards	20	Fire office	-----
31	Nss volunteers	21	SDM (U)	-----
32	Blood donors list	yes	SDM (U)	-----
33	Cbos	3	SDM (U)	----
C SUB DIVISION SHIMLA (R)				
34	Snow cutter	--		----
35	JCB	2	DIV 2 PWD	-----
36	Bulldozer	---		-----
37	Recovery vehicle	-----		-----
38	Trucks	3	DIV 2 PWD	-----
39	Tata 407/pick up	1	DIV 2 PWD	-----
40	Generator	---	-----	-----
41	Fire Tender	-----	-----	-----
42	Ladders	4	HPSEB DIV	-----

43	Ropes	10	DIV 2 PWD	-----
44	Public Address System	2	SDM (R)	-----
45	Search Lights	2	SDM (R)	-----
46	Manual digging equipments	40	DIV 2 PWD	-----
47	masons	25	DIV 2 PWD	-----
48	labour	50	DIV 2 PWD	-----
49	Concrete cutter	---	-----	-----
50	Tree cutter	-----	-----	-----
51	Home guards	-----	-----	-----
52	Nss volunteers	100	Sr Sec Schools	-----
53	Blood donors list	Yes	SDM(R)	-----
54	Cbos	Yes	SDM(R)	----
D	SUB DIVISION THEOG			
55	Snow cutter	-----		-----
56	JCB	2	Div PWD Theog	-----
57	Bulldozer	1	Div PWD Theog	-----
58	Recovery vehicle	----	-----	-----
59	Trucks	3	Div PWD Theog	-----
60	Tata 407/pick up	1	Div PWD /HPSEB Theog	-----
61	Generator	-----	-----	-----
62	Fire tender	-----	----	-----
63	Ladder	4	HPSEB THEOG	-----
64	Public Address System	2	SDM THEOG	-----
65	Search Lights	2	SDM THEOG	-----
66	Ropes	5	HPSEB THEOG	-----
67	Manual digging equipments	25	Div PWD Theog	-----
68	masons	20	Div PWD Theog	-----
69	labor	40	Div PWD Theog	-----
70	Concrete cutter	-----	----	-----
71	Tree cutter	-----	-----	-----
72	Home guards	-----	-----	-----
73	Nss volunteers	100	GOVT. College	----

ANNEXURE

			And Schools	
74	Blood donors list	Yes	SDM THEOG	-----
75	Cbos	Yes	SDM THEOG	-----
E	SUB DIVISION RAMPUR			
76	Snow cutter	-----	-----	----
77	JCB	2	PWD DIV KUMARSAIN/R AMPUR	-----
78	Bulldozer	2	PWD DIV KUMARSAIN/R AMPUR	-----
79	Recovery vehicle	2	SJVN	-----
80	Trucks	10	PWD DIV KUMARSAIN/R AMPUR /SJVN	-----
81	Tata 407/pick up	3	HPSEB KUMARSAIN/R AMPUR	-----
82	Generator	3	SJVN	-----
83	Fire Tender	4	SFO RAMPUR/ SJVN JHAKRI	-----
84	Ladder	10	HPSEB/SFO RAMPUR	-----
85	Ropes	20	HPSEB/SFO RAMPUR	-----
86	Public Address System	2	SDM RAMPUR	-----
87	Search lights	2	SDM RAMPUR	-----
88	Manual digging equipments	50	HPPWD DIV /KUMARSAIN AND RAMPUR	-----
89	masons	30	HPPWD DIV /KUMARSAIN AND RAMPUR	-----

90	labour	60	HPPWD DIV /KUMARSAIN AND RAMPUR	-----
91	Concrete cutter	11	SJVN JHAKRI	-----
92	Tree cutter	2	SJVN JHAKRI	-----
93	Home guards	21	SFO RAMPUR	-----
94	Nss volunteers	51	GOVT COLLEGE RAMPUR	-----
95	Blood donors list	YES	SDM RAMPUR	-----
96	Cbos	YES	SDM RAMPUR	----
F	SUB DIVISION ROHROO			
97	Snow cutter	----	----	----
98	JCB	2	PWD DIV ROHROO	----
99	Bulldozer	2	PWD DIV ROHROO	-----
100	Recovery vehicle	---	----	-----
101	Trucks	3	PWD DIV ROHROO	-----
102	Tata 407/pick up	3	PWD DIV ROHROO /HPSEB	-----
103	Generator	3	HPPCL SAWRA KUDDU	-----
104	Fire Tender	2	SFO ROHROO	-----
105	Ladder	10	HPSEB/SFO ROHROO	-----
106	Ropes	20	HPSEB/SFO ROHROO	-----
107	Manual digging equipments	20	PWD DIV ROHROO	-----
108	Search Lights	2	SDM ROHROO	-----
109	masons	20	HPPWD DIV	-----

ANNEXURE

			ROHROO	
110	labour	30	HPPWD DIV ROHROO	-----
111	Concrete cutter	---	----	-----
112	Tree cutter	----	----	-----
113	Home guards	20	SFO ROHROO	-----
114	Nss volunteers	21	GOVT COLLEGE ROHROO	-----
115	Blood donors list	YES	SDM ROHROO	-----
116	Cbos	YES	SDM ROHROO	-----
G	SUB DIVISION DODRA KWAR			
117	Snow cutter	-----	----	
118	JCB	2	HPPWD ROHROO	
119	Bulldozer	2	HPPWD ROHROO	
120	Recovery vehicle	---	----	
121	Trucks	---	-----	
122	Tata 407/pick up	---	----	
123	Generator	1	SDM DODRAKWAR	
124	Fire Tender	-----	----	
125	Ladder	-----	----	
126	Ropes	-----	----	
127	Search Lights	2	SDM DODRAKWAR	
128	Manual digging equipments	-----	----	
129	masons	-----	----	
130	labour	----	---	
131	Concrete cutter	----	---	
132	Tree cutter	-----	----	
133	Home guards	----	----	
134	Nss volunteers	----	----	

135	Blood donors list	---	----	
136	Cbos	---	---	
H	SUB DIVISION CHOPAL			
137	Snow cutter	----	-----	
138	JCB	2	PWD DIV CHOPAL	
139	Bulldozer	2	PWD DIV CHOPAL	
140	Recovery vehicle	----	----	
141	Trucks	3	PWD DIV CHOPAL	
142	Tata 407/pick up	2	PWD DIV CHOPAL	
143	Generator	----	-----	
144	Fire tender	2	SFO CHOPAL	
145	Ladder	4	SFO CHOPAL	
146	Search Lights	2	SDM CHOPAL	
147	Public Address system	4	SDM CHOPAL	
148	Ropes	4	SFO CHOPAL	
149	Manual digging equipments	20	PWD DIV CHOPAL	
150	masons	15	PWD DIV CHOPAL	
151	labour	35	PWD DIV CHOPAL	
152	Concrete cutter	----		
153	Tree cutter	-----		
154	Home guards	20	SFO CHOPAL	
155	Nss volunteers	60	GOVT COLLEGE CHOPAL	
156	Blood donors list	YES	SDM CHOPAL	
157	Cbos	YES	SDM CHOPAL	

ANNEXURE -2
FIRST INFORMATION REPORT

Name of the District

Date of Report

1. Nature of Calamity
2. Date and Time of Occurrence
3. Number and Names of the areas affected
4. Population Affected
5. Number of Persons
 - a) Died
 - b) Missing
 - c) Injured
6. Animals
 - a) Affected
 - b) Lost
7. Crops Affected
8. Number of houses damaged
9. Damage to Public Property

ANNEXURE -3

RAPID DAMAGE ASSESSMENT FORMAT FOR DISASTER MANAGEMENT TEAM

[Aim to determine immediate response of the locality]

Type of Disaster _____; Date _____;
Time _____;

Team

Member _____

1. Name of the location	
2. Administrative Unit and Division	
3. Geographical location	
4. Local Authorities interview(with name, address, designation)	
5. Estimated total population	
6. Worst affected areas/population - No of Blocks - G.P - Village	
7. Areas currently inaccessible	
8. Type of areas affected	
9. Distance from the District Head Quarters(Km) Accessibility of the areas	

<p>10. Effect on population</p> <p>(a) Primary affected population</p> <ul style="list-style-type: none"> - Children below 1 year - Children between 1 and 5 years old - Women - Pregnant and lactating women - Elderly (above 60) - Disabled 	<p>Number</p>
<p>(b) Death/Reports of starvation</p> <p>(c) Orphans</p> <p>(d) Injured</p> <p>(e) Missing</p> <p>(f) Homeless</p> <ul style="list-style-type: none"> - Number of people - Number of families <p>(g) Displaced/Migrated</p> <p>(h) Evacuated</p> <p>(i) Destitute</p> <p>(j) Need of counseling for traumatized population</p>	<p>Yes/No</p>
<p>11. Building</p> <p>(a) Building collapsed/wasted away</p> <p>(b) Building partially collapsed/wasted away</p> <p>(c) Buildings with minor damages (buildings that can be retrofitted)</p> <p>(d) Number of schools affected</p> <ul style="list-style-type: none"> - Gravity of the damages <p>(e) Number of hospitals and Health Centers affected</p> <ul style="list-style-type: none"> - Gravity of the damages <p>(f) Number of Government buildings affected</p> <ul style="list-style-type: none"> - Gravity of the damages <p>(g) Any other building affected</p> <ul style="list-style-type: none"> - Gravity of the damages 	<p>Number</p> <p>Scale 1 to 5 where 1 is no damages and 5 is completely destroyed</p>

<p>12. Infrastructure</p> <p>(a) Road Damaged/destroyed</p> <ul style="list-style-type: none"> - Scale of the damage - Location - Km <p>(b) Railways damaged</p> <ul style="list-style-type: none"> - Location - Km - Is the railway still working <p>(c) Bridges damaged/collapsed</p> <ul style="list-style-type: none"> - Locality - Villages isolated <p>(d) Damages to the Communication Network</p> <p>(e) Damages to the Electricity Network</p> <p>(f) Damages to the Telecommunication</p>	<p>Scale 1 to 5 where 1 is normal and 5 is completely destroyed/washed away</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No and scale of the damages Scale 1 to 5 where 1 is no damages and 5 is completely destroyed</p>
<p>13. Health Facilities</p> <p>(a) Infrastructure damaged</p> <ul style="list-style-type: none"> - Hospitals - Health Centers 	<p>Number</p> <p>Scale 1 to 5 where 1 is no damages and 5 is completely destroyed</p> <p>Number</p>
<ul style="list-style-type: none"> - Vaccination Centers <p>(b) Availability of Doctors</p> <ul style="list-style-type: none"> - In the area - In the district <p>(c) Availability of Paramedical staff</p> <ul style="list-style-type: none"> - In the area - In the district <p>(d) Local Staff affected</p> <ul style="list-style-type: none"> - Doctors - Paramedical Staff <p>(e) Conditions of equipments Specify which equipments</p> <p>(f) Availability of medicines/drugs</p> <ul style="list-style-type: none"> - Typology <p>(g) Availability of Vaccinations</p> <ul style="list-style-type: none"> - Typology <p>(h) Any immunization campaign was undertaken before the disaster</p> <p>(i) Possibility of diseases outbreak</p> <p>(j) Other health problems</p>	<p>Number</p> <p>Number</p> <p>Scale 1 to 5 where 1 is no damages and 5 is completely destroyed</p> <p>Ys/No Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>List</p>

ANNEXURE

<p>14. Water Sanitation</p> <p>(a) Availability of safe drinking water</p> <p>(b) Availability of sanitation facilities</p> <p>(c) Availability of Disinfectant</p> <p style="padding-left: 20px;">- Typology</p> <p>(d) Damages to the Water/Sewage systems</p> <p>(e) Damages to the water supply system</p> <p>(f) Availability of portable water system</p> <p>(g) Agencies participating in WATSAN</p>	<p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Scale 1 to 5 where 1 is no damages and 5 is completely destroyed</p> <p>Yes/No</p> <p>List</p>
<p>15. Crops/Agriculture Damage</p> <p>(a) Crop Damaged</p> <p style="padding-left: 20px;">- Typology</p> <p style="padding-left: 20px;">- % Of Hectare damaged</p> <p style="padding-left: 20px;">- In Upland/medium/low</p> <p style="padding-left: 20px;">- Paddy or Non paddy</p> <p style="padding-left: 20px;">- Irrigated or non-irrigated</p> <p>(b) Normal and actual rainfall assessment</p> <p>(c) Livestock loss</p> <p>(d) Availability of Health services for livestock</p> <p>(e) Cattle feed/folder availability</p>	<p>Mm</p> <p>Number</p> <p>Yes/No</p> <p>Number</p> <p>Tonnes</p>
<p>(f) Damage to agriculture infrastructure</p>	<p>Scale 1 to 5 where 1 is no damages and 5 is completely destroyed</p>

<p>g. Food/Nutrition</p> <p>(a) Availability of food/stocks (1) Family (2) Relief (3) PDS (4) Community Kitchen</p> <p>(b) Expected duration of the food stock</p> <p>(c) Most affected groups - Infant - Children - Pregnant and lactating mothers - Elderly</p> <p>(d) Where are the different groups located?</p> <p>(e) Levels of malnutrition?</p> <p>(f) Type of food required</p> <p>(g) Total quantity/ration levels required</p> <p>(h) How is the food supply and nutrition situation likely to evolve in coming weeks/months?</p>	<p>Yes/No Kg Tonnes Tonnes Kg</p> <p>Days To be ticked</p> <p>Days To be ticked</p>
<p>1. 15.Secondary Threats</p> <p>(a) Potentially hazardous sites (b) Existence of epidemics (c) Scarcity of Food (d) Scarcity of Water (e) Scarcity of Shelter (f) Scarcity of Clothes (g) Any other problem</p>	<p>List</p>
<p>16. Response</p> <p>(a) <u>Local</u>: Govt./NGOs/CSOs/Individuals Type of assistance</p> <p>(b) <u>National</u>: Govt./NGOs/CSOs Type of assistance</p> <p>(c) <u>International</u>: Govt./NGOs/CSOs Type of assistance</p>	<p>To be ticked Description</p> <p>To be ticked Description</p> <p>To be ticked Description</p>

Water /sanitation:

- (a) Portable water
- (b) Chlorine powder and disinfectant
- (c) Latrine
- (d) Soap
- (e) Detergent
- (f) Insecticides
- (g) Disinfestations of water body
- (h) Manpower for carcass disposal

1.2 Health:

- (a) Medical staff
- (b) Medicines(specify) (c) IV fluid (d) ORS
- (e) Vitamin A
- (f) Vaccines
- (g) Mobile units(quantity to be specified) (h) Cold chain system

1.3 Education:

- (a) Infrastructure temporary / permanent
- (b) Teachers
- (c) Teachers kits
- (d) Reading materials
- (e) Availability of mid-day meal

Crop/Agriculture

- (a) Need of seeds
- (b) Fertilizer , Pesticide
- (c) Type of Seed required
- (d) Availability of local variety
- (e) Availability of resources

Infrastructure:

- (a) Repair of roads
- (b) Repair of railways and bridges
- (c) Power Supply
- (d) Telecommunication
- (e) Equipments required for restoration
- (f) Manpower required

List

Yes/No and specify location

Yes/No and specify location

List

Number of Man days

- **Observation:**
- **Source of information:**
- **Site Visit:**
- **Interaction with affected population:**
- **Assessment Carried By:**

ANNEXURE -4
FLOW CHART FOR DISPOSAL OF DEAD BODIES AT THE
DISTRICT LEVEL

1. Activate the DM Plan
2. Nodal Officer in the incident Response System will activate all other stake-holders associated with Disposal of the Dead.
3. Establish an information Centre at the site of Disaster/District HQ.
4. Inform all other Stake-holders, both in government and Non- Governmental sector, including the elected, Panchayati Raj functionaries and the community.
5. Activate search and Rescue teams of Fire & Emergency Services, Police, SDRF, Civil Defence, NDRF and NGOs for the retrieval of the injured and the dead.
6. The injured will get the priority for First Aid and evacuation to hospital.
7. Prepare a record of details of the bodies retrieved in the Dead Body Inventory Record Register, allocated individual Identification Number, photographed, and then Dead Body Identification Form initiated.
8. Associate relatives and community members for the identification of the bodies.
9. Hand over the identified bodies to the relatives or the community, and if necessary after cross-matching Dead Body Identification Form with that of the Missing Person Form, for the last rites as per local, cultural and religious denomination.
10. Unidentified or unclaimed dead bodies/body parts shall be transported to the mortuaries for proper preservation and storage at the designated sites.
11. Consult relatives, legal and forensic experts for positive identification.
12. Final disposal of unidentified bodies/body parts shall be done by District authorities after applying all the possible means of identification as per the legal provisions.
13. The bodies of foreign nationals shall be properly preserved either by embalming or chemical methods and then placed in body bags or in coffins with proper labeling.
Handing over and transportation of such bodies shall take place through the Ministry of Extern Affairs, in consultation with the Consular offices of the concerned countries and other actors such as International Committee of the Red Cross, if necessary and possible.

ANNEXURE -5

GUIDELINES FOR DISPOSAL OF ANIMAL CARCASSES

1. Guidelines for Burial

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

2. GUIDELINES FOR COMPOSTING

- 2.1. Select site that is well drained, at least 300 feet from water sources, sinkholes, seasonal seeps or other landscape features that indicate hydrological sensitivity in the area.
- 2.2. Lay 24-inch bed of bulky, absorbent organic material containing sizeable pieces 4 to 6 inches long. Wood chips or hay straw work well. Ensure the base is large enough to allow for 2-foot clearance around the carcass.
- 2.3. Lay animal in the centre of the bed. Lance the rumen to avoid bloating and possible explosion. Explosive release of gases can result in odour problems and it will blow the cover material off the composting carcass.
- 2.4. When disposing large amounts of blood or body fluid, make sure there is plenty of material to absorb the liquid. Make a depression so blood can be absorbed and then cover, if a blood spill occurs, scrape it up and put back in pile.

- 2.5 Cover carcass with dry, high-carbon material, old silage, sawdust or dry stall bedding (some semi-solid manure will expedite the process). Make sure all residuals are well covered to keep odors down, generate heat or keep vermin or other unwanted animals out of the window.
- 2.6 Let it sit for 4 to 6 months, then check to see if carcass is fully degraded.
- 2.7 Reuse the composted material for carcass compost pile, or remove large bones and land apply.
- 2.8 Site cleanliness is the most important aspect of composting; it deters scavengers, and helps control odours and keeps good neighborly relations.

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

(Reference: HPSDMA 2012)

FLOW CHRT FOR DISPOSAL OF ANIMAL CARCASSES AT DISTRICT LEVEL

- a. Activate the DM Plan.
- b. Nodal Officer in the Incident Response System will activate all other stakeholders associated with the disposal of Animal Carcasses.
- c. Establish an Information Centre at the site of Disaster/District HQ.
- d. Inform all other Stake-holders, both in government and Non- Governmental sector, including the elected, Panchayati Raj functionaries and the community.
- e. Activate Animal Carcass Retrieval teams for the recovery and retrieval of the injured livestock and the animal carcasses.
- f. Injured livestock will get the priority for First Aid and evacuation to hospital.
- g. Prepare a record of details of the animal carcasses retrieved.
- h. Associate owners of the livestock, or their relatives and community members for the identification of the animal carcasses.
- i. Hand over the identified animal carcasses to the owners for disposal at the selected site.
- j. All unidentified animal carcasses will be photographed preferably before transportation for disposal.
- k. Unidentified or unclaimed animal carcasses shall be transported to the designated site for disposal by District authorities as per the Disaster Plan.

ANNEXURE -6

IMPORTANT TELEPHONE NUMBERS

SHIMLA DISTRICT DISASTER MANAGEMENT COMMUNICATION INVENTORY

Over All Incharge * Sh. Dinesh Malhotra, IAS

Chairman, DDM A-cum-

District Magistrate, Shimla

Nodal Officer ** Sh. Ram Kumar Gautam, HAS

Addl. District Magistrate (P)-CUM –

CEO DDMA -SHIMLA

1. (D.C. Office)

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
*1	D.C. Shimla Sh.Subhashish Panda, IAS	0177-2655988	94180-77244	2626745
2.	ADC Shimla Sh. B.C. Badalia, IAS	0177-2657003	94180-26165	0177-2622713
3.	ADM(L&O) Sh. N. K. Lath, HAS	0177-2657005	94180-10896	0177-2628895
**4	ADM(P) Sh. Ram Kumar Gautam, HAS	0177-2653436	94184-80006	0177-2629908
4.	SDM Shimla(Urban) Sh. Rajiv Kumar, HAS	0177-2657007	94180-58845	--
5.	SDM Shimla (Rural) Sh. Suneel Sharma, HAS	0177-2657009	94186-83266	0177-
6.	SDM, Theog Sh. Yashpal Singh Verma, HAS	01783-238502	98054-40777	01783-230501
7.	SDM, Rampur Sh. K.R. Sehgal, HAS	01782-233002	94184-75720	01782-233030
8.	SDM, Rohru Sh. Minu Ram Dhiman, HAS	01781-240009	94188-60264	01781-240609
9.	SDM, Chopal Sh.Krishan Chand, HAS	01783-260014	94592-18995	01783-260056
10.	SDM, Dodra Kwar Sh.Ashok Chauhan, HAS	01781-27001	94180-94755	-
11.	AC to DC Shimla Sh. Malok Singh, HAS	0177-2657011	94184-67899	-
12.	DRO, Shimla Sh. Narender a Kumar Aluwalia	0177-2657013	94180-16747	-
13.	Tehsildar, Shimla (Urban) Sh. Anil Sharma	-	94180-27775	-
14.	Tehsildar, Shimla(Rural) Sh. Rajiv Kumar	0177-2813064	98166-62244	-
15.	Tehsildar, Theog Sh. Jeet ram Bhardwaj	01783-238242	94592-54929	-

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16.	Tehsildar, Rampur Sh. Mukesh Sharma	01782-233003	94184-75338	01782-
17.	Tehsildar, Rohru Sh. Suraj Negi	01781-240088	-94187-05707	01781-
18.	Tehsildar, Chopal Sh.	01783-260039		01783-260039
19.	Tehsildar, Chirgaon Sh. Prithavi Singh	01781-277232	98167-44998	98167-43345
20.	Tehsildar, Suni Sh. Sant Ram Sharma	0177-2786625	94181-61070	0177-2786625
21.	Tehsildar, Kumarsain Sh. Deva singh Negi	01782-240033	94184-75267	01782-240033
22.	Tehsildar, Kotkhai Sh. Mani Ram Negi	01783-255368	94187-56654	01783-255368
23.	Tehsildar, Jubbal Sh. Devi Singh Kaushal	01781-252014	98172-54010	--
24.	Tehsildar, Nankheri Vacant	01782-225625	--	--

2. (S.P. Office)

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
1	SP Shimla Sh.Chander Shekhar, IPS	0177-2656535	94184-54546	0177-2659979
2	ASP (L&O) Sh. Ramesh Pathania, IPS	0177-2803212	94180-53666	0177-2625666
3	ASP (Hqrs) Ms. Somya, IPS	0177-2653497	88944-44806	--
4	DSP (City) Sh. Parveen Thakur, HPS	0177-2652123	94183-10163	--
5	DSP (Hqrs) Sh. Brijesh Sood, HPS	0177-2652123	94180-39449	--
6	DSP(Traffic) Sh. Raghu, HPS	0177-2652123	94188-00022	--

3. (M.C. OFFICE)

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
1	Commissioner Sh. M.P. Sood, IAS	0177-2812899	94182-50005	0177-2621651
2	Asstt. Commissioner Sh. Ashish Kohli, HAS	0177-2656576	94180-85682	0177-2650654
3	XEN(water supply) Er. Vijay Gupta	0177-2807021	94184-70578	--

4	XEN (R&B) Er. Sanjay Gupta	0177-2802771	94184-66696	--
5	XEN Er. Himanshu Bist	0177-2802771	94180-60273	--
6	Health Officer Sh. Omesh Bharti	0177-2802771	94181-20302	--

4. PWD (Mech., NH, Civil & Elect.)

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
1.	SE Mech. Er. Divesh Sharma	0177-2842353	94184-60807	0177-2845556
2.	XEN Mech. Er. Tej Pal Shartma	0177-2841169	94180-48519	--
3.	SE, NH Er. B. S. Bhardwaj	0177-2657551	94180-66077	0177-2653536
4.	XEN Solan Er. Mehesh Single	0177-2653062	01792-223804	01792-223117
5.	XEN Rampur Er. Passing Negi	01782-233214	94180-27276	--
6.	AE , NH Sub-Div. Dhalli Er. Vijay Chauhan	0177-2841145	94180-30099	--
7.	SE Civil Er. B. S. Chauhan	0177-2653455	94184-77325	0177-2801125
8.	XEN Div. No. I Er. R. K. Verma	0177-2658385	94184-86600	2802661
9.	XEN Div. No. II Er. Deepak Raj Chauhan	0177-2804134	94180-50100	--
10.	XEN Div. No. III Er. Som Nath Sharma	0177-2652832	94180-85668	2658758
11.	XEN, Theog Er. Ayub Chaudhary	01783-238376	94184-63331	--
12.	SE (PWD Elect.) Er. D. C. Chaudhary	0177-2620055	94184-82477	-
13.	XEN (Elect) Div. No. 1 Er. Bhartendu Kapoor	0177-2621398	93187-51108	0177-2807200
14.	XEN Div. No. II Er. R.s. Rana	0177-2658918	94184-88996	2835900

5. HPSEB.

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
1.	Addl. S.E. Div. No. 1 Er. Sanjeev Maria	0177-2623952	94180-23530	0177-2621666

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2.	AE, Khalini Er. Pratap Singh	0177-2624123	98160-25518	--
3.	AE, Dhalli Er. H.R. Shaarma	0177-2647669	94180-51011	0177-2624433
4.	AE, Mashobra Er. Chet Ram Sharma	0177-2740247	94184-34282	--
5.	AE, Jatogh Er. Sat Parkash Thakur	0177-2837126	94182-09732	
6.	AE, Junga Er. Sarwan Kumar	0177-2752477	94180-38530	--
7.	Sr. E.E., Div. No. 2 Er. K.K. Bassi	0177-2620120	94184-52324	--
8.	AE, Maliana Er. Virender Kumar Sharma	0177-2630480	98163-21895	0177-2674222
9.	AE, Bharari Er. Arun Kumar	0177-2805209	94184-20001	94187-12001
10.	Sr. E.E. City elect. Div. Er. Bisheshwar Sharma	0177-2653338	94180-35522	0177-2842920
11.	AE, Commercial Er. Arun Kumar	0177-2653338	94595-86150	--
12.	AE, Sanjauli Er. R. P. Modgil	0177-2640008	94180-19517	0177-2640869
13.	AE, Chhota Shimla Er. Arun Gupta	0177-2623951	98160-95693	0177-2841700
14.	AE, Ridge Er. P.K. Sharma	0177-2652206	94184-84816	0177-2626816
15.	AE, Edgah Er. H.K. Sharma	0177-2658901	94180-95733	0177-2835151
16.	AE, Boileauganj Er. M.L. Dhiman	0177-2830985	94180-05615	0177-2808075

6. Fire.

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
1	Chief Fire Officer Sh. M. S. Sonkhla	0177-2629945	98160-05626	0177-283318
2	Div. Fire Officer Sh. J.C.Sharma	0177-2657087	94180-28191	0177-2623318
3	Station Fire Officer Sh. D. D. Sharma	0177-2652939	9816005626	0177-2030318

7. Forest

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
1.	DFO, Shimla Sh. V. K. Sharma	0177-2623412	94180-62648	0177-2831631

2.	ACF Shimla Sh. Dhanwant Thakur	0177- 2623412	94180- 88022	--
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8 Jubber Hatti Airport

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
1	Controller Sh. Divesh Kumar Tyagi	0177- 2736284	94180- 37925	--
2	ATC Incharge Sh. Arvind	0177- 2736835	94180- 92294	--

9 Railway

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
3.	Station Supdt. Sh. G.S. Rajput	0177-2652696	98050-39931	0177-2652696
4.	AE Sh. Dinesh Kumar	0177-2653901	98050-39220	0177-2652854

10 HRTC

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
1	DM, HRTC Sh. A. P. Naddu	0177-2812328	94180-00531	--
2	RM., HRTC Dhalli Sh. Mohinder Singh	0177-2647295	98053-81807	--
3	RM, HRTC, Taradevi Sh. Deva Singh Negi	0177-2830363	94181-00560	--
4	Inspector, ISBT Sh. Shankar Lal Sharma	0177-2656326	98050-61434	--
5	Inspector, Local Bus Stand Sh. Liaq Ram Verma	0177-2658925	98161-76869	--

11 Home Guard

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
1	Commandant, Home Guard, 2nd Bn Sh. A. K. Prasher	0177-2621467	94185-21856	01772625790
2	Commandant, Home Guard, 3rd Bn Sh. Madan Lal	0177-2651423	94180-94366	0177-2658255

12 Misc.

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
1.	Sr. M.S. (IGMC) Dr. K.S. Rana	0177-2658845	94181-58984	0177-2844485
2.	Blood Bank (IGMC)	0177-2803073	--	--

ANNEXURE

3.	CMO (DDU) Dr. R. K. Gupta	0177-2657225	94180-33052	0177-2805757
4.	Sr. M.O. (DDU) Dr. P.C. Sharma	0177-2658941	94180-21676	--
5.	Blood Bank (DDU)	0177-2658940	--	--
6.	Secy. Red Cross Society, Shimla Sh. Deepak	01772656730	94593-60510	0177-2653343
7.	GM, BSNL Shimla Sh. Prem Singh	0177-2800666	94180-03000	2800555
8.	GM (Admn.), BSNL Shimla Smt. Indira Thakur	0177-2620240	94181-22022	0177-2673131
9.	GM, Tourism Deptt. The Mall Shimla Sh. C. R. Rangta	0177-2652704	94181-00441	--
10.	District Tourism Officer Sh. Surender Justa	0177-2653888	94184-56677	0177-2620606
11.	Manager(Production) HP Milk fed, Rampur Sh.R. K. Chauhan	01782-	94180-74143	--
12.	RTO, Shimla Sh. Arun Bhardwaj	0177-2658379	94180-54233	--
13.	DFSC, Shimla Sh. Ramesh Gangotra	0177265-7022	94181-26156	--
14.	DPRO, Shimla Sh. Daya Ram	0177-2657024	94182-74674	0177-2621666

13 Emergency Services

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
1.	Fire Station, The Mall, Shimla	101	--	--
2.	Fire Station Chhota Shimla	2623269	--	--
3.	Fir Station, Boileauganj	2830664	--	--
4.	Ambulance	102	--	--
5.	Traffic Police	2652217	--	--
6.	Police Control Room	2621714	--	--
7.	Inter State W/Less	2621728	--	--
8.	CID Control Room	2622408	--	--
9.	Sectt. Control Room	2622204	--	--

14 BDOs

Sr. N o.	Name & Designation of officer	Office	Mobile number	Residence
1.	BDO, Mashobra Sh. Sanjay Bhagwati	0177-2740248	94180-58973	0177-2740248
2.	BDO, Basantpur Smt. Ajay Kumari	0177-2784533	94180-22381	--
3.	BDO, Theog Sh. Bhuvan Sharma	01783-238210	94186-70335	011783-238210

4.	BDO, Narkanda Ms. Chetna Kadwal	01782-242428	94184-56920	01782-242428
5.	BDO, Rohru Sh. Jas Pal	01781-240037	94591-60004	--
6.	BDO, Jubbal Sh. Budh Ram (Officiating)	01781-252024	98162-12616	--
7.	BDO, Chirgaon Sh. O.P. Chauhan (Officiating)	01781-277229	98161-67579	--
8.	BDO, Chopal Sh. Yogesh Chauhan	01783-260024	94186-58911	--
9.	BDO, Rampur Sh. Satinder Thakur	01782-233025	98160-67867	01782-233025
10.	BDO, Nankheri Sh. Rajesh Dhiman	01782-225606	98160-79779	01782-225606

15. DISTT ADMINSTRATION COMMUNICATION PLAN AT A GLANCE

ADC Shimla Sh. B.C. Badalia,	0177-2657003	94180-26165	Tehsildar, Shimla (U) Sh. Anil Sharma	-	94180-27775
ADM(L&O) Sh. N. K. Lath,	0177-2657005	94180-10896	Tehsildar, Shimla(R) Sh. Rajiv Kumar	0177-2813064	98166-62244
ADM(P) Sh. R. K. Gautam,	0177-2653436	94184-80006	Tehsildar, Theog Sh. Jeet Ram Bhardwaj	01783-238242	94592-54929
SDMShimla(Urban) Sh. Rajiv Kumar,	0177-2657007	94180-58845	Tehsildar, Rampur Sh. Mukesh Sharma	01782-233003	94189-75338
SDM Shimla (Rural) Sh. Suneel Sharma,	0177-2657009	94186-83266	Tehsildar, Rohru Sh. Suraj Negi	01781-240088	-94187-05707
SDM, Theog Sh. Yashpal Singh	01783-238502	98054-40777	Tehsildar, Chopal -	01783-260039	-
SDM, Rampur Sh. K.R. Sehzal	01782-233002	94184-75720	Tehsildar, Chirgaon Sh. Prithavi Singh	01781-277232	98167-44998
SDM, Rohru Sh. Minu Ram Dhiman,	01781-240009	94188-60264	Tehsildar, Suni Sh. Sant Ram Sharma	0177-2786625	94181-61070
SDM, Chopal Sh. Krishan Chand	01783-260014	94592-18995	Tehsildar, Kumarsain Sh. Deva Singh Negi	01782-240033	94184-75267

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SDM, Dodra Kawar Sh.Ashok Chauhan,	01781-27001	94180-94755	Tehsildar, Kotkhai Sh. Mani Ram Negi	01783-255368	94187-56654
AC to DC Shimla Sh. Malok Singh	0177-2657011	94184-67899	Tehsildar, Jubbal Sh. Devi Singh Kaushal	01781-252014	98172-54010
DRO, Shimla Sh. N. K. Aluwalia	0177-2657013	94180-16747	Tehsildar, Nankheri Vacant	01782-225625	--

N/T Shimla (U) Smt. Champa Bhardwaj	-	98167-35509	N/T Kotkhai Sh. Kali Ram	01783-255368	88946-32234
N/T Shimla(R) Sh. Bishan Singh Thakur	0177-2813064	94180-03102	N/T Jubbal Sh.	01781-252014	
N/T Theog Sh. Rakesh Sharma	01783-238242	98055-25792	N/T, Nankheri Sh. Uday Singh Negi	01782-225625	94181-20933

N/T Rampur Sh. Ravesh Chandel	01782-233003	94184-00999	N/T Junga Sh. Rakesh Kumar	0177-2752520	98055-25792
N/T Rohru Sh. Dharma Singh Chauhan	01781-240088	94597-45126	N/T Nerwa Sh. Maya Ram Sharma	01783-264386	98163-31235
N/T Chopal Sh. Man Singh	01783-260039	98055-32533	N/T Kupvi	01783-270332	-
N/T Chirgaon Sh. Mast Ram Kashyap	01781-277232	98161-18069	N/T Dodra kawar Sh. Rajender Kumar	-	94188-79106
N/T Suni	0177-2786625	-	N.T Tikkar	01781-233547	
N/T Kumarsain Sh. Liaq Ram Sharma	01782-205250	94180-04232	N/T computer Sh. Tara Chaad	-	94188-42252

16. FIELD LEVEL COMMUNICATION PLAN

SDO(C) (Urban)

Sr. N o.	Name of official	Designation	Mobile Number
1	Sh. Prem Singh, SDK	Shimla (U)	91290-74440
2	Sh. Mehar Chand	Tehsil (U)	94180-57916

DISTRICT DISASTER MANAGEMENT PLAN OF DISTRICT SHIMLA 2012

3	Sh. Bal Krishan Verma, FK	Tehsil (U)	94180-69041
4	Sh. Harpal Mehta, AOK	Tehsil (U)	94184-69925
5	Smt. Rekha Kumari, Patwari	Lakkar bazaar	94184-98098
6	Sh. Partap Thakur, Patwari	Bazaar Ward Bada	94181-20900
7	Sh. Balak Ram, Patwari	Boileauganj	94183-43075
8	Sh. Saran Dass, Patwari	Sanjauli	94180-67856
9	Sh. Sees Ram , Patwari	Kaithu	94184-55287
10	Sh. Gian singh, Patwari	Chhota Shimla	94595-82729
11	Sh. Mangat Ram, Patwari	Khalini	92187-76621
12	Sh. Gian Thakur, Patwari	Tuttikandi	94181-03771

SDO(C), Chopal

Sr. N o.	Name of official	Designation	Mobile Number
1	Sh. Bansi Lal, Kgo	SDK, Chopal	98056-12662
2	Sh. Dalbir Dhanta, Kgo	Record Kgo, Chopal	98162-53540
3	Sh. Surat Ram, Kgo	LR Kgo, chopal	94592-49436
4	Sh. Raghubir Singh, Kgo	Fk, Chopal	98165-39866
5	Sh. Kedar Singh, Kgo	Ok, Nerwa	98163-43440
6	Sh. Gulat Ram, Kgo	Fk, Tharoch	98165-31336
7	Sh.	FK, Nerwa	Addi charge
8	Sh. Dayal Singh, Kgo	FKgo/OK Kupvi	98166-68255
9	Sh. B.S. Dhaulta, Patwari	Copist, Chopal	94180-26122
10	Sh. Yaspal Sauhta, Patwari	AOK, Chopal	94188-57470
11	Sh. B. S. Khagta, Patwari	PC Nanhar	98166-76642
12	Sh. Moti Ram, Patwari	PC Chopal	94182-11281
13	Sh. Amolak Ram, Patwari	PC Makroag	94187-01051
14		PC Maraog	Addi charge
15	Sh. Hemant Kumar, Patwari	PC Dewat	94181-58019
16	Sh. Kamal Kant, Patwari	PCBamta	94181-28334
17	Sh. P:rem chand, Patwari	PC Khagna	98052-41220
18	Km. Veena Negi, Patwari	PC Sarain	94186-70666
19	Sh. Nand Ram, Patwari	PC Nakorapul	98820-25355
20	Sh. Sher Singh, Patwari	PC Matal	98163-14964
21	Sh. Bhagat Ram, Patwari	PC Pulbhal	98167-62608
22		PC Sari	Addi Charge
23	Sh. Ghan Shyam, Patwari	PC Jhina	98156-70526
24	Sh. Om Parkash, Patwari	PC Nerwa	94180-05449
25	Sh. Roshan Lal, Patwari	PC Ruslah	94184-95569
26	Sh. Mohan Singh, Patwari	PC Irra	98166-26797
27	Sh. Daulat Ram, Patwari	PC Tharoch	98162-01462
28	Sh. Mohan Lal , Patwari	PC Bohrar	98051-25686
29	Sh. Ajay Kumar, Patwari	PC Kedi	95185-32034
30		Pouria	Addi charge
31	Sh. Mohan Singh, Patwari	PC Madhana	98167-87515
32		PC Guma	Addil charge
33	Sh. Kahan Chand, Patwari	PC Antrawali	94180-14823

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34	Sh. Lachmi Singh, Patwari	PC Kiran	98057-28602
35	Sh. Manjeet Singh, Patwari	PC Tikkri	94592-12046
36	Sh. Ashok Patwari	PC Bharanu	98059-97465
37	Sh. Manoj Kumar, Patwari	PC Kupvi	98168-20945
38	Sh. Ram Lal Sharma	PC Charoli	98168-04085
39	Sh. Mela Ram Patwari	PC Malat	98057-90030
40		PC Gonth	Addi charge
41	Sh. Bir Pal, Patwari	PC Kulag	88945-34399*
42	Sh. Liaq Ram, Patwari	PC Bhalu	98166-98262
43		PC Dhar Chandna	Addi charge

SDO (C) ROHRU

Sr. N o.	Name of official	Designation	Mobile Number
1	Sh. Ramesh Kumar, Kgo	OK, Tehsil Rohru	98164-14982
2	Sh. Rajinder Singh, Kgo	FK, Rohru	94181-07185
3	Sh. Lokinder Singh, Kgo	Fk, Gangtoli	94590-42012
4	Sh. Rameshwar Singh, Kgo	FK. Mahandli	94181-710704
5	Sh. Devinder Singh, Kgo	Record Kgo, Rohru	98162-19289
6	Sh. Kushal Singh, Kgo	Sub-Div. Kgo Rohru	94598-740009
7	Smt. Indira Devi, Patwari	Record Room, Rohru	94180-46653
8	Sh. Prithvi raj, Patwari	AOK, Tehsil Rohru	94592-12085
9	Sh. Amar chand, Patwari	Land Reform Tehsil Rohru	98822-49036
10	Sh. Mehar Cahnd, Patwari	PC Rohru	94185-00225
11	Sh. Ramesh Thakur, Patwari	PC Bhamnoli	94187-98442
12	Sh. Kundal Lal, Patwari	PC Gawna	97365-67380
13	Sh. Yash Pal, Patwari	PC Kutara	98165-28954
14	Krishan Chand, Patwari	PC Samoli	98052-66607
15	Sh. Mohinder Singh, Patwari	PC Jakhar	94186-99765
16	Sh. Keshav Ram, Patwari	PC Brasil	94181-71244
17	Sh. Inder Dev, Patwari	PC Arhal	94181-42012
18	Sh. Hardyal Singh, Patwari	PC Rohru	94189-48751
19	Sh. Uttam Dev., Patwari	PC Summerkot	94186-01754
20	Sh. Hukam chand, Patwari	PC Khangteri	98570-03195
21	Sh. Surat Ram, Patwari	PC Kui	97368-66187
22	Sh. Vinay Kumar, Patwari	PC Banchhunch	94180-74065
23	Sh. Jai Parkash, Patwari	PC Mandharli	94182-10824
24	Sh. Govind Ram, Patwari	PC Karasa	98164-67676
25	Sh. Bhagat Ram, Patwari	PC Parsa	98163-34473
26	Sh. Jai Dev, Patwari	PC Lowerkoti	98166-35545
27	Sh. Daya Nand, Patwari	PC tandali	94180-10039
28	Sh. Parveen Kumar, Patwari	PC Melthi	97363-81414
29	Kr. Anu Kumari, Patwari	PC Sheel	89882-31781
30	Sh. Parmod Singh, Kgo	OK Tehsil Jubbal	94182-45220
31	Sh. Joginder Samra, Kgo	FK sarswati Nagar	94188-13299
32	Sh. Jawahar Singh, Kgo	FK Jubbal	94187-60934

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33	Sh. Rajinder Singh, Patwari	PC Parali	97365-81103
34	Sh. Mohan Singh, Patwari	PC Shilli	94184-63198
35	Sh. Rajya Singh, Patwari	PC Pouta	94181-71252
36	Sh. Harinder Singh, Patwari	PC Mihana	98168-06312
37	Sh. Chander Parkash, Patwari	PC Patsari	98576-26204
38	Sh. Parkash chand, Patwari	PC Mandhol	92188-00100
39	Sh. Narinder Singh, Patwari	Land Reform Patwari Tehsil Jubbal	94590-42112
40	Sh. Rakesh Kumar, Patwari	PC Sarswati Nagar	98169-22331
41	Sh. Susheel Kumar, Patwari	PC Anti	98168-69422
42	Sh. Lahouri Singh, Patwari	PC Kudu	9805316612
43	Sh. Gianinder Singh, Patwari	PC Pandranoo	98164-24145
44	Sh. Bala Nand, Patwari	PC Jhalta	94182-45365
45	Sh. Rajinder Singh, Patwari	PC Jhagtan	98167-34458
46	Sh. Arvind Kumar, Patwari	PC Mandal	98169-79499
47	Sh. Daulat ram, Patwari	PC Shilgaon	94188-12802
48	Sh. Jamna Dass, Patwari	PC Dhadi-Ghunsa	98177-96549
49	Sh. Hem Raj, Patwari	OK Tikkar	94185-11255
50	Sh. Arun Lal, Patwari	PC Tikkar	94184-85551
51	Sh. Partap Singh, Patwari	PC Kashiani	94184-71634
52	Sh. Kamal Kishore, Patwari	PC Badshal	94189-02817
53	Sh Mohinder Singh, Patwari	PC Pujarli No.04	98575-37884
54	Sh. Deepal Singh, Patwari	Land Reform Patwari Tehsil Tikkar	94183-28155
55	Sh. Huklam Chand, Kgo	FK Ransar	98165-83408
56	Sh. Prem Singh, Kgo	FK Dhamwari	98163-40572
57	Sh. Ram Lal, Patwari	PC Tikkari	98168-76075
58	Sh. Gopinder Singh, Patwari	PC Khashdhar	94181-40204
59	Sh. Raj Kumar, Patwari	PC Masli	88949-05999
60	Sh. Rakesh Kumar, Patwari	PC Illaqua Kyani	88945-80102
61	Sh. Surender Singh, Patwari	PC Chirgaon	98167-03342
62	Sh. Surat Ram, Patwari	PC Dhamwari	98166-48667
63	Sh. Krishan Chand, Patwari	PC deividhar	88949-63623
64	Sh. Arvind Kumar, Patwari	PC Jangla	94185-93606
65	Sh. Jai Singh, Patwari	PC Thana	84185-27883
66	Sh. Balak Ram, Patwari	PC Gaonsari	94185-38270

SDO (C) Shimla (Rural)

Sr. N o.	Name of official	Designation	Mobile Number
1	Sh. D. S. Gagta	Office Kgo	94592-82044
2	Sh. Balwan Sanjta	Land Reform Kgo	98160-26457
3	Sh. Mohan Lal	A.O.K.	94592-65027
4	Smt. Sunita	Land Reform Patwari	94181-48304
5	Sh. Khem Verma	Patwari LRC	89882-78777
6	Sh. Joginder Chauhan	FK Kasumpti	94180-90469
7	Sh. Suresh	FK Sanjauli	98160-74344
8	Sh. Udham Singh	FK Jutogh	98169-79169

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9	Sh. Jai Krishan	Patwari Bharoi	94188-94775
10	Sh. Virender	Patwari Totu	94595-57001
11	Sh. Ramesh Dogra	Patwari Chayli	94592-64208
12	Sh. Kamal chand	Patwari Beolia	94184-23630
13	Sh. Bhisham Singh	Patwari Kasumpti	94181-60844
14	Sh. K. D. Mehta	Patwari Badhei	94185-11144
15	Sh. Om Parkash	Patwari Anandpur	94186-85433
16	Sh. Guman Singh	Patwari Raghanw	94592-28027
17	Sh. Bhim Dutt	Patwari Kot	98171-15333
18	Sh. Ram Lal	Patwari Thari	-
19	Sh. Karam chand	Patwari Jalel	94186-85502
20	Sh. Krishan Chand	Patwari Rampur	94186-70165
21	Sh. Satya Varat	Patwari Toon	98053-71710
22	Sh. Parveen Kumar	Patwari Halog	98174-54163
23	Sh. Man Singh	Patwari Kathiyana	94189-83167
24	Sh. Mohinder singh	Patwari Batmana	94183-44407
25	Sh. Krishan Chand	Patwari Dhamoon	94186-85502
26	Sh. Ram Sawroop	Patwari Ganewag	98161-55033
27		Patwari Ghandal	Dual charge
28	Sh. Diwakar Dutt	Patwari Maili	98173-46400
29	Sh. Ramesh Jaswal	Patwari Kohbag	98052-69372
30	Sh. Inder Khachi	Patwari Panesh	94594-48509
31	Sh. Pawan Bhatia	Patwari Chanog	94180-69149
32	Sh. Kamal Jeet	Patwari Kanda	94180-05534
33	Sh. Chander Dass	Patwari Padech	98164-96009
34	Sh. Bhagmal	Patwari Bhont	98165-84378
35	Sh. Brij Lal	Patwari Kelti	94183-44529
36	Sh. Madan Lal	Patwari Mashobra	941840-91963
37	Sh. Partap Singh	Patwari Dhagog	94180-62459
38	Sh. Satpal Sharma	Patwari Sipur	94181-37189
39	Sh. Chaman Lal	Patwari Mool Koti	94181-36572
40	Sh. Bharam Dev	Patwari Naldhera	94181-23401
41	Sh. Ramesh Chauhan	Patwari Dhalli	94181-50036
42	Sh. Jai Dayal	Patwari Sanjauli	94182-11354
43	Sh. Ram Lal	Patwari Dhagog	94184-76318
44	Sh. S. N. Gangta	Patwari Mundaghat	98166-03703
45	Sh. Suraj Bhimta	Patwari Baldeyan	94591-27600
Tehsil Suni			
1	Sh. Duni Chnad	Patwari Ogli	94592-45507
2		Patwari Banuna	-do-
3	Sh. Vinod Kumar	Patwari Karyali	98160-60922
4	Sh. Lok Raj	Patwari Chebri	89881-15151
5	Sh. Puran Chand	Patwari Khatnol	98167-01418
6		Patwari Deola	-do-
7	Sh. Tota Ram	Patwari Thaila	94185-69839
8	Sh. Govind Bharti	Patwari Sainj	98175-49341

9	Sh. Prem Kumar	Patwari Bairty	94592-12487
10		Patwari Basantpur	-do-
11	Sh. Ram singh	PatwariReog	94597—08190
12	Sh. Manoj Kumar	Patwari Juni	98171-16786
13	Sh. Tek Chand	Patwari Sunni	94592-64226
14		Patwari Shakrori	-do-
15	Sh. Man Singh	Patwari Bajhol	96252-39931
16	Sh. Hem Raj	Patwari Chanawag	98172-69892
17	Sh. Om Parkash	Patwari Pahal	94189-38719
18	Sh. Gopal Singh	Patwari Ghaini	98572-05817
19	Sh. Goverdhan Singh	Patwari Mandri	94180-29715
20	Sh. Rameshwar	PatwariSohal	94181-89728
21	Sh. Yog Raj	Patwari Dhrogra	89881-12739

SDO (C), Rampur

Sr. N o.	Name of official	Designation	Mobile Number
Tehsil Rampur			
1	Sh. Diwan Negi	SDK	94590-87398
2	Sh. Lokinder Jhohta	OK	98051-10744
3	Sh. Radhe Lal	Land Record Kgo	94184-23816
4	Sh. Maina Ram	Land Record Patwari	98053-16016
5	Sh. Baldev Thakur	A.O.K.	94183-40387
6	Sh. Suresh Negi	F.K. Sarahan/Rampur	94186-69299
7	Sh. Vishnu Lal Negi	F.K. Deothi/Nogli	94181-00195
8	Sh. Tikam Singh	Patwari Chandi-branda/Kiyo	94592-94815
9	Sh. Kewal	Patwari Lab-Sadana/Ganvi/Sarpara	94186-27541
10	Sh. Jyoti Parkash	Patwari Tyawal/Sarahan	94184-76895
11	Sh. Hari Singh	Patwari Kino/Shahdhar	88945-60665
12	Sh. Ashok Kumar	Patwari Dofda/Majhewali	98052-34327
13	Miss Ashwani Sar	Patwari Gopalpur/Dhar	94590-87242
14	Sh. Tulsi Dass	Patwari Racholi/Jhakri	94187-02915
15	Sh. Narain Mehta	PatwariRampur/Shingla	94180-34909
16	Sh. Daleep Mehta	Patwari Lalsa	94182-44628
17	Sh. Veshesher Lal	Patwari Dansa/Dhar	98169-54685
18	Sh. Shyam Lal	Patwari Duttnagar/Kamsu/Nirth	94180-74336
19	Sh. Murat Singh	Patwari Bahli/Naren/Dawara	94183-08468
20	Sh. Ashok Mehta	Patwari Taklech/Darkali	94180—01906
21	Sh. Mohar Singh	Patwari Munesh-Bahli/Kasha-pat	941870-71017
22	Sh. Rameshwar Dass	Patwari Deothi/Kuhal Patena	94181-03880
Tehsil Kumarsain			

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23	Sh. Chuni Lal Verma	O.K.	98172-85121
24	Sh. Shankar Dass	F.K. Kotgarh	94593-89256
25	Sh. Bali ram	F.K. Kotighat	98160-10268
26	Sh. Ram Lal	Patwari Kotighat	84181-71762
27	Km. Deepika Gupta	Patwari Kangal	98170-06764
28	Sh. Kartar Chand	Patwari Babahar	98172-34805
29	Sh. Subhash Chand	Patwari Shivan	98161-49546
30	Sh. Yash Pal	PatwariBaragaon	94189-49521
31	Sh. Geeta Ram	Patwari Dhalla	98173-48405
32	Sh. Gurdev singh	Patwari Kotla	94181-57872
33	Sh. Raj Kumar	Patwari Malendi	98163-64577
34	Sh. Prem Lal	Patwari Zar	94590-87609
35	Smt. Rachna	Patwari K/Sain	94183-61460
36	Sh. Om Parkash	Patwari Kacheri	94593-90743
37	Sh. Hari chand	Patwari Madhawani	94184-04842
38	Sh. Chand Ram	Patwari Narkanda	98164-56847
39	Sh. Desh Raj	Patwari Jadoon	98161-76061
40	Sh. Anil chauhan	Patwari Jarol	98056-78076
41	Sh. Gopal chand	Patwari Kotgarh	98176-02099
42	Sh. Surat Ram	Patwari Kirti	98164-70557
43	Sh. Puran Chand	Patwari Shamathla	94181-68142
44	Sh. Budhi singh	Patwari Bhutti	98174-14659
45	Sh. Anil Kumar	Patwari Land Record	94186-46608
Sub-Tehsil Nankheri			
46	Sh. Khem Raj	F.K./O.K. Nankheri/Thali-Chakli	94182-74370
47	Sh. Mohan Lal	Patwari Khunnipanoli/Kharahan/Jahu	94592-23123
48	Sh. Krishan Negi	Patwari Baglati/Jatral	94181-42308
49	Sh. Bhagwan Dass	Patwari Majholi Tipper/Majheoti/Khamadi	94184-75522
50	Sh. Gopal singh	Patwari Delath/Barach/Lailan/Kalmog/Dharan	94592-79672
51	Sh. Prabhu Lal	Patwari Sholi/Thaill/Chakti/Punan/Thana/Nankhari	94189-41200

SDO (C), Theog

Sr. N o.	Name of official	Designation	Mobile Number
1	Sh. Hira Singh Khachi	O.K. Theog	98161-02836
2	Sh. Sohan Lal	Land reform Kanungo	98191-56698
3	Sh. Krishan Lal	Asstt. Office Kanungo	98166-06364
4	Sh. Balbir Thakur	Patwari Computer	94590-42351
5	Sh. Hira Lal	F.K. Theog	94593-94713
6	Sh. Atma Ram	Patwari Rehigat	93187-84187
7	Sh. Tulsi ram	Patwari Devrighat	98177-77884
8	Sh. Rajinder singh	Patwari Jais	94182-14466
9	Sh. Mohan Lal	Patwari Sainj	98162-85872
10	Sh. Mohan	Patwari Basa	98051-66651

DISTRICT DISASTER MANAGEMENT PLAN OF DISTRICT SHIMLA 2012

11	Sh. Sant Ram	Patwari Kiar	94593-54781
12	Sh.Madan	Patwari Chikkar	98176-32883
13	Sh Surinder	Patwari Majhar	94183-83464
14	Sh. Sadh ram	Patwari Sandhu	98167-09821
15	Sh. Govind Singh	F.K. Dhamandri	98165-81585
16	Sh. Madan	Patwari Dharech	94184-61201
17	Sh. Tulsi ram	Patwari Nohal	98053-21950
18	Sh. Nand Lal	Patwari Tiwali	94184-82436
19	Sh. Inder singh	Patwari Cheog	94180-47037
20	Sh. Ramesh	Patwari Dadas	94591-79052
21	Sh. Ved Parkash	Patwari Bani	98169-79169
22	Sh.Naresh Kumar	Patwari Dhamandri	98172-53322
23	Sh. Sher Singh	Patwari Balag	98162-68770
24	-do-	Patwari Mundu	98162-68770
25	Sh. Hira Lal	F.K.Matiana	94593-94713
26	Sh. Hari Saran	Patwari Matiana	94181-61053
27	Sh. Keshav Ram	Patwari Shari	94594-84040
28	Sh. Deva Nand	Patwari Shillaru	89880-52903
29	Sh.Krishan dutt	Patwari Mohari	94184-82729
30	Sh. Karam Chand	Patwari Bharana	98166-88511
31	Sh. Rama Nand	Patwari Kelvi	98162-12147
32	Sh. Mohinder	Patwari Dharkandru	94592-26155
33	Sh.Rahguvir	Patwari Lafu	89880-46243
34	Sh. Sant Ram	Patwari Dharampur	94183-14064
35	Sh. Matha Ram	Patwari Kalind	94187-15984
36	Sh. Nand Ram	F.K. Deha	98166-73466
37	Sh. Gulab singh	Patwari Bagain	98059-74816
38	Sh.TaraDutt	Patwari Ghoond	94592-30384
39	Sh. Vikas	PatwariNeri	96251-52652
40	Sh. Gian singh	Patwari Janahan	94595-82581
41	Sh.Madan	Patwari Gorna(Deha)	94185-70361
42	Sh. Ram Dutt	PatwariBhagri	98058-16853
43	Sh. Mohi Ram	Patwari Kuthar	98163-80967
44	Sh. Hira Nand	Patwari Balghar	94185-79343
45	Sh. Shyam Lal	O.K. Kotkhai	98162-34287
46	Sh.Hukam Chand	F.K.Kotkhai	94180-72163
47	Sh.PyareLal	F.K. Rawlakiar	94185-33707
48	Sh. Ram Krishan	Patwari Purag	98161-70922
49	Sh.JaiPal	Patwari Bag Dumehar	94181-10900
50	Sh.Surinder	Patwari Panog	98160-94563
51	Sh.Chander	Patwari Kiari	94598-75164
52	Sh. Prem Parkash	Patwari Padshal	94180-53834
53	Sh. Mohar Singh	Patwari Garawag	94182-10182
54	Sh. Anil Chauhan	Patwari Deori Khaned	94181-92743
55	Sh-do-	Patwari tharila	94181-92743
56	Sh. Jeet Ram	Patwari Prem Nagar	84180-53949

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57	Sh.Surinder	Patwari Gumma	98059-02405
58	Sh. Budhi ram	Patwari Bakhol	98164-43229
59	Sh. Chaman Lal	Patwari Himri	98171-54771
60	Sh. Sunil Kumar	Patwari Kalbog	94185-89540
61	Sh. Mohan Lal	Patwari Ratnari	94183-10397
62	Sh.Amar Singh	Patwari Ramnagar	98057-26518
63	Sh. Sunil Kumar	Patwari Rawla Kiar	94180-16847
64	Sh.Kamlesh	Patwari Kiaryi	94592-65846

SADAR KANUNGO BRANCH.

Sr. No.	Name of official	Designation	Mobile No.
1	Sh. Mast Ram	SK	94183-83141
2	Sh. Ram Dayal Bhardwaj	NSK	94181-29760
3	Sh. Prem chand Verma	Kgo	98164-02639
4	Sh. Mohinder Singh	Kgo	94181-34399
5	Sh. Durga Singh	Kgo	94184-50136, 98166-12929
6	Sh. Uttam Chand	Patwari	94181-09640
7	Sh. Mohan Singh	Patwari	94180-44569
8	Sh. Bihari Lal	Patwari	98163-07912
9	Sh. Sanjay Thakur	RSA	94186-86411
10	Sh. Om Parkash	DRA	98168-16851
11	Sh. Krishan Bhardwaj	DRA(R)	94184-55380
12	Sh. Vinod Negi	Clerk	94186-24288
13	Sh. Kamal Rohal	Clerk	92187-41548
14	Sh. Suresh Chauhan	Clerk (Rev. Br.)	94182-50470
15	Sh. Suresh Kumar	Jr. Asstt. (LFA Br.)	94184-73622
16	Sh. Suresh Chauhan	Jr. Asstt. (RA)	94595-81195
17	Sh. Ratti Ram	Sr. asstt.	98166-15188
18	Sh. Haminder Singh	Patwari	98160-46669
19	Sh. Pradeep Mehta	Sr. Asstt.	98058-77781
20	Sh. Jagat Ram	Peon	98177-20264
21	Sh. Oma Devi	Peon	-
22	Sh. Mathra Dass	Peon	92188-79587
23	Sh. Hari Ram	Peon	98171-44392

ANNEXURE -7

MEDIA MANAGEMENT DURING DISASTER

Media is considered as the fourth pillar of Indian Democracy meaning there by that it can make or mar the opinion of the people in the country and hence the role of media in disaster management can't be lopsided and therefore we need a responsible media in the country. By media, we generally imply the important channels of mass communication. This includes television, radio, newspapers, magazines, audio and video cassettes as well as movies. Media - print, voice or visual - is an organized means of reaching a large number of people, quickly, effectively and efficiently. The suggestive, informative and analytical role of the media must form a key component of disaster education. It is the most potent way of educating the community on disaster prevention, mitigation and rehabilitation. These tasks can be carried out on the basis of the dual role of media related with imparting information and analyzing disasters discerningly. The effects of disasters need to be examined not only in technical mind scientific terms, but also in humanitarian, social and economic terms.

The electronic media have during recent times emerged as a major component of disaster management, as amply demonstrated in the aftermath of the Jammu and Kashmir earthquake in 2005, sunami in 2010 and the recent cloud bursts in Uttarakhand in 2012. Special emphasis is laid on the role of electronic media and information technology as it is felt that this sector needs to be integrated with not only the disaster response but the overall disaster management strategy.

Role of the print media is also important, as this continues to be the medium of mass media in many parts of the Indian society which are still unreachable by the electronic media. The print media have a major role to play in the pre-disaster prevention, mitigation and preparedness activities through appropriate community awareness generation.

Media needs to be proactive in nature rather than reactive. They need to disseminate the right information at the appropriate time. For instance in Himachal, the reach of radio and television to the masses, in providing information is getting organized. However, there is a need to include professionals in these channels to enable easy comprehension and response to the information. For instance, the involvement of professional meteorologists or training of media experts in providing weather-related information would definitely make an impact on how meteorological information is presented. Keeping in view the usage of the information being disseminated by the media in the society, the roles played by the Media can be categorized into the following four categories :-

1. Educator :- Before a disaster, educating people about the hazard, prevention and self-help during the disaster. During rehabilitation, media can be extremely helpful in providing, accurate and unbiased coverage, post disaster impacts and needs.
2. Mentor :- Guiding /advising people in preparing resource disaster calendar, resource mapping and preparation of community contingency plan.

3. Critics :-By critically evaluating the emergency plan and benefit to be transferred to the people. This may include review and improvement of any existing plan.
4. Opinion Maker:- Media can suggest long term suggestions in the form of structured measure like enactment of certain legislation, adoption of code of conduct etc.

A) Steps Required to be taken by media in disaster management

Media plays an all round roll in pre disaster, during disaster and post disaster stage. The media not only is powerful, it has an inner reach to the lowermost tier and the top most tier as may be most useful for best Governance and management in the case of disaster. However media for such disaster situations needs to be institutionalized and made purposeful, accurate, efficient and effective.

1) Pre Disaster Phase :- The early information by electronic media like television and radio about the likely disasters can save many human being and lives tock. The loss to property can also be minimized to considerable extent. The media can create awareness among community about various types of disasters. It can also play a role in preparing the community by training them and making them aware about do's and don'ts during disasters.

2) During Disaster :-

a) It will play the role of Watch dog On the disaster machinery during the disaster phase. The response time of the relief machinery is generally very late after any disaster. The rehabilitation work after the catastrophe is normally not carried out expeditiously. The media can play the role of a watch dog especially after the disaster when rehabilitation work is going on. The pressure of media in a democratic set up is tremendous and it should be used in a responsible and constructive manner for the benefit of the society. Resources such as search and rescue team equipment, relief material and money are essentially required during disaster and subsequent rehabilitation. The responsibility lies with the Govt. to make available all the resources but some time the system is little lethargic and respond little late. In those circumstances media can play a vital role by being a watch dog and keeping the disaster machinery active.

b) During a disaster, with the breakdown of communications, rumour can have debilitating effect on the relief work. During this time, media can play a role of monitoring such rumours by relaying correct information about the measures being taken and monitoring them. In addition the media can also help by providing an early warning to the people likely to be affected, or about the Do's and Don'ts during a disaster. Media can also help in establishing contacts, identifying the needy spots and focusing attention on them. In addition, media can help by assisting the authorities, voluntary organizations and volunteers in reaching informing and assuring the affected ones of the assistance and measures taken for their relief.

c) media can keep a watch on anti- social elements who try to take advantage of such situations. They can report such matter and highlight such situations. They can also assist the law and order machinery in restoring peace and harmony in the affected community.

d) Media had played very effective role in raising resources for disaster victims in the past. The role of media during Tsunami disaster, Bhuj earthquake where they not only raised crore of rupees but also truck loads of relief materials - clothes food and medicine - was commendable. They were able to convince people for larger participation by highlighting the contributions, providing tax-reliefs and quick and efficient mechanisms of donations.

3) Post disaster Phase:- Making appeal to the people to contribute for the reconstruction and restoration of the disaster affected areas. During a disaster this network is severely affected. District administration who need to contact different agencies like Indian Air Force, Indian Navy, Army, Govt officials and other departments for organization of relief have to rely upon the network available with the media. The district administration take the support of media in making various announcements, releasing the list of casualty, lost people, do's and don't of the disaster etc. Since media's network works on wireless mode, hence it is very effective and useful for the district administration.

B) Dos and Don't for Media

The media should be very careful during reporting of disasters. It should not create excitement and an atmosphere which lead to panic especially in today's time when there is cut-throat competition between various television channels and news papers. It is desired that a balance approach is taken to report a situation. The people should be provided true and correct picture of disaster, its impact, the relief arrangements and coping mechanisms. They should avoid issuing warning signal unless it has been issued by the govt.

Self generated code of conduct for media

1. Impartial
2. Sensitive to social norms and values
3. Not to infringe upon privacy of individuals and families.
4. Avoiding provocation of one group against another.
5. Journalists covering disaster should have basic knowledge and training on disaster management.
6. Make available greater space and broadcasts related to disaster aspects in the form of brief spots, interviews and full-length features.

ANNEXURE -8

EMERGENCY SUPPORT FUNCTIONS

Emergency Support Functions (ESFs) Plan at District Level

In the aftermath of a natural disaster wherein District Administration's overall coordination is needed the command, control and coordination will be carried out under the ESFs Plan. District EOC shall activate the ESFs and the concerned Department/Agency of each ESFs shall identify requirements in consultation with their counterparts in affected districts, mobilize and deploy resources to the affected areas of the district. The District EOC shall maintain a close link with the State EOC.

ESFs shall be responsible for the following:

1. The designated authorities for each of ESF shall constitute quick response teams and assign the specific task to each of the member.
2. The designated authorities for each of the ESF shall identify and earmark the resources i.e. Manpower and materials to be mobilized during the crisis.
3. An inventory of all the resources with details shall be maintained by each of the designated authority for each of the ESF.
4. The designated authority for each of the ESF will also enter into pre-contracts for supply of resources, both goods and services to meet the emergency requirements.
5. The designated authority for each of the ESF will be delegated with adequate administrative, legal and financial powers for undertaking the tasks assigned to them.

PRIMARY AND SECONDARY AGENCIES

The designated primary agency, acting as the State agency shall be assisted by one or more support agencies (secondary agencies) and shall be responsible for managing the activities of the ESF and assisting the district in the rescue and relief activities and ensuring that the mission is accomplished. The primary and secondary agencies have the authority to execute response operations to directly support the needs of the affected districts.

Agency for Each Emergency Support Functions and Roles to be performed

ESF No.	ESF	Primary Agency	Secondary Agency	Responsibilities of Primary Agency	Activities for Response	Role of Secondary Agency
1.	Communication	BSNL	Police Units of Armed Forces in the area	Coordination of national actions to assure the provision of telecommunication support the state and district; Coordinate the requirement of temporary telecommunication in the affected areas.	Responsible for coordination of national actions to assure the provision of telecommunication support the state and district response elements; Coordinate the requirement of temporary telecommunication in the affected areas.	Make available police wireless network at the affected locations; Coordinate for the other networks available such as Ham Radios or HPSEB network etc; The units of armed forces in the area would provide communication network on the request of the competent authority.
2	Public Health	Department of Health and Family	Department of Ayurveda (DAMO)	To Coordinate, direct and integrate state level response	Provide systematic approach to patient care:	To perform the same functions assigned to

ANNEXURE

		Welfare (CMO/M S ZH)		<p>Direct activation of medical personnel, supplies and equipment;</p> <p>Coordinate the evacuation of patients;</p> <p>Provide human services under the Dept of health;</p> <p>To prepare and keep ready Mobile Hospitals and stock;</p> <p>To network with private health service providers;</p> <p>To provide for mass decontamination;</p> <p>Check stocks of equipment and drugs.</p>	<p>Perform medical evaluation and treatment as needed;</p> <p>Maintain patient tracking system to keep record of all patients treated;</p> <p>Mobilization of the private health services providers for emergency response.</p> <p>In the event of CNBR disaster to provide for mass decontamination of the affected population;</p> <p>Maintain record of dead and arrange for their post mortem.</p>	<p>the primary agency;</p> <p>Provide manpower to the primary agency wherever available and needed;</p> <p>Make available its resources to the primary agency wherever needed and available.</p>
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3.	Sanitation/ Sewerage Disposal	Urban Develop ment and Rural Develop ment	Irrigation and Public Health	Make arrangement for proposal disposal of waste in their respective areas;	Ensure cleanliness and hygiene in their respective areas; To arrange for	Repair the sewer leakages immediately ; Provide bleaching
				Arrange adequate material and manpower to maintain cleanliness and hygiene.	the disposal of unclaimed bodies and keeping record thereof; Hygiene promotion with the availability of mobile toilets; To dispose off the carcass.	powder to the primary agencies to check maintain sanitation.

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4.	Power	HPSEB Ltd. (SE/XEN)	Himurja	<p>Provide and coordinate State support until the local authorities are prepared to handle all power related problems;</p> <p>Identify requirements of external equipment required such as DG sets etc;</p> <p>Assess damage for national assistance.</p>	<p>Support to Local Administration ;</p> <p>Review the total extent of damage to the power supply installations by a reconnaissance survey;</p> <p>To provide alternative means of power supply for emergency purposes;</p> <p>Dispatch emergency repair teams equipped with tools, tents and food;</p> <p>Hire casual labour for the clearing of damaged poles etc.</p>	<p>Make arrangements for and to provide the alternative sources of lighting and heating to the affected populations and for the relief camps.</p>
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5.	Transport	Department of Transport (RTO)	HRTC, Civil Aviation. (RM, HRTC, DTDO)	<p>Overall coordination of the requirement of transport;</p> <p>Make an inventory of vehicles available for various purposes;</p> <p>Coordinate and implement emergency related response and recovery functions, search and rescue and damage assessment.</p>	<p>Coordinate arrangement of vehicles for transportation of relief supplies from helipads/airports to the designated places;</p> <p>Coordinate arrangement of vehicles for transportation of SAR related activities.</p>	<p>Make available its fleet for the purpose of SAR, transportation of supplies, victims etc;</p> <p>Act as stocking place for fuel for emergency operations;</p> <p>Making available cranes to the Distt. Administration;</p> <p>To coordinate for helicopter services etc. required for transportation of injured, SAR team, relief and emergency supplies.</p>
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ANNEXURE

6.	Search and Rescue	Civil Defence, Home Guards, Fire and Emergency Services (Commandant HG)	SDRF, Armed and Para military forces, Police, Red Cross, VOs, Volunteers and 108.	Establish, maintain and manage state search and rescue response system; Coordinate search and rescue logistics	GIS is used to make an estimate of the damage area and the deployment of the SAR team in the area according to the priority;	108 and Red Cross to make available ambulances as per requirement ; SDRF, VOs and
				during field operations; Provide status reports of SAR updates throughout the affected areas.	Discharge all ambulatory patients for the first aid which has the least danger to health and others transported to safer areas.	Volunteers to assist the primary agency in SAR; Armed and para military forces to provide assistance to civil authorities on demand; Police to arrange for the transportation and postmortem of the dead.

7.	Public Works and Engineering	HP PWD (SE/XEN)	CPWD, National Highways Authority of India, MES, BRO	<p>Emergency clearing of debris to enable reconnaissance ;</p> <p>Clearing of roads;</p> <p>Assemble casual labour;</p> <p>Provide a work team carrying emergency tool kits, depending on the nature of disaster, essential equipment such as</p> <ul style="list-style-type: none"> • Towing Vehicles 	<p>Establish a priority list of roads which will be opened first;</p> <p>Constructing major temporary shelters;</p> <p>Connecting locations of transit/relief camps;</p> <p>Adequate road signs should be installed to guide and assist the relief work;</p> <p>Clearing the roads connecting</p>	<p>Making machinery and manpower available to the PWD and to keep national highways and other facilities in functional state.</p>
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ANNEXURE

				<ul style="list-style-type: none"> • Earth Moving Equipments • Cranes etc. <p>Construct temporary roads;</p> <p>Keep national and other main highways clear from disaster effects such as debris etc.;</p> <p>Networking with private services providers for supply of earth moving equipments etc.</p>	<p>helipads and airports;</p> <p>Restoring the helipads and making them functional;</p> <p>Rope in the services of private service providers and secondary services if the department is unable to bear the load of work.</p>	
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8.	Information and Communication	District Collectorate (AC/ADM)	Department of IT/NIC (DIO, NIC)	Operate a Disaster Welfare Information (DWI) System to collect, receive, and report status of victims and assist family reunification; Apply GIS to speed other facilities of relief and search and rescue; Enable local authorities to establish contact with the state authorities; Coordinate planning procedures between district, the state and the centre; Provide ready formats for all reporting procedures as a standby.	Documentation of response/relief and recovery measures; Situation reports to be prepared and completed every 3-4 hours.	Render necessary assistance in terms of resources, expertise to the primary agency in performing the assigned task.
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ANNEXURE

9.	Relief Supplies	Collectorate (AC/ADM)	Department of Food and Civil Supplies (DFSC, AM CSC)	To collect, process and disseminate information about an actual or potential disaster situation to facilitate the overall activities of all responders in providing assistance to an affected area in consultation; Coordinate activities involved with the emergency provisions;	Support to Local Administration ; Allocate and specify type of requirements depending on need; Organize donation (material) for easy distribution before entering disaster site.	To assist the primary agency in arranging and supplying relief supplies; To assist the primary agency in running the relief camps.
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				<p>Temporary shelters;</p> <p>Emergency mass feeding;</p> <p>To coordinate bulk distribution of emergency supplies;</p> <p>To provide logistical and resource support to local entities;</p> <p>In some instances, services also may be provided to disaster workers;</p> <p>To coordinate damage assessment and post disaster needs assessment.</p>		
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ANNEXURE

10.	Food & Supplies	Department of Food and Public Distribution (DFSC)	Department of Cooperation (ARCS)	<p>Requirement of food and clothing for affected population;</p> <p>Control the quality and quantity of food, clothing and basic medicines;</p> <p>Ensure the timely distribution of</p>	<p>Make emergency food and clothing supplies available to population;</p> <p>Ensure the provision of specific nutrients and supplementary diet for the lactating, pregnant</p>	<p>Ensuring the distribution of food supplies to the affected population through the PDS network etc.</p>
				<p>food and clothing to the people;</p> <p>Ensure that all food that is distributed is fit for human consumption.</p>	<p>women and infants.</p>	

11.	Drinking water	Department of I & PH (SE/XEN)	Department of Urban Development (Secretary SADA)	Procurement of clean drinking water; Transportation of water with minimum wastage; Special care for women with infants and pregnant women; Ensure that sewer pipes and drainage are kept separate from drinking water facilities.	Support to local Administration ; Water purification installation with halogen tablets etc.	To assist the primary agency wherever ULB is associated in the distribution of potable water.
12.	Shelter	Collectorate (AC/ADM)	HIMUDA, HP PWD, UD and Panchayati Raj	Provide adequate and appropriate shelter to all population; Quick assessment and identifying the area for the establishment of the relief camps; Identification of public	Support to Local Administration ; Locate adequate relief camps based on survey of damaged houses; Develop alternative arrangements for population living in	HIMUDA and HP PWD would assist the primary agency in establishing temporary shelters of larger dimensions; Department of Panchayati Raj through local Panchayats

ANNEXURE

				<p>buildings as possible shelters;</p> <p>Identifying the population which can be provided with support in their own place and need not be shifted reallocated;</p> <p>Locate relief camps close to open traffic and transport links.</p>	<p>structures that might be affected even after the disaster.</p>	<p>would assist the primary agency in establishing shelters of smaller dimensions.</p>
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13.	Media	Department of Public Relations (DPRO)	Local DD and AIR	<p>To Provide and collect reliable information on the status of the disaster and disaster victims for effective coordination of relief work at state level;</p> <p>Not to intrude on the privacy of individuals and families while collecting information;</p> <p>Coordinate with DOCs at the airport and railways for required information for international and national relief workers;</p>	<p>Use and place geographical Information to guide people towards relief operation;</p> <p>Use appropriate means of disseminating information to victims of affected area;</p> <p>Curb the spread of rumours;</p> <p>Disseminate instructions to all stakeholders.</p>	To assist the primary agency in discharge of its role.
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ANNEXURE

				<p>Acquire accurate scientific information from the ministry of Science and Technology;</p> <p>Coordinate with all TV and radio networks to send news flashes for specific needs of Donation;</p> <p>Respect the socio-cultural and emotional state of the disaster victims while collecting information for dissemination.</p>		
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14.	Help lines	Collectorate (AC/ADM)	Department of Public Relations	<p>To receive distress calls from the affected people and coordinate with the control room;</p> <p>To facilitate the optimization of donations received in kind;</p> <p>Co-ordinate, collect, process, report and display essential</p>	<p>One of the most critical needs will be having a simplified way of identifying and tracking victims and providing assistance;</p> <p>Identify locations for setting up transit and relief camps, feeding centres and setting up of the Help lines at the nodal</p>	<p>To assist the primary agency in performing its job effectively and provide its manpower and resources for the purpose.</p>
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ANNEXURE

			<p>elements of information and to facilitate support for planning efforts in response operations;</p> <p>Co-ordinate pre-planned and event-specific aerial reconnaissance operations to assess the overall disaster situation;</p> <p>Pre-positioning assessment teams headed by the State coordinating officer and deployment of other advance elements;</p> <p>Emergency clearing of debris to enable reconnaissance of the damaged areas and passage of emergency personnel and equipment for life saving property protection and health and safety.</p>	<p>points in the state and providing the people the information about the numbers.</p>	
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15.	Animal Care	Department of Animal Husbandry (AD AH)	Department of Panchayati Raj (DPO)	Treatment of animals; Provision of vaccination; Disposal of dead animals.	To arrange for timely care and treatment of animals in distress; Removal of dead animals to avoid outbreak of epidemics.	To assist the primary agency in performing its role.
16.	Law and Order	Police (SP)	Home Guards (Commandant Home Guards)	Having sound communication and security plan in place to coordinate law and order issues; Training to security personnel in handling disaster situations and issues related to them.	To maintain law and order; To take measure against looting and rioting; To ensure the safety and security of relief workers and material; To take specific measure for the protection of weaker and vulnerable sections of the society; To provide safety and security at relief camps and temporary shelters.	To assist the primary agency by making available manpower.

ANNEXURE

17.	Removal of trees and fuel wood	Forest (DFO)	Forest Corporation (AM FC)	<p>Removal of fallen trees;</p> <p>To provide fuel wood for the relief camps and public;</p> <p>Have adequate storage of fuel wood and make arrangement for distribution thereof;</p> <p>To provide fuel wood for cremation.</p>	<p>Arrange for timely removal of trees obstructing the movement of traffic;</p> <p>Arrange for timely removal of trees which have become dangerous;</p> <p>Make arrangement for fuel wood for the relief camps and for general public;</p> <p>Provide fuel wood for mass cremation etc.</p>	To support and supplement the efforts of the primary agency.
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ANNEXURE -9

Guidelines for Requisitioning of Armed Forces in Aid of Civil Administration

Procedure for Provision of Aid

1. The Armed Forces are conscious of not only their constitutional responsibility in-aid to civil authority, but also, more importantly, the aspirations and the hopes of the people. Although such assistance is part of their secondary role, once the Army steps in, personnel in uniform wholeheartedly immerse themselves in the tasks in accordance with the Army's credo - **SERVICE BEFORE SELF.**

2. Assistance during a disaster situation is to be provided by the Defence Services with the approval and on orders of the central government. In case, the request for aid is of an emergency nature, where government sanctions for assistance is not practicable, local military authorities, when approached for assistance should provide the same. This will be reported immediately to respective Services Headquarters (Operations Directorate) and normal channels taken recourse to, as early as possible.

Requisition Procedure

3. Any state unable to cope with a major disaster situation on its own and having deployed all its resources will request Government of India for additional assistance. Ministry of Defence will direct respective service headquarters to take executive action on approved requests. The chief secretary of state may initiate a direct request for emergency assistance, for example, helicopter for aerial reconnaissance, or formation of local headquarter (Command/Area Headquarters) or naval base or air force station.

Coordination

4. The responsibility for coordination of disaster relief operations at various levels is as follows:

- a) Inter-service Coordination at Central Level: Cabinet secretariat (Military Wing). A case for co-opting a Tri Service RRF to cater for emergency situations within India and in the region is under consideration of COSC. This JCC would be responsible for coordination and directing all rescue/relief operations to ensure synergy of efforts of all three services in management of disasters.
- b) Service Headquarters
 - (i) Military Operations Directorate (MI-6) at Army Headquarters
 - (ii) Director of Naval operations at Naval headquarters
 - (iii) Directorate of Operations (Transport and Maritime) at Air Headquarters
- c) Command and Lower Formation Headquarters: Senior General Staff Officers (Operations)
- d) State Level: Service liaison officer deputed to form a part of Joint Control Centre. e) Local Level: Nominated Commander of troops and senior civil administrator in-

- charge of relief.
5. The Armed Forces may be called upon to provide the following types of assistance:
- a) Infrastructure for command and control for providing relief. This would entail provision of communications and technical manpower.
 - b) Search rescue and relief operations at disaster sites.
 - c) Provision of medical care at the incident site and evacuation of casualties. d) Logistics support for transportation of relief materials
 - e) Setting up and running of relief camps
 - f) Construction and repair of roads and bridges to enable relief teams/ material to reach affected areas.
 - g) Repair, maintenance and running of essential services especially in the initial stages of disaster relief.
 - h) Assist in evacuation of people to safer places before and after the disaster
 - i) Coordinate provisioning of escorts for men, material and security of installations, j) Stage management and handling of International relief, if requested by the civil administration.

Disaster Relief Operation

6. Important aspects of policy for providing disaster relief are as under:

- a) Disaster relief tasks can be undertaken by local commanders. However, HQ Sub Area is to be informed at the first opportunity and then flow of information to be maintained till completion of the task.
- b) Effective and efficient disaster relief by the army while at task
- c) Disaster relief tasks will be controlled and coordinated through Commanders of Static Headquarters while field units Commanders may move to disaster site for gaining firsthand knowledge and ensuring effective assistance.
- d) Once situation is under control of the civil administration, army aid should be promptly de-requisitioned.
- e) Adequate communication, both line and radio, will be ensured from Field Force to Command Headquarters.

Procedure to Requisition Army, and Air Force

7. It will be ensured by the local administration that all local resources including Home Guards, Police and others are fully utilised before assistance is sought from outside. The District Collector will assess the situation and project his requirements to the State Government. District Control Room will ensure that updated information is regularly communicated to the State Control Room, Defence Service establishments and other concerned agencies.
8. District Collector will apprise the State Government of additional requirements through State Control Room and Relief Commissioner of the State.
9. Additional assistance required for relief operations will be released to the District Collector from the state resources. If it is felt that the situation is beyond the control of state administration, the Relief commissioner will approach the Chief Secretary to get the aid from the Defence Services. Based on the final assessment, the Chief Secretary will project the requirement as under while approaching the Ministry of Defence, Government of India simultaneously for clearance of the aid from Army Head quarters Sub Area Commander,

and Headquarters of Western Command Chandimandir.

Aid from Air Force: Sector Commander Sarsawa, Saharanpur (Contact Person: Wg. Cdr. Vineet Sharma – 07599342240; Fax No. 01331 – 244822), and Western Air Command Headquarters, Delhi.

10. Co-Ordination Between Civil and Army: For deployment of the Army along with civil agencies on disaster relief, co-ordination should be carried out by the district civil authorities and not by the departmental heads of the line departments like Police, Health & Family Welfare, PWD and PHED etc.

11. Overall Responsibility When Navy and Air Force are also being Employed: When Navy and Air Force are also involved in disaster relief along with the Army, the Army will remain overall responsible for the tasks unless specified otherwise.

12. Principles of Employment of Armed Forces

- a) **Judicious Use of Armed Forces:** Assistance by Armed Forces should be requisitioned only when it becomes absolutely necessary and when the situation cannot be handled by the civil administration from within its resources. However, this does not imply that the response must be graduated. If the scale of disaster so dictates, all available resources must be requisitioned simultaneously.
- b) **Immediate Response:** When natural and other calamities occur, the speed for rendering aid is of paramount importance. It is clear that, under such circumstances, prior sanction for assistance may not always be forthcoming. In such cases, when approached for assistance, the Army should provide the same without delay. No separate Government approval for aid rendered in connection with assistance during natural disasters and other calamities is necessary.
- c) **Command of Troops:** Army units while operating under these circumstances continue to be under command of their own commanders, and assistance rendered is based on task basis.
- d) **No Menial Tasks:** While assigning tasks to troops, it must be rendered that they are

not employed for menial tasks e.g. troops must not be utilised for disposal of dead bodies.

- e) **Requisition of Aid on Task Basis:** While requisitioning the Army, the assistance should not be asked for in terms of number of columns, engineers and medical teams. Instead, the- civil administration should spell out tasks, and leave it to army authorities to decide on the force level, equipment and methodologies to tackle the situation.

- f) **Regular Liaison and Co-ordination:** In order to ensure that optimum benefit is derived out of Armed Forces employment, regular liaison and coordination needs to be done at all levels and contingency plans made and disseminated to the lowest level of civil administration and the Army.

- g) **Advance Planning and Training:** Army formations located in areas prone to disaster must have detailed plans worked out to cater for all possible contingencies. Troops should be well briefed and kept ready to meet any contingency. Use of the Vulnerability Atlas where available must be made.

- h) **Integration of all Available Resources:** All available resources, equipment, accommodation and medical resources with civil administration, civil firms and NGOs needs to be taken into account while evolving disaster relief plans. All the resources should be integrated to achieve optimum results. Assistance from outside agencies can be superimposed on the available resources.

- i) **Early De-requisitioning:** Soon after the situation in a disaster-affected area has been brought under control of the civil administration, Armed Forces should be de-requisitioned.

REQUISITION FOR ARMY AID BY CIVIL AUTHORITIES (NATURAL CALAMITIES)

Reference No. : Calamities

1. From :

2. To :

3. for Information -

4. Date and time origination of demand -

5. Situation as

at area _____ an

Heavy flood in area _____ due rising of rigor

_____ Civilians marooned. Own evacuation resources insufficient meet requirement. In view continuous heavy, rains in upper regions, more areas may be affected marooning other civilians of _____ region.

6. **Type of extent of aid required for**

- (i) Equipment and personal, to evacuate marooned civil.
- (ii) Medical assistance for approximately _____ civilians.
- (iii) Tentage for _____ families if available.

7. **Likely duration and period of aid required**

for _____ days with effect from _____ (esent situation permitting)

8. **Officer in charge Army aid to contact.**

9. **Name of civil Liaison Officer detailed.**

Mr. _____ (Telephone No.) _____

10. **Arrangement made by civil authorities to guide Army aid to place of operations.**

Mr. _____ will meet Army aid part at _____ On receipt of information from Army authorities)

11. **Special Instructions.**

ANNEXURE

- (i) School building at _____
house personnel and also for medical
arrangements. being made available to
- (ii) Sufficient stocks of required medicines in the present contingency being made
available to treat effected civilians population.
- (ii) Road Bridge at _____ is unserviceable.

12. Please acknowledge.

Signature

Office Seal

DE-REQUISITION OF ARMY AID (NATUAL CALAMITIES)

- 1. **Reference No.** _____ **Date :** _____
- 2. **From** - _____
- 3. **To** - _____
- 4. **Information** - _____
- 5. Army aid requisitioned vide our reference No. _____ of
_____ is hereby de-requisitioned with effect from
_____ hrs on _____.
- 6. Please acknowledge.

Signature

Office Seal

ANNEXURE -10

CHECK LISTS

REVENUE DEPARTMENT

Sr. No.	Preparedness Measures	Action Taken/Remarks
1	Update District Disaster Management Plan twice a year specifically with reference to the resources and improved HVRA.	
2	Check upon communication network; phones, wireless, fax, internet, HAM network every month.	
3	Identify and determinate Hazard wise most vulnerable & risk prone pockets quarterly.	
4	Activate District Control Rooms establish communication with sub-division, The, Block & Village level functionaries in the close proximity affected area.	
5	Fix the location of Response base	
6	Designate In-charge officials of the response base.	
7	Check the availability and deployment of resources and mobilize	
8	Convene meetings of District Disaster Management Authority once in three months	
9	Convene civil defense, NGOs, PRIs and ULBs meetings prepare a list of NGOs, PRIs and ULBs with their Functional Specialization and Geographical Coverage.	
10	Check the availability of Food Grains in PDSs shops and other stocking and distributors in the district	
11	Prepare a list of relief items for distribution division wise keeping in view the food habits of people	
12	Determine quantity of relief items as per minimum standards and expenditure to be incurred in it.	
13	Prepare a transport and alternate transport plan for evacuation and distribution of relief	
14	Prepare a plan for VIP's movement.	
15	Prepare a media plan for dissemination of information to the people of the district; local newspaper , radio, TV and cable, etc	
16	Ensure appropriate stocking of relief material received from outside.	

HOME DEPARTMENT

Sr. No.	Preparedness Measures	Action taken/ Remarks
1	Prepare a deployment plan for police forces	
2	Check the availability and readiness of the search and rescue teams within the district police	
3	Check adequacy of wireless communication network and setup links with the SEOC DEOC and at Sub-divisional level to reach out the	
4	Develop a traffic plan for contingencies arising out of disasters – alternative routs and traffic diversion etc.	
5	Develop a patrolling plan for controlling the activities for controlling the activities of anti social elements, critical infrastructure and affected villages/locality/shelters/relief camps.	
6	Keep the police vehicles and other modes of transport available in readiness.	
7	Prepare a Plan for VIP movements to the disaster affected areas.	
8	Identify anti social elements that could take undue advantage and take suitable preventive actions.	
9	Coordinate with NGOs and provide them with adequate security.	

DEPARTMENT OF IRRIGATION AND PUBLIC HEALTH

Sr. No.	Preparedness Measures	Action Taken/ Remarks
1	Check the availability of seeds and disseminate information about the outlets where seeds can be made available.	
2	Set up a public information center for providing information sowing of crops, alternative crops, pests and application of	
3	Prepare a schedule for spray of pesticides and insecticides after the disaster.	

DEPARTMENT OF AGRICULTURE

Sr. No.	Preparedness Measures	Action Taken/ Remarks
1	Check the availability of seeds and disseminate information about the outlets where seeds can be made available.	
2	Set up a public information center for providing information sowing of crops, alternative crops, pests and application of	
3	Prepare a schedule for spray of pesticides and insecticides after the disaster.	

DEPARTMENT OF ANIMAL HUSBANDRY

Sr. No.	Preparedness Measures	Action Taken/ Remarks
1	Prepare and publicize the list of common disaster specific ailments and possible precautions for the farmers to observe.	
2	Organize vaccination for cattle in disaster villages.	
3	Prepare a plan for setting up cattle camps and cattle feeding centers.	
4	Prepare kits which could be given to Veterinary doctors and Animal Husbandry workers/volunteers.	
5	Prepare a plan for disposal of dead animals	
6	Prepare a plan for feed storage centers.	

DEPARTMENT OF HEALTH AND FAMILY WELFARE

Sr. No.	Preparedness Measures	Action Taken/ Remarks
1	Prepare a Health Contingency Plan for deployment of health and medical personnel.	
2	Obtain a list of respondent Base from district administration and assign mobile health units and medical staff to each Response	
3	Organize vaccination in Disaster affected area.	
4	Ensure necessary stock of medical supplies and blood.	
5	Organize maternity care centers in every Advance Medical Post.	
6	Keep operative facilities in readiness.	
7	Seek mutual aid arrangement with private hospitals and other dispensaries existing in the area.	

SOURCE:- HPSDMA 2012

ANNEXURE -11

GLOSSARY

ARMVs	–	Accident Relief Medical Vans
BIS	–	Bureau of Indian Standards
CBOs	–	Community Based Organisations
CBRN	–	Chemical, Biological, Radiological and Nuclear
CSR	–	Corporate Social Responsibility
CRF	–	Calamity Relief Fund
CWC	-	Central Water Commission
DDMA	–	District Disaster Management Authority
DCMC	-	District Crisis Management Committee
DM	–	Disaster Management
DMC	-	Disaster Management Cell
GIS	–	Geographic Information System
GSI	-	Geological Survey of India
Gol	–	Government of India
GPS	–	Global Positioning System
HPC	–	High Powered Committee
HIPA	-	Himachal Institute of Public Administration
IAY	–	Indira Awas Yojana
IAG	-	Inter Agency Coordination
ICIMOD	-	International Centre for Integrated Mountain Development
IRS	–	Incident Response System
ICT	–	Information and Communication Technology
IDRN	–	India Disaster Resource Network
IDKN	–	India Disaster Knowledge Network
IMD	-	Indian Meteorology Department
IITs	–	Indian Institutes of Technology

IT	–	Information Technology
ITIs	–	Industrial Training Institutes
ITK	–	Indigenous Technical Knowledge
MFA	-	Medical First Aid
MHA	–	Ministry of Home Affair
NCC	–	National Cadet Corps
NCCF	–	National Calamity Contingency Fund
NDEM	–	National Database for Emergency Management
NDMA	–	National Disaster Management Authority
NDMF	–	National Disaster Mitigation Fun
NDRF	–	National Disaster Response Force
NEC	–	National Executive Committee
NGOs	–	Non-Governmental Organisations
NIDM	–	National Institute of Disaster Management
NITs	–	National Institutes of Technology
NSDI	–	National Spatial Data Infrastructure
NSS	–	National Service Scheme
NYKS	–	Nehru Yuva Kendra Sangathan
PPP	–	Public-Private Partnership
PRIs	–	Panchayati Raj Institutions
R&D	–	Research and Development
RH	-	Reproductive Health
SAARC	–	South Asian Association for Regional Cooperation
SAR	-	Search and Rescue
SASE	-	Snow and Avalanche Study Establishment
SCMC	-	State Crisis Management Committee
SDMA	–	State Disaster Management Authority
SDRF	–	State Disaster Response Force
SEC	–	State Executive Committee
SOPs	–	Standard Operating Procedures

ULBs	–	Urban Local Bodies
UN	–	United Nations

DEFINATION

Hazard Is an event of occurrence that has the potential for causing injury to life or damage to property or the environment.

Disaster Can be defined as an occurrence, due to natural causes or otherwise, which results in large-scale deaths or imminent possibility of deaths and extensive material damage. In magnitude and intensity, it ranks higher than an accident and requires special measures of mitigation, which is beyond the capabilities of the existing fire, rescue, and relief services.

Risk Is defined as a measure of the expected losses due to a hazard event of a particular magnitude occurring in a given area over a specific time period. The level of risk depends upon:

- The nature of the Hazard
- The vulnerability of the elements which is affects.
- And the economic value of those elements.

Risk Assessment means the quantitative evaluation of the likelihood of undesired events and the likelihood of harm or damage being caused by them, together with the value judgments made concerning the significance of the results.

Risk Analysis means the identification of undesired events that lead to the materialization of a hazard, the analysis of the mechanisms by which these undesired events could occur and, usually, the estimation of the extent, magnitude, and likelihood of any harmful effects.

Risk Management means the program that embraces all administrative and operational programs that are designed to reduce the risk of emergencies.

Vulnerability of an area is determined by the capacity of its social, physical and economic structures to withstand and respond to hazard events.

Emergency Response Plan :- It means a detailed program of action emergency requiring prompt corrective measure beyond normal procedures to protect human life, minimize

injury, optimize loss control and reduce; the exposure of physical assets and the environment, or in other words is the process by which the response to an extraordinary even is categorized into functional components and responsibility for each component is assigned to the appropriate individual or agency.

Preparedness: Those activities which governments, organizations, communities and individuals develop to minimize loss of life and damage and to organize and facilitate timely and effective rescue, relief and rehabilitation in case of disaster.

Preventive Measures :- Preventive **action** may be described as measures designed to prevent natural phenomena from causing or resulting in disaster or other related emergency situations. It involves the formulation and implementation of long-range policies and programmes to prevent or eliminate the occurrence of disasters.

Mitigation: The concept of mitigation spans the broad spectrum of disaster prevention and preparedness. Mitigation means reducing the actual or probable effects of extreme disaster on man and his environment.

Response is the first phase which occurs after the onset of an emergency and is intended to provide emergency assistance for disaster effects and casualties. This includes search, rescue, shelter, medical care, and other efforts to reduce the probability or extent of secondary damage.