

ACTIVITY REPORT (2011-2015)



*Himachal Pradesh State Disaster Management Authority
(HP SDMA)*

Government of Himachal Pradesh
Department of Revenue (Disaster Management Cell)
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ACTIVITY REPORT 2011-2015.

1. Introduction:

The state of Himachal Pradesh is prone to multiple disasters as of the total 33 identified hazards by High Powered Committee (HPC) the State is vulnerable to 25 hazards. Every year the state faces the fury of perils caused by vagaries of nature and aggravated by the intervention of human beings. Due to topographical, metrological and geological variability across the state the incidence of cloud bursts, flash floods, avalanches, droughts and other natural calamities hit the State often. In the disaster prone map of the country, Himachal Pradesh has attained dubious distinction of falling in first five states in respect of hazards such as earthquakes, flash floods, landslides, avalanches and forest fires.

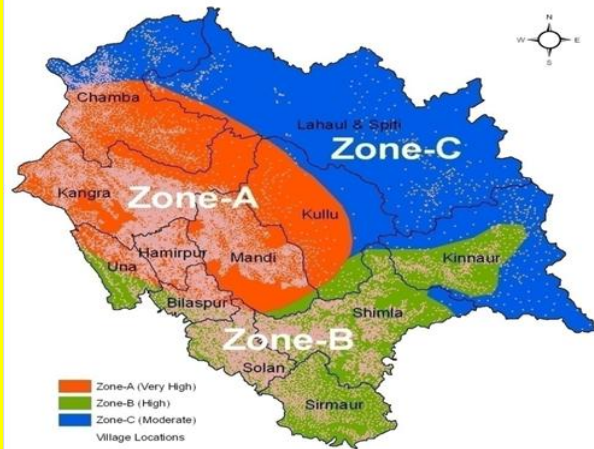
The following specificities further accentuate the disaster vulnerability of the people in the State:

- Physical isolation & tough terrain.
- Scattered nature of settlements & hamlets.
- Harsh climatic conditions.
- High construction cost.
- Inadequate infrastructure.
- Inadequate road connectivity
- Dependency of 70% people on agriculture and allied sectors for their livelihood.
- Heavy dependence on rains and inadequate irrigation.
- Substantial population of livestock (52, 26,388).
- Vulnerability to climate change.

NEW ADDITION TO LEXICON OF NATURAL HAZARDS

- STATE OF H.P IS PRONE TO MULTIPLE HAZARDS .
- AFFLICTED BY ABOUT 25 OUT OF 35 HAZARDS IDENTIFIED BY HIGH POWERED COMMITTEE.
- FLASH FLOODS ARE NOT NEW BUT GLOF & LDOF/LLOF – POTENTIAL TRIGGER OF CLIMATE CHANGE IS A NEW INSIGHT.

Vulnerability & Risk Zones of Himachal Pradesh



The past experiences suggest that immediate impact of disasters such as floods, landslides and earthquake results in the disruption of road connectivity. Sometimes the roads in the state remain cut-off for months due to the occurrence of landslides, formation of lakes and submergence of roads. There are many instances when the districts of Kinnaur and Lahaul & Spiti remained cut-off from rest of the state for months. At times the connectivity is also broken due to avalanches and snowstorms hindering the transport to the affected border areas. Lack of connectivity would also cause secondary effects such as non-availability of essential supplies, hoarding by the rich and hardship to the poor.



The dispersed and scattered nature of the settlements away from the roads on top of spur, hills and deep in the valleys also render the communities highly vulnerable in the wake of disasters. For instance in the absence of road connectivity the fire tender could not reach village Chachawari in Rohru area of Shimla district which was devastated by the fire on Dec 23, 2011. As a result 65 houses were reduced to ash, 250 cattle perished and 450 people were affected including the aged and children. As per the 2011 Census the State has about 20,000 villages scattered in different districts of the state and as on day only about 8,000 have been connected by roads. Apart from road connectivity the disrupted telecommunication and electricity supplies further enhances the vulnerability of communities.

Isolation of affected communities and villages due to hostile weather condition render them vulnerable to hardships of all kinds besides the risk of increased death toll due to snowfall, rains, freezing temperature and non-availability of required relief. In fact, during 1975 Kinnaur earthquake, not many people died due to earthquake, but due to heavy snowfall, providing relief became difficult and the affected people had to suffer in the absence of health services to injured, shortage of food, shortage of warm clothing and shelter. Due to poor visibility and inclement weather even providing relief to the affected village's through helicopter was not possible.

The threat of impending earthquake in the state is looming large and hangs like proverbial Damocles sword on the large population which lives in the highest risk zone V as per the seismic zoning map of India. Seismic records for the past years coupled with continued occurrence of moderate to large earthquakes in the state of Himachal Pradesh render the state's seismic vulnerability very high. Even though the earthquakes are generally considered to be rare low probability events with recurrence periods of the order of several decades, yet they pose extremely high risk. The fact that 32% of the total geographical area

of the state falling in very high damage risk zone accommodates about 60% of the total population is an eloquent reflection of seismic vulnerability of the state.



Risk from impending threat of earthquake can be gauged from the 1992 simulation of possible effects of a major earthquake in Kangra region of Himachal Pradesh. The simulation based on the scenario of 1905 earthquake projects complete collapse of 145,000 houses and partial collapse of 2,68,000 houses in the affected area of 7900 SQ. KM . The loss of life could range from 88,999 to 3,44,000 depending on the time of the day and season when it occurs. Recently another hypothetical scenario has been developed by NDMA team of earthquake engineering experts from IITs Bombay and Madras in consultation with WIHG; GSI & IMD. The simulation results with earthquake M8.0 and epicenter near Sundernagar in Mandi District of Himachal Pradesh predicts strong ground shaking with most parts of the State experiencing Intensity $> IX$. About 64% of the total geographical area of the State will be exposed to the impact of the earthquake and 80% of which comprises urban conglomeration such as Bilaspur, Chamba, Hamirpur, Kangra, Kullu, Lahul Spiti, Mandi, Shimla & Una will experience highest intensities of damage IX –X . It is estimated that about 84% of the population will be exposed to highest damage intensities. The projected deaths will be 160,000(2.3% of the population) and projected injuries will be 16 % (11,00,000) and projected ex- gratia will be Rs. 700 crores.

70% of the people of the state are agrarian and very much dependent on the vagaries of seasonal rainfall & climate conditions. Erratic rainfall and weather conditions cause frequent flash floods in the catchments of major drainage systems of the state causing extensive damage to property and life. The state experience cloud bursts during southwest monsoon period and the frequency is more during the months of July & August. The geographical configuration of valleys in the state provides environment for the vertical lifting necessary for the formation of cumulonimbus clouds and when upward currents suddenly cease the entire amount of water descends on to a small area with catastrophic force all of a sudden resulting in devastation. Parts of districts Kullu, Shimla, Kinnaur and Mandi are highly prone to cloud burst. Floods on account of high precipitation cause inundation where carrying capacity of the streams is exceeded. The flash floods and cloud bursts has caused enormous loss of life and property in past. The risk has also grown many times as large number of power projects and drinking water supply infrastructure in the state are situated in the major river basins. Every year the relief is distributed to compensate for the losses incurred due to floods of various kinds.





Occurrence of landslides and landslips is a common feature as about 1 percent geographical area of the State is affected by the landslides of all kinds. Every year one or the other stretches of the roads are blocked due to landslide or huge rock mass disrupting normal life. Hydro-meteorological conditions and fragile structural fabric of geological strata are primarily responsible for the slides. Loss of life, damage to buildings, soil erosion, and loss of tree cover, damage to bridges, communication lines and hydropower infrastructure are some of the common impacts the landslide and slips cause.



Forest and building fires is a common phenomenon in the state of Himachal Pradesh. Precious life and property is lost on account of this disaster in almost all parts of the state. . Haphazard growth of towns and habitations also render them susceptible to fires of all types. Rural villages in the state are particularly vulnerable because the construction of houses involve use of substantial quantity of timber and fuel wood as source of energy for cooking and warming. Every year there are numerous incidences of fires causing human, animal and material loss? The destruction of Malana village in Kullu and Chachawari village in Rohru area of Shimla district are the recent instances of fire hazards in the State.



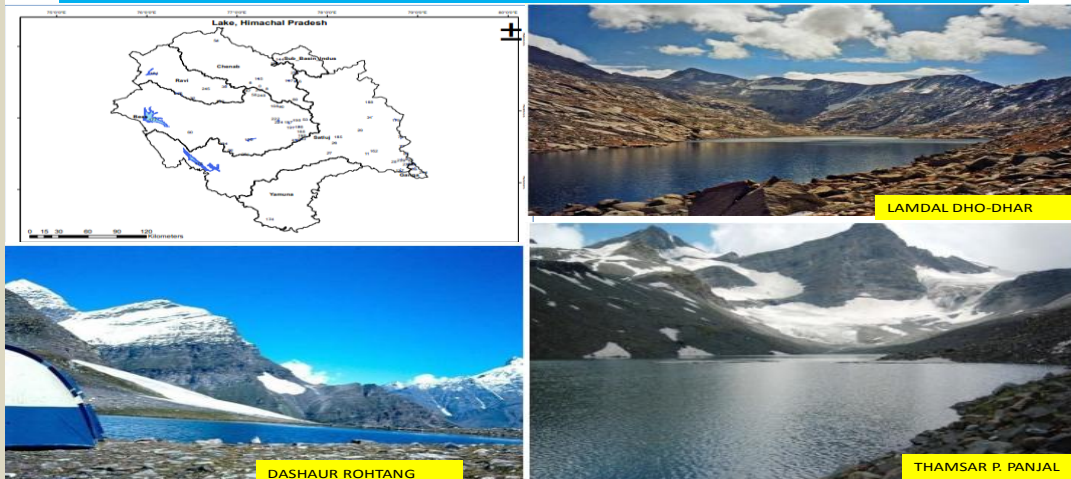
Amongst the man induced disasters the road accidents are major killer. Road accidents involve all kinds of vehicles leading to death and injuries. The topography of the state of HP is such that accidents can happen anywhere without any warning. The table below indicates the magnitude of the problem in the state.

Year	Cases Occurred	Persons killed	Persons injured	Vehicles involved
2003-04	2,794	843	4,293	3,195
2004-05	2,758	920	4,674	3,423

2005-06	2,868	861	4,755	2,868
2006-07	2,737	929	4,886	2,917
2007-08	2,953	921	5,272	3,756
2008-09	2,840	898	4,837	3,583
2009-10	3,023	1,173	5,630	3,705
2010-11	3,104	1,105	5,350	3,810

Besides geological Hazards the State of Himachal Pradesh is prone to climate induced hazards of various forms & nature. For instance due to unprecedented heavy snow fall the State Government was forced to declare Kinnaur district as Natural Calamity district. In the month of February, 2013 the district received on an average 3 to 3.5 meter snow fall paralyzing the normal life besides heavy loss to humans and infrastructures. Both severity & intensity of the natural calamities have increased on account of changing climate. Hence the prevailing system of providing relief requires to be modified. Recent flash floods occurred in the Satluj basin receiving its seasonal flow from snow melt and glaciers besides rainfall have added new dimension to the hazard vulnerability of river basins situated in the state of Himachal Pradesh. Intense and excessive rainfall resulting in cloud bursts coupled with rapid melting of snow and glaciers due to rising temperatures has been identified as the main cause for the flash floods. Another consequence of glacier retreat that has been a cause of concern and worry to the people of Himachal Pradesh is the formation and expansion of glacial lakes high up in the mountains in the upper reaches of glacier-fed river systems. A glacier outbursts flood caused by moraine dammed lakes is a common feature in the glaciated terrain. In Himachal Pradesh more than 268 water bodies or wetlands have been mapped in areas above 3200 meter elevation. The melting of glaciers and snow fields in the state has been reported to be on rise resulting in the formation of Glacier Lake behind the newly formed terminal moraines.

GLACIAL LAKES IN HIMACHAL (HVRA ATLAS)



- The earliest recorded GLOF/LLOF event is perhaps from Chandra basin when in 1836 Bara Shigri glacier burst its bounds and dammed the Chandra river causing the formation of a large lake which finally broke loose and carried devastation down the valley. The story runs that people of Spiti posted guards in the Kunzam pass to watch whether the water would rise high enough to flow across in to Spiti (**H.P District Gazetteers Lahul&Spiti -1975**) Similar floods emanating from Bara shigri in 1850s have reported to damage all bridges even beyond the present national borders.

Inventory of glacial lakes carried out by ICIMOD Nepal and , Group of researchers from Switzerland and State council for Science Technology and Environment Himachal Pradesh suggest the presence of large number of glacial lakes and some of them has been identified to be dangerous. One of the study has indicated the presence of two critical lakes requiring immediate attention.

SUMMARY OF GLACIAL LAKE INVENTORY IN H.P

TOTAL NO. LAKES	CRITICAL LAKE/	POTENTIALLY DANGEROUS LAKES	Source
45	2	16	Warni et al 2012
156		16	ICIMOD NEPAL/HPCSK AGI - UNI PALAMPUR 2004
212		11	HVRA ATLAS 2013 HIMACHAL PRADESH
391			H.P SCST&E 2013

Besides precipitation, the frequent seismic activity and permafrost thawing also triggers landslides resulting in the damming of river channel forming lakes. These natural dams cause valley inundation upstream and subsequently when breach by lake water pressure results in flash floods or debris flows downstream causing heavy loss to life and property. Parechu lake outburst is one such event that has given new dimension to the possibility of lake formation due to geo-environmental factors in the state of H.P. Huge infrastructure of hydropower projects and water supply system located in different basins of the state in particular is at risk to the phenomena of GLOF & LIOF.

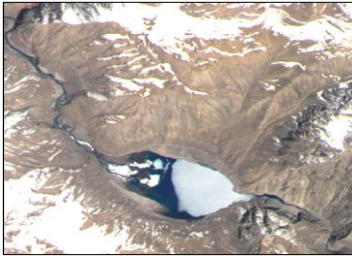
Pareechu Lake



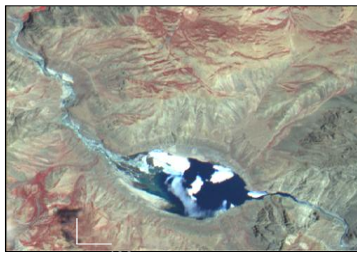
Aug, 2004



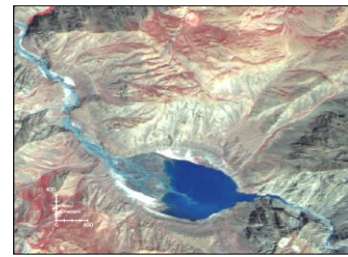
April, 2006



June, 2006



July, 2006



Sept, 2006

Though the damages & loss caused by wild animals is not yet included in the list of disasters identified in the relief manual yet the issue has become very serious for the last couple of years. Farmers in the state identifies the wild animal and monkeys as the dominant threat for their livelihood. The attacks of wild animals and monkeys are considered to be much more damaging as it happens regularly without any warning. The data for the period from 2009-2012 suggest that the wild animals attack on human and animals were as high as 2789 in which 21 people even lost their lives. Minimizing or preventing damage to crops by resolving man and animal conflict is emerging a major challenge. According to media reports there are about 3.5 lack monkeys in the state affecting the farming community in about 2600 Panchayats. Annually damage to the crops has been estimated to the tune of Rs **500 crores.**

The eligible list of natural calamities does not take into account the whole spectrum of disaster the state of Himachal Pradesh experiences every year. For instance of the 33 disasters identified by High Power Committee the State experiences the fury of 25 disasters every year with varying intensities and magnitude. It is therefore, necessary to revise eligible list of calamities keeping in view the disasters as defined in the Disaster Management Act, 2005 .The emerging concerns of man & animal conflict such as monkey menace that have acquired the dimension of a disaster in the State of Himachal Pradesh

should be included in the list of relief Compensation besides snow storms, cold waves and road accidents.

The current allocation system does not meet fully the relief requirements of the state. This is more than apparent from the wide gap between the requests made by State and the amount provided by the Center. The existing criteria for allocating funds required to be changed keeping in view the specific vulnerabilities of the state and emerging threat of climate induced hazards 90% of population being rural uncertainties of nature affect their livelihood in farm sector with small size of operational holdings. Their coping capacity is very limited to deal with situations resulting from total failure of crops of all types including high value commercial crops like apple. Vulnerability of people in high altitude areas is further accentuated due to the limited working season and erosion of traditional coping strategies like diversification, mixed cropping, reciprocation and resource pooling.

The past experience suggests that a prompt well-coordinated and effective response mounted in the aftermath of disaster not only minimizes the loss of life and property but also facilitates early recovery. The important ingredients of an effective response system are integrated institutional arrangements, state of the art forecasting, and early warning system besides a failsafe communication. Communication link is an important pre-requisite for providing relief to the victims of any disasters. In the mountain areas road connectivity is generally cut-off due to landslides, floods & avalanches. More over notwithstanding the best efforts of successive governments about one third villages are yet to be connected by roads. One of the primary reasons for non-availability of roads access to such villages is the obligation of State Government to protect the tree cover necessary for preserving the fragile Eco- System. Permissions for construction of roads are not granted due to the Forest & Environmental Acts rendering large population vulnerable to vagaries of nature.

The Govt. has constituted State and District Disaster Management Authorities supported by Advisory Committees for evolving disaster preparedness & mitigating strategies. Similarly for improving and strengthening search and rescue capabilities of District Disaster Management Authorities Rs. 4.25 Crore has been provided to all the Deputy Commissioners. The state has initiated the process for evolving practical plans at different levels. It is matter of satisfaction that the State Disaster Management Plan (SDMP) prepared by Himachal Pradesh has received appreciation at the National level. We are also in the process of establishing 13 state of art Emergency Operation Centers (EOC) at the state and district level. In the first phase the Department of Revenue will establish State Emergency Operation Centers (SEOCs) at Shimla and District level Emergency Operation Centers (DEOC) at Mandi and Kangra districts for which Rs. 3 crore will be spent. Similarly

Government has also initiated the process for establishing DNA based Disaster Victim Identification facility the first of its kind in mountain states for which Rs. 52 lacs has been earmarked to the State Forensic Science Laboratory at Junga, Shimla. Considering inaccessible nature of most parts of the state the Govt. is exploring the possibilities of using technology of Unmanned Aerial Vehicles (UAVs) for improving search and rescue operations besides establishing low cost communication at time of disasters. Collaborative programme with Defence Research & Development Organisation (DRDO) will be planned for using this technology on an operational scale in the state of Himachal Pradesh.

The experience shows that Govt. alone cannot tackle this problem in isolation hence a multilevel and multi-dimensional coordination and collaboration among all stakeholders is required. The Govt. proposes to constitute Village Disaster Management Committees (VDMC) in 3243 panchayats and 49 urban local bodies. The volunteer teams at village level will be provided trainings for search & rescue, evacuation, firefighting and first-aid. The task of capacity building will be taken up with the active participation of NGOs, ex-army and paramilitary volunteers.

Government has also decided to conduct State wide mock exercises and training & capacity building programmes every year during the week starting from 4th April to commemorate the Kangra Earthquake day as a reminder for ensuring preparedness and prevention..

SAMARTH -2015

As a symbol of solidarity with the global efforts to make the International Day for Disaster Reduction 2015 a success through promoting awareness and preparedness among the communities vulnerable to disasters, the Himachal Pradesh State Disaster Management Authority (HPSDMA) organized a series of events started from October 1st, 2015 to 13th October 2015. As a part of 'SAMARTH-2015'- the annual mass awareness and capacity building campaign of the HPSDMA, various events organized with the support of UNDP India, Various Government departments of Government of Himachal Pradesh. Theme of the SAMARTH 2015 was 'KNOWLEDGE FOR LIFE'. In order to achieve the objectives of 'Samarth 2015'. Line-Departments, Media Houses, Academic & Research Institutions, Corporate Houses, GOs, NGOs and CBOs were participated pro-actively in the campaign and contributed effectively to the process of making Himachal Pradesh a state resilient to disasters. SAMARTH- 2015 has been appreciated by the United Nations Disaster

Management Team & UNDP India. Detailed description of the activities are enclosed as Annex- A



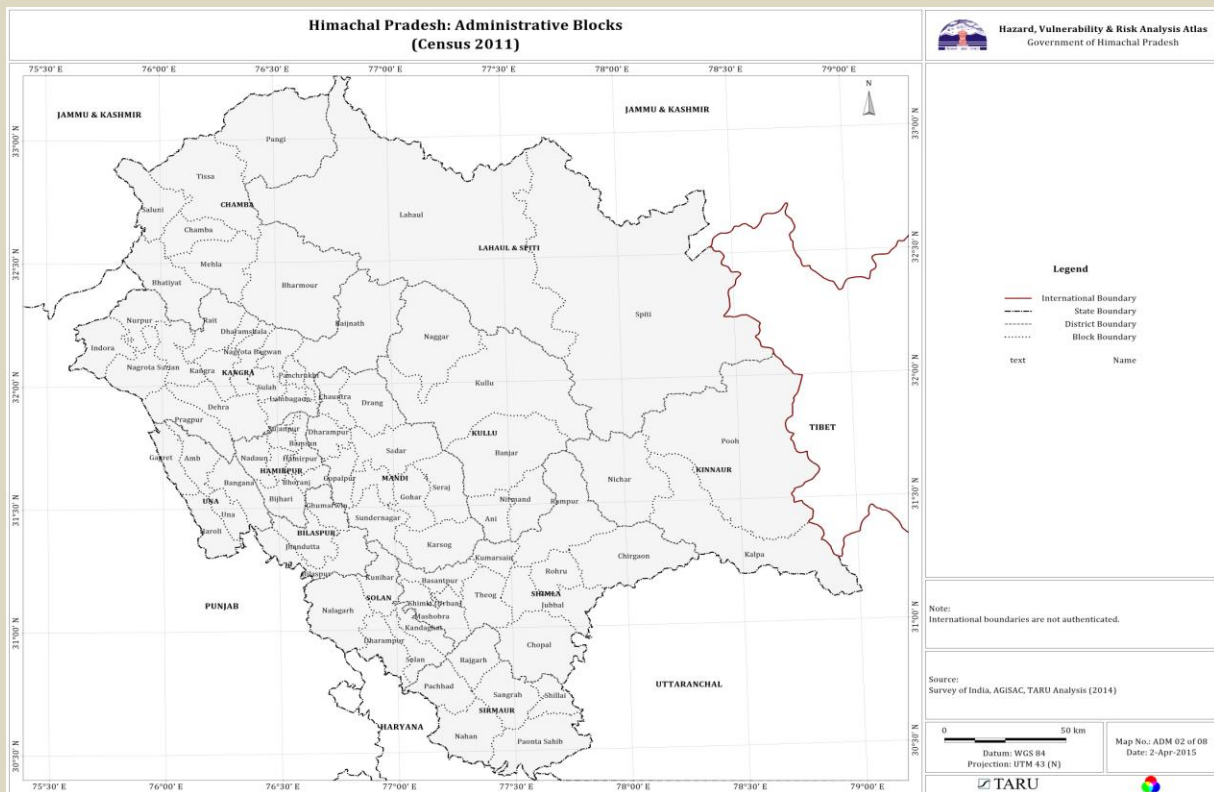
2. Preparation of Hazard Vulnerability Risk Analysis Atlas and Report for the State of Himachal Pradesh.

Natural hazards are a matter of immediate concern to the whole state as every year the state experiences the fury of nature in various forms like cloudbursts, flash floods, landslides, snow avalanches, droughts, forest fires, earthquakes, hailstorms, etc. Man induced disasters such as road accidents, stampedes; electrical fires are also common. The seismic sensitivity of the state of Himachal Pradesh has been indicated to be very high as due to its location the state experiences dozens of mild earthquakes every year. Large earthquakes have also occurred in all parts of Himachal Pradesh, the biggest being the Kangra Earthquake of 1905. The seismic vulnerability is primarily attributed to northward movement of Indian Plate and to the major dislocation Tectonic features such as MBF, MBT and MCT, etc.. The past earthquake also indicates that the impact of earthquake was not uniform but varied from place to place as ground vibration and site amplification played an important role in controlling the structural

damage during such events. This is more important as very high seismic risk zone areas in the state are also characterized with dense population and heavy infrastructure. This when viewed in the backdrop that probability of a major earthquake striking the state is looming large is quite frightening. Both, population and demand on allied infrastructure to meet the requirements of housing, water, power, transport etc., have rendered almost all the towns in the state vulnerable to high seismic risks.

While the knowledge about the extent, type & magnitude of various natural hazards at macro i.e. at State level is available, little systematic information exists about relative vulnerability at district, block and village level. In order to ensure the safety of people and all kinds of built infrastructure it would be imperative to adopt strategies to minimize disaster impact and damages in hazard prone areas by ensuring development compatible with vulnerability and risk. This is only feasible if the information on the extent, nature and frequency of hazards and on the gravity of vulnerability of people, property, infrastructure and environment is assessed and mapped by employing scientific techniques. Existing, data base and knowledge on this issue in the State of H.P is not only incomplete but incomprehensive as well.

The Department of Revenue (Disaster Management Cell) is mandated to assess hazards, vulnerability and risks in as a part of its pro-active disaster prevention and mitigation activities. The Department has commissioned a series of disaster risk reduction studies and projects aimed towards building a culture of safety across relevant sectors and communities in the State. Within this, a key assignment is the “Preparation of Hazard Vulnerability Risk Analysis Atlas and Report for the State of Himachal Pradesh” based on priority natural hazards and their interaction with the physical, social and economic vulnerability of its population, assets and economy. This Atlas will be derived from an underlying digital database that is expected to be periodically updated using a replicable methodology that will be developed by this study (through establishment of Decision Support System, a component of the existing study). It is expected that the current (and later versions) of this Atlas will play a critical role in the prioritization of multi-hazard emergency preparedness, response and mitigation investments and interventions in the state of Himachal Pradesh. Apart from providing inputs to response and community based mitigation interventions, this study will form the basis for the preparation of disaster management plans at the state and provide guidance in establishing a policy and planning linkage for development programmes in the state. This GIS assisted facility is expected to facilitate Govt. of H.P inter-agency coordination and cooperation and help build strategic policy and planning linkages between Department of Revenue and ongoing development programmes in the state, facilitate development of State Disaster Resource Network (SDRN), in keeping with the principle of “integrating disaster management into development planning”.



2.1 ASSIGNMENT OBJECTIVES:

The main object of this study is to generate basic data, undertake in-depth analysis to quantify disaster risk levels and associated causal factors to produce a Vulnerability Atlas for the State. The study will also propose solutions for reducing the hazard risks. This is expected to be undertaken by meeting the following subsidiary objectives:

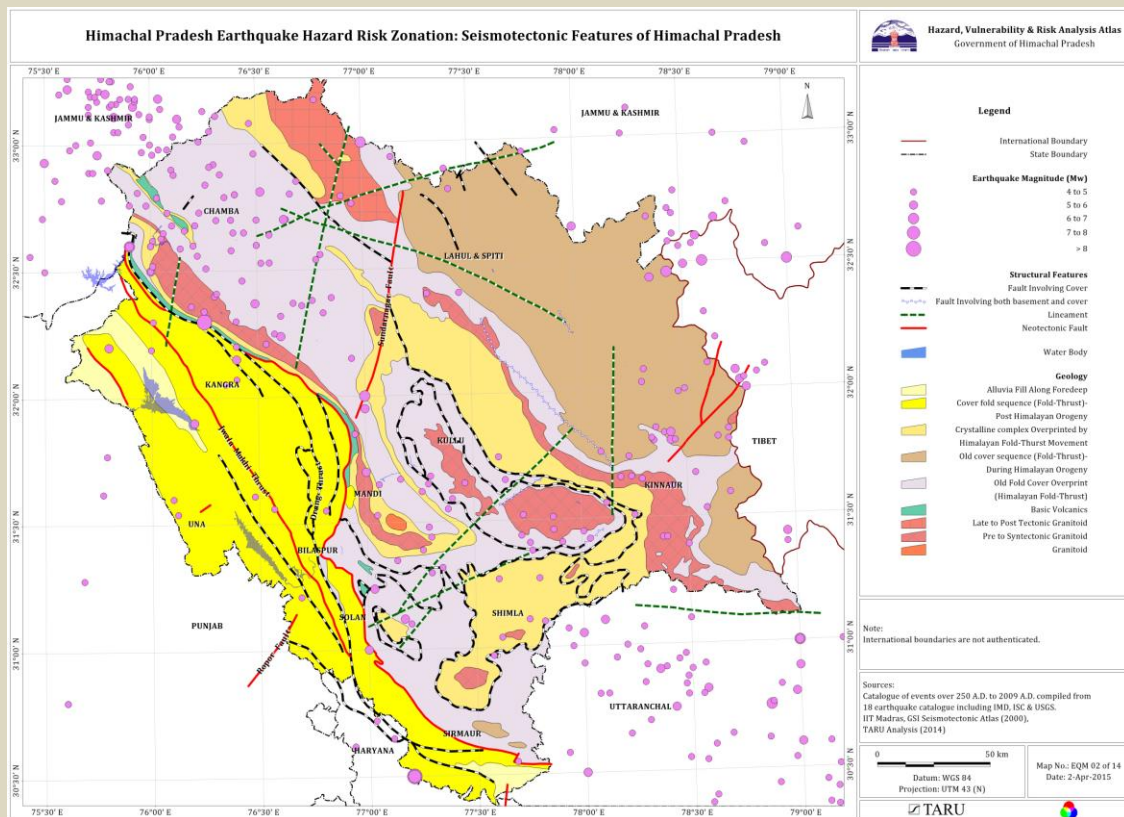
- i. To map out all hazards prone areas at State, district and block level, covering water and climate, geological, environmental, chemical & industrial, biological and accident related hazards in the state of Himachal Pradesh (with projections for at least next 20 years).
 - ii. To assess extent of vulnerability, the exposure of people, infrastructure and economic activities to these hazards in consideration of potential growth for next 20 years.
 - iii. To identify and propose location specific detailed solutions to avoid the disaster risks by implementing both structural and non-structural mitigation and prevention measures.
- In addition the study will meet the following secondary objectives:

- iv. To map out and delineate all hazard prone areas within the districts down to the village level, covering all geological, hydro-meteorological, industrial and environmental hazards including the one anthropogenic in nature and to prepare GIS based Atlas at 1:50,000 scale
- v. To assess and delineate the exposure of people, infrastructure and economic activities to these hazards
- vi. To assess the full range of vulnerabilities of the exposed elements at risk such as houses, infrastructure, public places and utilities etc. with reference to all natural and man induced hazards
- vii. To prepare block wise disaster probability matrix having details of probability of disaster occurrence and possible intensities
- viii. To prepare a matrix on ranking & probability of disaster episodes for the state
- ix. To develop composite Risk Atlas for the State of Himachal Pradesh

2.2 METHODOLOGY

A systematic determination of composite risk involves:

1. Assessment of elements at risk: This component enumerates on: a. Physical elements: housing, critical buildings and lifeline infrastructure b. Socio-economic elements: various categories of population, especially the economically and socially vulnerable. c. Economic elements: productive activities especially agriculture, craft, and industry.
2. Hazard Risk Analysis: The independent analysis of hazard risk across Himachal Pradesh is carried out for earthquake, drought, cloud burst, dam bursts, avalanches, forest fires, floods, landslides, GLOF, industrial and environmental on a district wide basis. The hazard risk analysis includes: a. Location of the hazards b. Seasonality of hazards c. Frequency of occurrence d. Probable severity/ intensity of the hazards at different locations
3. Vulnerability Assessment: The independent analysis of vulnerability for the above elements at risk by hazard intensity based on analysis of historical data, field surveys, recall case studies, stakeholder consultations and other participatory approaches using established hazard intensity scale.
4. Composite Risk Assessment: The mathematical and geographical analysis of composite risk using a TARU Brief Update – HVRA and Report for the State of HP.



2.3 TASKS & KEY MILESTONES:

- x. The “Preparation of Hazard Vulnerability Risk Analysis Atlas and Report for the State of Himachal Pradesh” is phased under nine main tasks as mentioned below:
- xi. T1 Project Inception, T2 Hazard Risk Assessment, T3 Exposure and Vulnerability Analysis (Physical and Social Exposure) ,T4 Critical Facility maps & Large Scale Digital Map T5 HVRA Atlas, T6 Composite Final Draft Report T7 Final Technical Report, T8 Transfer of Knowledge, T9 Project Management & Reporting. The hazard maps provide adequate scientific analysis in respect of causation, frequency and magnitude for each of hazards while establishing their probabilistic estimates. Data acquisition for Seismic Hazard has been done through extensive field survey and by adopting of MASW Test. A detailed Socio-Economic Vulnerability & Risk Assessment (SEVRA) survey was conducted across the state to understand social patterns of vulnerability (which include vulnerabilities associated with gender, weaker sections, disability, orphans and widowhood etc). The assessment covers 0.5% of the population across all the 12 districts of the State (both rural and urban areas). The survey covers 726 urban households across 12 cities and

6618 rural households across 412 villages. The assessment of physical vulnerability includes housing, critical infrastructure and lifelines and essential facilities such as schools, hospitals etc. in structural terms, present their vulnerability to hazards. The building vulnerability assessment involves the documentation of building typology, analysis of exposure of housing stock and determination of vulnerabilities of various construction types. Through the use of RVS procedure/format, aims to build a database of about 20,000 buildings will be created and analyzed through detailed vulnerability assessment. The study will undertake economic analysis of the impact of past disasters and assess the impact of disasters in statistical and analytical terms. The final outputs will represent different types of vulnerabilities on GIS maps, and prepare a composite vulnerability and potential multi hazard map for the State/town/district/block. The HVR Atlas, shall depict both hazards and vulnerability together for State/District and block wise. A technical report will be produced towards the end of the assignment which will outline the process for all the key tasks along with data, commentary of the process adopted for selecting the methodology and output maps. In addition TARU will provide recommendations for integrating hazard and vulnerability concerns in the developmental strategy.

- xii. The knowledge will be transferred to the identified officers/officials/ govt. functionaries with respect to the preparation of the HVRA and its application subsequently. Two participants from each district will be identified by HPSDMA and they will be trained as master trainers on HVRA.

3. Baseline survey on assessment of existing knowledge level awareness and preventive practices of disaster management in Himachal Pradesh

In order to undertake effective capacity building drive to respond to the disaster preparedness requirements and aspiration of different stakeholders Knowledge Aptitude & Practices (KAP) study was commissioned by Disaster Management Cell, Department of Revenue to capture the existing knowledge, attitude and practices prevalent in different parts of Himachal Pradesh. The study was conducted by Department of Economics and Statistics by adopting quantitative and qualitative approach besides the intensive field work approach to assess the data gaps, it was thought prudent to devise training programs and course contents by taking in to consideration the baseline assessment made through this study.

The study has brought out the level of existing knowledge in the areas of engineering & architect, medical services, rural & urban dwelling, district administration, school safety etc.

Some of the observation that deserves attention by planners and policy makers are as follows:

The study revealed that even though more than 90% sampled population had either heard or read about the disaster concept yet 83% of them not received any formal or informal training and 86% had never participated in any kind of mock drill.

The most surprising was the revelation that 19% of the officers were unaware of the disaster management set up at the State and National level.

In case of attitude and practices the survey revealed that majority of the rural population still believe that dominant causative factor responsible for disaster occurrence is the wrath of god. This attitudinal issue if not addressed with conscious effort can become an impediment in realizing the DM initiatives. It is imperative for all training institutes as well capacity development programs to take this factor in to consideration while devising the contents and modules.

Survey data also brings out the awareness level across districts and the priority areas that should be addressed. For instance the survey suggest that the people in the tribal areas and in Chamba district are already sensitized to the extent that training programs can address the preparedness and mitigation aspects directly whereas districts like Una, Sirmour, Kangra requires initial efforts for sensitizing the people.

The survey also suggests that concept like retrofitting has yet not caught up with the engineers and requires special capacity development efforts. Similarly 92% of the sampled population had not received any kind of early warning related to disasters.

The knowledge about Disaster Management Act and Disaster Management Plans was also found to be inadequate with officials at different levels.

Only about 46% of population claimed to knew how to operate fire extinguishers.

The role and responsibility of PRIs and community was also not clear to majority of population.

One grey area that requires immediate attention is the medical services. The survey suggest that 67% of the medical professional admitted that they were not prepared and are inadequately equipped to face any sort of disaster.

The outcome of this study can be effectively used for the following:

- 1) In identifying gaps to be addressed in different phases of DM cycle.
- 2) In devising training structure, course contents, modules and training methodologies.
- 3) In deciding priority areas and target audiences requiring attentions in different districts
- 4) In addressing sector specific concerns and priorities.

The report was forwarded to all concerned agencies directly or indirectly involved in the human resources and capacity development initiatives for utilizing the findings of the study in training and capacity development programs being coordinated by them.

4. Establishment of Emergency Operation Centers for Disaster Management.

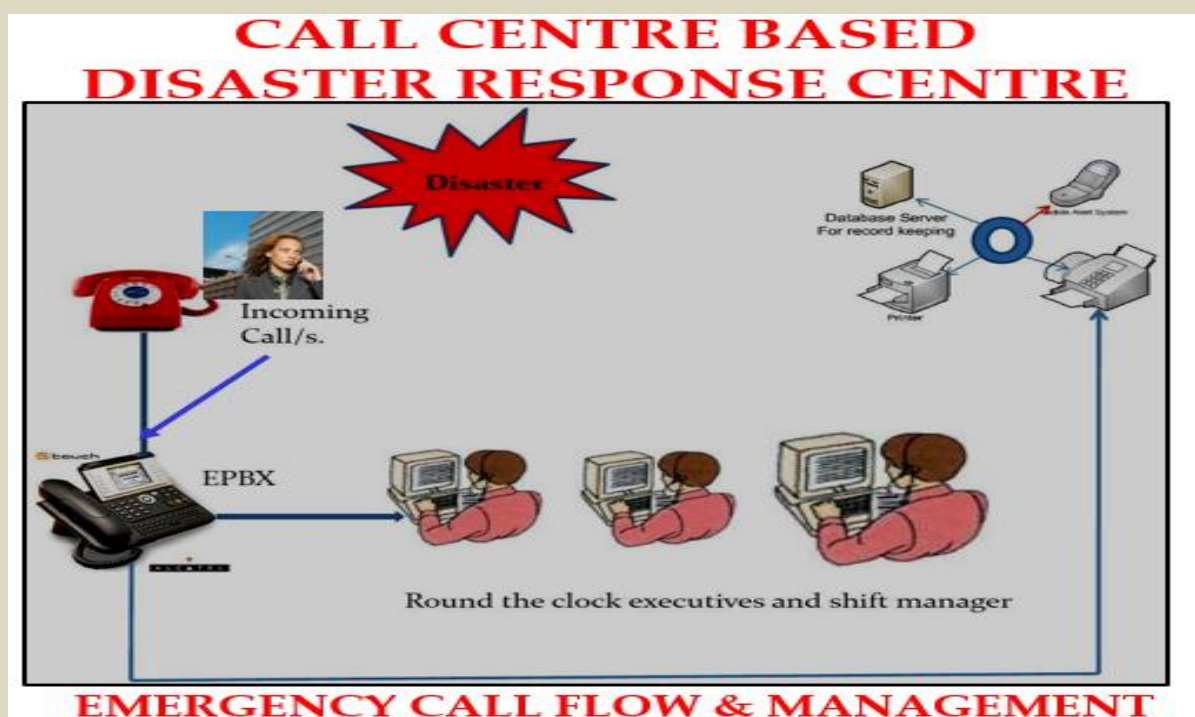
For effective disaster management it is imperative to put in place multimode multichannel communication system for ensuring the availability of adequate redundancy. As per the Govt. of India national framework for disaster management the states are assisted for setting up control rooms /emergency operation centers at state and district level. Emergency Operation Centers is envisaged to play a vital role in the emergency operation activation. It coordinates the flow of information with respect to the activities associated with relief operations. During normal times it maintains a systematic database on important resources available, important telephone numbers, names and addresses of important Govt. and non Govt. officials, international bodies, NGOs. During crisis it expected to function as center for decision making and help flow of information horizontally and vertically to different departments for smoother relief operations.

In order to plan for setting up state of art EOC the department of Revenue engaged the services of a consultant for designing the total concept, evaluating and finalizing the sites for the EOC both at the state and district levels. The study was envisaged to be completed by undertaking the following tasks:

- 1) Preparation of emergency communication and response plan network
- 2) Suggest appropriate technology for networking and linking of EWS.
- 3) Prepare protocols and manuals.

- 4) Evaluate and suggest sites for all the 13 EOCs.
- 5) Prepare location specific lay out of the EOCs
- 6) Draw up detailed technical specification of equipment and software
- 7) Prepare tender document for procurement and provide assistance in procurement of identified hardware and software for EOCs
- 8) Provide technical support and supervision for installation and commissioning of the EOCs

The site specific layout plans along with budgetary provisions has been provided to all Deputy Commissioners in order to operationalize EOCs.



5. Updation of HP Disaster Management Relief manual.

The HP Disaster management relief manual 2012 has been amended by incorporating the 14th Finance Commission recommendation as communicated by MHA, Govt. of India. The new

guidelines have become functional with effect from 1-4-2015. The significant modification that had been made in the updated guidelines is providing ex-gratia payment to the bereaved families irrespective of their place of residence or Nationality. In the new guidelines the ex-gratia payment to the families of deceased persons has been also increased from 1.5 lakh to 4 lakh. Similarly the benefit on account of loss to agriculture and horticulture crops will be provided to farmers even when the loss to crops is 33% which earlier was 50%. Departing from the National norms the HP Relief manual also provides a support of Rs. 15,000 in case of loss of clothing and utensils, household goods as against Rs. 2,000 per family provided under national norms. Another significant Relief that has been provided in HP relief manual is providing a support of Rs. 25,000 to shopkeepers who losses their goods in case of fire or any other natural calamity.

6. Setting up of Disaster victim identification cells at State Forensic Science Laboratory and Regional Forensic Science Laboratory.

Himachal's geo-climatic conditions make it vulnerable to a host of disasters. The disasters either natural or man-made are responsible for huge loss of precious lives and properties. In the aftermath of disasters, the administration is often saddled with the task of retrieval and recovery of dead followed by their identifications so as to enable authorities to handover the mortal's remains to their legitimate next-of-kins. In the absence of the latter, there is bound to psychological, emotional, economical issues etc. With the advent of technology in the modern era and as per mandate of NDMA, 2005, it is aimed that no dead should be laid to rest unidentified.

As per the recommendation of the HP forensic science developmental board, chaired by the Hon'ble Chief minister, the DMC supported the setting up of disaster victim identification cells for establishing State of Art facility to get DNA profiles in order to establish identity of disaster victims. The example of Larjee Dam disaster that resulted in the death of 25 students was cited to underscore the importance of this initiative when State FSL had taken lead and emerged as premier institute in the country in establishing identities of the washed away unidentifiable human bodies with the help of irrefutable technology of DNA profile. It has now been decided to further strengthen and consolidate this initiative of State FSL by establishing the facility for collection and preservation of samples at the regional centers and for identification at State headquarter so that in the time of need the task of identification of unidentified bodies is done

smoothly. Rs 52.00 lakh will be spent on this activity in a phased manner for procurement of equipment, refrigeration facility and creation of trained man power.

7. Development of Disaster Management Plans.

The Disaster Management Act, 2005 stipulates every state in India to prepare its own disaster management plan aimed at reducing potential loss of life and property in disasters as well as ensuring strong preparedness, response, relief and rehabilitation measures for coping with disasters. The State and District disaster management plans have been prepared as per the guidelines provided by the National Disaster Management Authority and based on existing hazard vulnerability and risk perception of the various stakeholders. The roles and functions to be played by the different organs of institutional mechanism have been defined taking into consideration the specificities of the state. Disaster management, by its very nature, requires a multi-disciplinary approach hence a strong coordination mechanism forms the core of successful Disaster Management. This Plan outlines the functions of the principal Agencies like SDMA, SEC, State Relief Commissioner, and DDMA. The Himachal Pradesh State Disaster Management Authority (HP SDMA) and SEC is supported by the line departments. However the functions identified for each line department are mandatory and each line department and DDMA are required to prepare their own disaster management plans in conformity with the State Plan. The SDMP is an outcome of the information assimilated from various secondary sources as the systematic data on the HVRA for the State is being compiled as yet. This Plan will be reviewed periodically by the SEC to ensure all activities and information is updated using the HVRA Atlas that will be ready by October, 2015. Regular training of all stakeholders and specially the officials is being carried out through HIPA and other training institutes for mounting effective quick response in disaster situations to ensure compliance.

The State Plan has been structured in 14 chapters covering state profile, Socio-economic profile, vulnerability scenario and actions to be taken in different phases of disaster management. The plan also attempts to put in place a coordinated, comprehensive and management centric response system with the active participation of community and by delineating proper sequence of actions at various stages of Disaster management. The plan prepared in the year 2012 is under review and necessary modifications are being made by incorporating the changes that has taken place since the year 2012. The district level plans have been approved and uploaded on the SDMA Website. All development departments have also been issued directions and guidelines for preparing their sector and department specific plans in consonance with SDMPs and DDMPs. As of now 18 departments have prepared their plans and the drafts have been uploaded on the website for seeking comments from other

concerned stakeholders. The DMC has issued specific directions to all hydro-power projects proponents through department of energy for preparing disaster management plans including emergency response plans and Crisis management plans.

8. Multi-State Mega Mock exercises:

Earthquakes are one of the worst natural disasters that cause huge loss to lives, property and the economy. The earthquakes can neither be predicted nor prevented. But the impact of earthquakes can be considerably reduced by better preparedness and awareness generation.

The Mw-8 Mandi Earthquake Scenario- Multi State Exercise and awareness Campaign was conducted by NDMA, aimed at preparing the region to synergies their resources for better disaster preparedness. A Multi -State Mega Mock Exercise in the tri-cities of Chandigarh, Panchkula and Mohali and in Shimla was conducted on 13th February, 2013 where in the response mechanism and their interdepartmental coordination of these States and Chandigarh UT were evaluated. The effort included creation of a pool of engineers and generating awareness amongst them on the use of RVS techniques and its application for vulnerability assessment of the built environment.it also included sensitization of different stakeholders on earthquake preparedness including Govt. officials and community.



The Mega Mock exercise was conducted with following main objectives:

- To develop science-based earthquake scenario for a high magnitude earthquake in north-west India
- To understand direct and indirect consequences of such an earthquake in the Region
- To understand and generate awareness about the impact of such an earthquake
- To facilitate preparation and review of disaster management and response plans at

various levels in the north-west states

- To evaluate preparedness and functioning of various stakeholders
- To identify gaps in their preparedness and response; and
- To facilitate inter-departmental and inter-state coordination for earthquake disaster management.

8.1 Earthquake Scenario:

Earthquake engineering experts from IIT-Bombay and IIT-Madras under guidance of NDMA and in consultation with Wadia Institute of Himalayan Geology, Seismology Division of IMD and Geological Survey of India developed a hypothetical earthquake scenario for a $M_w 8$ earthquake with its epicenter at Sundernagar near Mandi in Himachal Pradesh, to assess its impact and consequences for the region. The hypocenter was considered to be on the Main Boundary Thrust (MBT) at a depth of 15 km in seismic zone V. It gave an idea about the anticipated strong ground shaking in the states of Haryana, Himachal Pradesh, Punjab, and Union Territory of Chandigarh.



8.2 Lessons Learnt:

This exercise provided an opportunity to the stakeholders to gain near real-life experience to implement their emergency plans and identify the gaps in preparedness viz. areas of deficiency etc. By acting in a coordinating manner, States and UT Chandigarh were able to realize the importance of earthquake awareness and to re-emphasize the

necessity of being ready for a potential disaster situation. The important learning from the exercise summarized by NDMA are as follows:

- Necessity of sound Disaster Management Plans at various levels, and their periodic review
- Necessity of SOPs for every department
- Need for state-of-the art emergency operation centre (EOC) at the state and district levels with redundancy
- Need for skilled and trained personnel for EOCs
- Need for coordination and periodic interaction among various agencies/ Stakeholders
- Setting-up and use of wireless communication system for the stakeholders for more effective communication in an earthquake disaster scenario.
- Need for better road accessibility or separate road corridors in time of disaster
- Identification of requirements of state-of-the-art equipment and systematic inventory of resources, both with govt. and private sector
- Need for adequate number of Ambulances
- Greater public awareness and sensitization of people for enhanced preparedness
- Capacity building of the community with specialized Task Force at every level
- Need to make younger generation aware of the earthquake hazards and the coping mechanism
- Strengthening of Civil Defense.
- Develop a disaster centered preparedness brochure to educate masses on techniques and tips for protecting themselves during an earthquake event.
- Continue to promote emergency planning through such exercises and encourage stakeholders and community from across the city / district to participate; and The lessons learned from this exercise have provided States and UT with quality inputs for improved preparedness for disaster mitigation and management


9. National School Safety Programme.



The “**NATIONAL SCHOOL SAFETY PROGRAMME (NSSP) –A Demonstration Project**” is being implemented by National Disaster Management Authority (NDMA) in partnership with the State/UT Governments. The project is covering 200 schools in each of the selected 43 districts spread over 22 States/UTs of the country falling in **Seismic Zone IV & V (prone to earthquakes)** with the aim to sensitize children and the school community on disaster preparedness and safety measures. District Kangra and Kullu has been selected in Himachal Pradesh for this project. Under the project, development and circulation of Information Education Communication(IEC) material has been undertaken to make the school children, parents, teachers, school administration and larger community aware of school safety and disaster risk reduction mechanism. Mock drills ,nonstructural mitigation measures and Rapid Visual Screening in 200 schools of each districts has been conducted. Demonstrative Structural Retrofitting in one Senior Secondary School (boys) at Dharamshala has been undertaken.

राष्ट्रीय स्कूल सुरक्षा कार्यक्रम-कांगड़ा (हि.प्र.)

भूकम्प जानकारी एवं बचाव



भारत का भूकम्पीय मानचित्र

भारतवर्ष के भूकम्पीय मानचित्र पर हिमाचल प्रदेश को ज़ोन 4 और 5 में वर्गीकृत किया है। यह हिमाचली प्रदेश को टेक्टोनिक प्लेटो इन्डो-ऑस्ट्रेलियन और यूरेशियन प्लेटों के जोड़ की रेखा पर या आसपास होने के कारण, यहाँ पर सबसे अधिक तीव्रता वाले भूकम्प आने की सम्भावना बनी रहती है। प्लेटों के जोड़ों/सर्जों पर स्थित कर्जों/ सन्नाम के कारण हिमाचल प्रदेश का सर्वाधिक आबादी वाला जिला कांगड़ा दुनिया के अति संवेदनशील भूकम्पीय क्षेत्रों में से एक है। भूकम्प को टालना नहीं जा सकता लेकिन घरेलू की जानकारी और तैयारी से होने वाले नुकसान को अवश्य टाला या कम किया जा सकता है।




यूरेशियन प्लेट
हिमाचली आबादी वाला
इन्डो-ऑस्ट्रेलियन प्लेट

प्लेटों के जोड़ (Fault Line) दर्शाना मानचित्र

हिमाचल प्रदेश का भूकम्पीय मानचित्र



CHAMBA (शुभवा)
LAHUL & SPITI (लाहौल स्पिती)
KANGRA (कांगड़ा)
KULLU (कुल्लू)
UNA (उना)
HAMIRPUR (हमिरपुर)
MANDI (मण्डी)
BILASPUR (बिलासपुर)
SOLAN (सोलन)
SHIMLA (शिमला)
KINNAUR (किन्नौर)
SIRMAUR (सिरमौर)



घर में बाहर निकलने के लिए सुरक्षित पथों की चिह्नित योजना (Evacuation Plan)

आपातकाल के प्रश्न प्रकृति

- पुश्चिम 100
- फायर किरोडा 101
- एम्बुलेंस 108
- आपदा प्रबंधन केंद्रों का क्रम 1077

संरचना के मापदंड क्या करें?

- आवासीय/कार्यालयी संरचनाओं को दृढ़तापूर्वक बनाने पर ध्यान दें।
- घर में पतलें से सुरक्षित स्थान तय करें जहाँ भूकम्प के समय रहना सही जाए।
- घर के सामान का एक-एकानु एक प्रकार से योग्य ढाँचाएँ कि भूकम्प के दौरान हानि न होने के लिये सुरक्षित न हो। हार्ड आगेन स्थान पर अच्छी तरह से बाँध दिया जाए।
- संकेत या परिवार में सभी को आपत्काली उपचार की जानकारी होनी चाहिए ताकि आवश्यकता पड़ने पर समय-समय पर सुरक्षा की जा सके।
- स्कूल/समूह का घर को खाली करने के लिए सुरक्षित रास्ते और सुरक्षित खुली जगह को चिह्नित कर लिया जाए।
- मकान/समूह का निर्माण कराया जाए।
- इमारत किसी पेशेवादी या प्रशिक्षित के पास न बनाएँ।
- भूकम्प रूकना से सम्बन्धित नीति तैयार करें। जैसे 'बालों, कपड़े, सफ़ाई के यंत्रों को खाली करने, सुरक्षित जगह इकट्ठे होना, आदि की जाए ताकि आवश्यक भूकम्प आने पर तुरन्त कार्य प्रारम्भ हो सके।
- अग्नि-समय-मार्ग, बीम आदि उपरोक्त संरचनाओं सुरक्षित जगह पर संभाल कर रखें।

भूकम्प के दौरान क्या करें?

- भूकम्प के दौरान किसी भवन/कक्षा के अंदर या गैर के भीतर स्थित जाए और पकड़े रहें ताकि वह स्थिर कर पड़े नहीं जाए। कमरे के अंदर जाने पर सावधान रहें।
- कमरा एक जगह जाने पर सुरक्षित स्थिति स्थान पर जाने समय किसी भी स्थिति में रुकना, किसी भी वस्तु आदि को धर कर लेने की चेष्टा न करें।
- सबसे पहले जहाँ कहीं भी सुरक्षा स्थिति स्थिति में सुरक्षित स्थिति में रहें।
- निकल का प्रयोग न करें और बाहर के कारण इमारत से चढ़ने की कोशिश न करें।
- घर/समूह के बाहर निकलने के समय बाहर न मचाने, सभी को ध्यान रखें न सामानाधिकारिक कार्य करें।
- भेदों से दूर को हटाने की योजना तय करें न कमरे के अंदर एक स्थान को हटाने की योजना में रहें।
- सबसे भी सुरक्षित स्थिति में जहाँ सुरक्षित स्थिति में रहें।
- घर से बाहर जाने की स्थिति में खतरा, पड़े, बिजली की तार न पीछे, बाईं-बाईं करवाएँ एवं मचाने से दूर रहें।
- इमारत में बिजली का भंग स्थित करवा दें।
- समय में निकलने की कोशिश करें ताकि सुरक्षित स्थिति में रहें।

भूकम्प के बाद क्या करें?

- आधिकारिक सूचनाओं से सावधान रहने में प्रयत्न करें। बाद के भूकम्पीय हलकों से कामकीर्ण हुई संरचनाएँ/अवस्थाएँ बच सकती हैं।
- भूकम्प के संरक्षण आग काली संरक्षण तक छोटे भूकम्पों का आना सामान्य है। इस बात को ध्यान में रखकर बचाव कार्य किए जाए।
- कमरा कार्य करने की पहले बिजली, गैस, पानी आदि की संरक्षाओं को बंदी-बंदी कर दिए जाए।
- पुश्चिम/स्कूल के सभी सदस्यों की जानकारी होनी चाहिए, कौन कहां है ?
- सबसे भी सुरक्षित स्थिति में रहें। बाद के भूकम्पीय हलकों से कामकीर्ण हुई संरचनाएँ/अवस्थाएँ बच सकती हैं।
- भूकम्प के कारण गिरी इमारतों के पास भीड़ एकत्रित न करें। अकस्मात् न जाएं।
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- भूकम्प के कारण गिरी इमारतों के पास भीड़ एकत्रित न करें। अकस्मात् न जाएं।

To develop culture of school safety amongst teachers and students, apart from above project, following two projects are also being implemented with the financial assistance of 13th FC grants:

- Capacity building through State Council of Educational Research & Training in 6 districts (Shimla, Solan, Una, Kinnaur, Solan, Bilaspur and Sirmour)
- Capacity building through Government College of Teacher Education in 6 districts (Kangra, Kullu, L&S, Mandi, Chamba & Hamirpur)

Position of physical/financial achievements are as follows:-

INSTITUTION	FUNDS RELEASED	ACHEIVEMENTS
SCERT Solan	56.34 lac	Teachers trained =3166 Schools covered =1533
GCTE Dharamshala	49.90 lac	Teachers trained =1797 Schools covered =633

GLIMPSES of Earthquake Mock Exercises Conducted in the Schools



10. GOI-UNDP Project on Enhancing Institutional and Community Resilience to Disasters and Climate Change in the State.

GOI-UNDP project on enhancing institutional and community Resilience to Disasters and Climate Change (2013-2017) is aimed at providing technical support to strengthen capacities of government, communities and institutions to fast track implementation of the planning frameworks on Disaster Risk Reduction and climate Change Adaptation. The Project with an overall budget of US\$ 6.117 million is being implemented in 10 States viz. Assam, Andhra Pradesh, Himachal Pradesh, Jharkhand, Kerala, Maharashtra, Orissa, Sikkim, Tripura and Uttrakhand. In total, 25 Districts, 10 cities and 10,000 villages would be targeted during the project duration.

10.1 Key Strategies:

- Provide substantive high level national and international technical expertise on DDR and CCA (risk assessment, establishment of early warning systems, strengthening technological frameworks for DRR, Design and implementation of mitigation activities etc.) also linked to local knowledge.
- Provide high quality expertise to help mainstream DRR as per the Twelfth Five year Plan.
- Build capacities by working with training institutions that can in turn deploy trainers/resource persons to the sub-district level.
- Develop capacities of select vulnerable communities to enhance their resilience to cope with disasters and climate variability with government's support.
- Promote systematic collection, storage and analysis of data as well as sharing of learning and experiences through knowledge management initiatives by setting up a Knowledge Management Center at the National level. The center will work in close collaboration with UN-Solution Exchange Network.

10.2 Key Project Components involves:

1. Mainstreaming DRR and CCA in development Planning.
2. Urban Risk Reduction.
3. Technical Assistance and capacity building.
4. Support for knowledge management.
5. Enhancing resilience of vulnerable communities to cope with disasters and climate variability by implementing scalable demonstrative pilot initiatives.

In the State of Himachal Pradesh the project is being implemented in District Chamba & Kullu. As part of this program the major initiatives taken so far are/being undertaken:

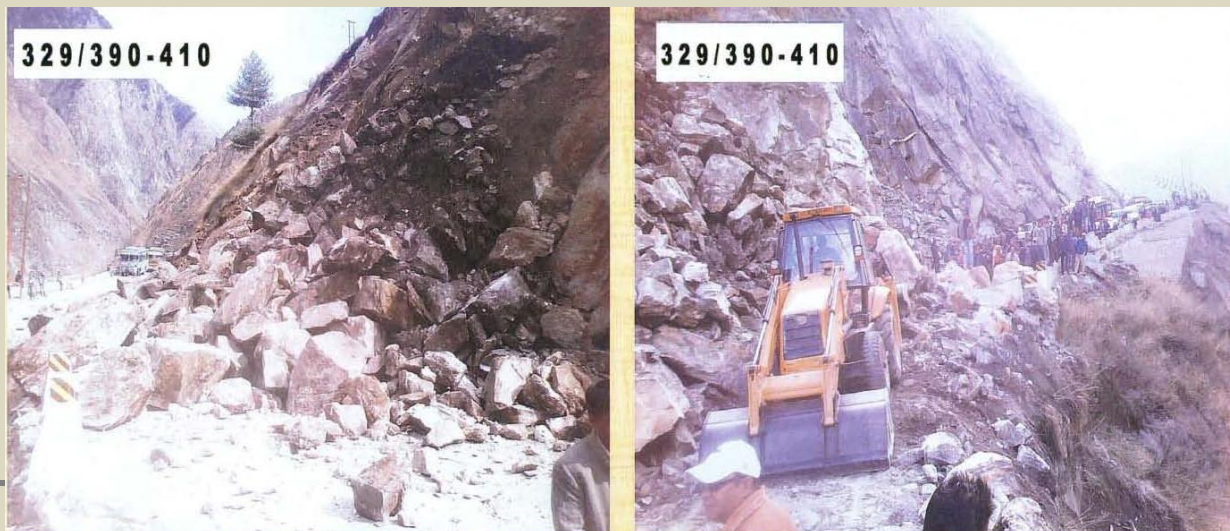
- Document on Training Need Assessment in DRR & CCA for various stakeholders in HP.
- State Level Consultation Meeting on Mainstreaming DRR & CCA into Construction, Social, Environment & Natural Resources Sector.
- Development of Action Plan on Integration of DRR & CCA in Rural Development and Education Sector schemes.
- Training of Trainers Program for Education Department on Disaster Risk Reduction.
- Compilation and Documentation of Traditional, Indigenous & Best Practices on Disaster Management/Risk Reduction and Climate Change Adaptation in the Himachal Pradesh.
- Development of Course Module for Education Department on DRR & CCA.
- Pilot Project on Enhancing Resilience of Rural Communities through Integration of Flood Risk Reduction & Adaptation Measures into Development Schemes in selected Gram Panchayats of Kullu District.
- Developing baseline database (BLD) for assessing Community Resilience indicators in Kullu & Chamba districts, HP.
- Study on Early Warning System for floods/Flash Floods of the most vulnerable communities of Beas River Basin in Selected 5 villages of Kullu District.
- Scoping Study on NGOs/Civil Society Organizations for Community Based Disaster Preparedness in Kullu and Chamba Districts.
- Training and Capacity Building of Village Disaster Management Committees/Panchayati Raj Functionaries in Kullu and Chamba Districts.
- Updation of City Disaster Management Plan.
- Development of Action Plan on Integration of DRR & CCA in Water Supply and Sewerage Sector at City Level.
- Study on Early Warning System in City Level.

11. Submission of memorandum on Rain Damages:

Every year the State of Himachal Pradesh suffers heavy damages during monsoon seasons. The Damages are both on account of excess as well as deficient rains. For instance during the year 2012 as many as 29 lives were lost due to unprecedented very heavy rains and the total cumulative loss was estimated to the tune of Rs. 1271 Crore.



The year 2013 was the worst year when the damages occurred both during Monsoon & winter season. 29 people lost their lives and financial losses to the tune of Rs. 1972 Crore were incurred due to heavy rains. Similarly during winter season Kinnaur District experienced heavy snowfall leading to avalanches, landslides and cold waves.



Besides paralyzing the normal life the resultant disaster caused heavy loss to life and property. 17 people lost their lives and cumulative loss worth Rs 117.87 Crore were incurred. Every year DMC take stock of the damages, prepare damage report with active participation of the concerned development departments and prepare memorandum of damages for submission to GOI. DMC also coordinates & assist the Central expert teams that evaluates & validate the damages before granting the support to the States. Over the year the grants demanded and received is as follows:

Fin Year	Funds released by Gol	Funds released by the State Govt.	Total funds available	Funds utilized	Funds unspent	Amount of UCs received and sent to Gol
2010-11	117.68	13.08	130.76	130.76	Nil	130.76
2011-12	123.57	13.73	137.30	137.30	Nil	137.30
2012-13	129.75	14.42	144.17	144.17	Nil	144.17
2013-14	136.24	15.14	151.38	151.36	00.02	151.36
2014-15	143.06	15.89	158.95	158.93	00.02	158.93

12. Strengthening of SDMA:

As per the provisions of the DM Act 2005 the Govt. of HP have notified the constitution of SDMA under clause (b) of subsection 2 of section 14 of the disaster management Act 2005 under the chairmanship of Hon'ble Chief Minister of HP. In order to further strengthen the SDMA a new notification was issued on 21-5-2014 by inducting Vice-chairman as 8th member of the authority. The SEC chaired by the Chief Secretary to the Govt. of HP and supported by Additional Chief Secretary (Rev), Additional Chief Secretary (Home), Additional Chief Secretary (Health) and Additional Chief Secretary (PWD) provides administrative and technical support to

the SDMA in the performance of its function and to coordinate actions in accordance with the guidelines laid down by the State authority. (Annexure- 1)

13. Constitution of State Disaster Response Force:

Disaster management act, 2005 empowers the state to take several steps for disaster response preparedness and mitigation, one of them being setting up of state disaster response force (SDRF). The vision of State disaster management authority is to built a safe and disaster resilient HP through a culture of prevention, mitigation and preparedness to generate prompt and efficient disaster response at the time of disasters. Based on the experience of NDRF, NDMA has advocated to all the states, particularly to the states with vulnerability from disasters angle, to constitute its own SDRF. In order to ensure that SDRF is specialized force capable of handling any disaster situation with high degree of professionalism, it is important that SDRF should be a standalone force dedicated exclusively for disaster response on the pattern of NDRF. The suggested modalities are that the Govt. may sanction the additional strength to the Sate Armed police and thereafter, equivalent number is drawn on deputation from the state armed police for a period of 4-5 years. This would mean a turnover of around 20 to 25 % of the total strength every year which takes care of continuity in this force. This modality would also ensure availability of trained police personnel in young age group in the SDRF all the time.

SDRF should be able to provide specialized response during disasters, proactive deployment during impending disaster situations, acquire and continually upgrade its own training and skills, liaisons, reconnaissance, rehearsals and mock drills, impart basic and operational level training to police , civil defense, home guards and common people.

In order to create and strengthen training infrastructure, the DMC provided special grant of Rs 1.25 crores to IR battalion Pandoh. This training institute has been identified as a master resource facility for training SDRF as well as police and other Para- military forces including civil defence personnel in the state of Himachal Pradesh. Necessary facility has been created and further upgraded as per the requirements.

BRIEF STATUS NOTE ON THE CONSTITUTION OF NDRF COMPANY IN HIMACHAL PRADESH:

Decision was taken in the meeting held on 5.8.2013 under the chairmanship of Chief Secretary, HP to station one company of NDRF in HP . Joint team of State Govt. and NDRF Bhatinda was constituted to suggest suitable areas for locating the Company

The team submitted its report on 25.9.2013, and suggested accommodating the company in Battalion HQ Pandoh or IRBN campus Sakoh in Kangra district.

Based on the request of NDRF, process for identification of suitable land was started and notification to acquire about 17 hec of private land and 23 hec of government land was issued under Land Acquisition Act in 2011. The final award of Rupees 12.68 crore for private land was issued in August, 2012. In addition in principle approval for diversion of 23 hec Government forest land was also obtained on assessed cost of Rupees 12.00 crore. Total requirement of funds Rupees. 24.68 Crore was sent to NDRF.

The matter was taken up by the Hon'ble Chief Minister, HP with the Hon'ble Prime Minister/NDRF on various occasions for locating at least one battalion in HP.

In response to the DO letters, a communication was received from the Joint Secretary, MHA on 10.12.2014 informing that the earlier decision to locate one battalion in Nurpur was reconsidered and it has now been decided to deploy some teams of NDRF instead of a battalion in HP for providing immediate response during disaster. He further requested that suitable land or build up accommodation be provided in Kangra for permanent deployment of a company of NDRF.

The DC Kangra, has now identified 5 acre of land at Jawali in Kangra district. NDRF team has surveyed the area for assessing its suitability and process for locating a company in H.P is likely to start soon.

14. Strengthening of Search and Rescue capacity in the state:

Search and rescue constitute an important component of Disaster management cycle in general and response phase in particular. There are various techniques and tools that are applied by professional institutions and individuals who are trained in this field. The DMC provided specific grants to all DC's and SDM's for procuring area specific equipments by taking into consideration local Hazard vulnerability and risk profiles. Specific grants were provided to department. of Home Guards and Civil Defense for procuring mobile vehicles equipped with multiple tools to deal specific hazards prevalent in the Sate of HP.

15. Implementation of Sendai framework:

Disaster Management Cell has initiated steps to implement the Sendai framework for Disaster Risk Reduction (DRR) which was signed by Government of India in March-2015. As part of the implementation process, State level Consultation workshop on Implementation of Sendai Framework was organized by the Revenue –Disaster Management department on 11th October 2015, with the support of UNDP India. State Government is in the process to finalize detailed framework for Himachal Pradesh and the same will be ready by February 2015. All DDMA's through Deputy Commissioners have been advised to take specific actions on understanding disaster risk, strengthen disaster risk governance to manage disaster risk, investing in DRR for resilience and enhancing disaster preparedness for effective response. Directions have also been issued to fulfill the objectives as envisaged under the 7 targets identified as part of Sendai declaration.



16. HPSDMA Website:

The HPSDMA has created user friendly, easy to search website which contains crucial information on the subject pertaining to disaster management. The web site provides information on DM Act- 2005, SOP for responding to Disasters, Emergency Support function Plans, Guidelines for conducting Earthquake and fire mock drills in schools/Educational Institutions and Relief manuals etc. The links and sub-links given below are updated from time to time.

The main contents of the website are as follows:

S.No	Main links	Sub-links
1.	About Us	SDMA Structure
		National DM Structure
		Roles and responsibilities
		Organization structure
		Location
2.	Profile of State	State Profile
		Hazard Profile
		Current Status of Vulnerability
		Housing Vulnerability
3.	Disaster Management	Approach to DM
		Plans
4.	Act and Notification	
5.	Programmes	GOI-UNDP DRR Programme
		Training Under Capacity Building under FC-XIII
		National School Safety Project
6.	Resource List	List of helipads
		List of trained Personnel
		List of Resource persons
		Emergency operation centers
		Telephone directory
		Resource Inventory
		Maps
		Damage/Incident reports
7.	Citizen corner	Safety tips
		IEC Materials
		Guidelines for Safe Constructions

		Training/Seminars/events
		Recent disasters
8.	NGO Corner	Role in DM
		NDMA guidelines
		Volunteer registration
	Other links on the Website	Picture gallery, useful links, FAQs, Latest news and Contact Us.

17. Human Resources Development:

One of the primary tasks of the disaster management cell is to promote awareness and enhance knowledge and skills of all stakeholders in various faced of disaster management. The capacity development training and awareness programs are being run through the following institutions:

- Himachal institute of Public Administration (HIPA).
- State Council of Education Research and Training (SCERT)
- NIT Hamirpur.
- Govt. College of Teacher Education (GCTE)
- Regional Training Institute, Joginder Nagar
- Panchayati raj training institute, PRTI.
- Atal Bihari Institute of Mountaineering & Allied Sports.
- Health Training Institute Parimahal Shimla.

During the report period the HIPA has conducted a number of training for officer at various levels addressing pre-disaster risk reduction as well as post disaster recoveries and rehabilitation aspects of disaster cycle. The Centre is providing regular trainings to Officers & Officials of the State Government, representatives of Panchayati Raj Institutions, Urban Local Bodies, NGOs Mahila/Yuvak Mandals and other Public & Pvt. agencies. The center has also undertook the responsibility of training communities and community based organizations and through them develop a strong regional knowledge base towards disaster policy, prevention mechanisms, mitigation measures, preparedness, and response plans.. The Centre so far has conducted more than **225**

training programmes by exposing more than **10,000** personnel to various aspects of Disaster Management.

Detail of training programmes conducted by Disaster Management Centre,HIPA for the last 5 year from 2011-12 to 2015-16 is as under:-

Sr. No.	Financial Year	Total No. of Courses Conducted	Total No of Participants	Total No of Training Days	Total No Of Man Days
1	2011-12	36	1817	123	5294
2	2012-13	27	964	62	1977
3	2013-14	19	780	51	1890
4	2014-15	25	844	61	1876
5	2015-16	6	148	17	405
6	Grand Total	113	4553	314	11442

Detail of Training Programme Organized on Earthquake Disaster Preparedness by HIPA:

Year	Name of Training Institute	Number of Training Conducted	No. Of Staff Trained				Amount Involves in Rs.
			Engineer	Architect / TCP/ Draftsman	Non Technical Persons	Total	
	HIPA, Fairlawns, Shimla-12						
2012-13	-do-	5	82	38	26	146	3,19,680.00
2013-14	-do-	2	77	01	0	78	2,90,927.00

2014-15	-do-	1	14	09	0	23	73,499.00
Grand Total		08	173	48	26	247	6,84,106.00

18. Setting up of HAM Radio Club:

Amateur Radio is a scientific activity popularly known as “Ham Radio”. Any individual above the age of 12 can become an Amateur Radio operator –no matter what age, gender or physical ability. Amateur radio operators use two way radio stations and communicate with others similarly authorized using various modes of communication like voice, Morse code, computers, internet etc. The advanced amateur radio communication techniques include automatic position reporting systems using GPS information, internet linking of repeater stations, interface with internet for exchange of emails, images etc as well as visual communication modes. A wireless communication network through radio is one of the most effective and alternate medium of communication and can play a significant role in providing reliable communication when other normal communications fails. The skills of the trained amateur radio operator can be used for public service in time of need and emergencies. In numerous occasions, under extreme circumstances, very efficient amateur radio communication and humanitarian assistance was provided by Hams particularly during Uttarakhand Floods 2013, Aila cyclone-2009, Krishna floods-2009, Indian Ocean Tsunami-2004, Orissa super cyclone-1999 and many other natural calamities in the country.

Further national Human Rights Commission, NITI Aayog, State Governments and even the former Central Vigilance Commissioner made recommendation to take a conscious policy decision to promote amateur radio as part of Disaster mitigation/Management.

In order to create necessary environment for training individuals above the age of 12 for taking up Ham Radio as hobby the DMC has provided a grant of Rs 10 lakh for planning and institutionalizing the process by establishing an amateur radio cell. The training will consist of 3 essential elements:

- Awareness program on Ham radio to the students/general public/officials by way of exhibitions/demonstrations and publicity.

- Selecting interested candidates after above awareness program, motivating them to undergo basic training for ASOL exam conducted by Dept. of Telecommunication, Ministry of Communications and IT, Govt. of India, New Delhi.
- Those qualified in the ASOL exam will receive licenses from wireless planning & coordination wing of Ministry of Communication & IT, Govt. of India to possess, operate and maintain an Amateur Radio Station. They would acquire necessary technical training on operating Ham equivalent for utilizing their services during Natural Calamities.

19. GO-NGO Collaboration:

In the recent past, the role of NGOs in disaster management (DM) has started changing from providing post-disaster relief to strengthening pre-disaster preparedness and mitigation through capacity building, public awareness campaigns, mock exercises, workshops and conferences, etc. NGOs have also started to collaborate with corporate entities in Public-Private Partnership (PPP) projects and Corporate Social Responsibility (CSR) initiatives in the field of DM at State, District and Sub-district levels. Till recently, the work of NGOs in the field of DM has been mostly sporadic, reactive, and responsive and driven by local level compulsions in the geographic areas where they are implementing development projects and very often they faced enormous challenges in coordinating with the government machinery and even among NGOs themselves. In line with its mandate as envisaged in the Disaster Management Act 2005 (DM Act 2005), the National Disaster Management Authority (NDMA) has circulated National Disaster Management Guidelines on Role of NGOs in Disaster Management defining the role of NGOs in disaster management.

The government of Himachal Pradesh believes that many devastating effects of potential hazards can be prevented by enhancing the capacity of community to respond as it is these communities who are on the frontline when it comes to fending off immediate impacts of calamities. The State Disaster Management Plan recognizes that NGO's and other voluntary groups are the most effective means of achieving an efficient communications link between the disaster management agencies and the affected community and can also play an important role in creating public awareness, capacity building and knowledge management.. The Government, therefore, intends to engage the NGO's and other civil society organizations for mobilizing the communities and resources for addressing the objectives as laid down in National Guidelines. The Disaster Management Act -2005 under section 38 (2) (a) 22 (2) (j) and 30 (2) (XIX) mandate every State Government, SEC of SDMA and DDMA respectively for collaboration with stakeholders agencies including NGO's to act in an equitable and non-discriminatory manner

for the purpose of assisting or protecting the disaster affected communities or providing relief to the affected communities or while dealing with any effects of threatening disaster situation. As per the provisions in the Act and subsequent formulation of Guidelines the DMC Revenue Department organized a meeting of all NGO's working in the State of Himachal Pradesh for establishing GO-NGO network .State level NGO Task Force and coordination platform on Disaster Management was formulated for implementing the provisions in the state disaster management plan that envisages the formation of village level disaster management committees. The DMC has formulated guidelines for delineating the role of NGO's in DM and regulating the financial support for DM initiative in the State of Himachal Pradesh. (Annexure) As stipulated in the guidelines the SDMA, DDMA's and other key line departments will give due priority in involving NGO's for improving the effectiveness of Disaster management in the state of Himachal Pradesh. In addition following facilities are also created by the Disaster management cell

- NGO\Volunteer Online Registration.
- Registration Form for Volunteers
- Registration Form for Voluntary Organizations
- A toolkit on Volunteerism for Disaster Preparedness and Response (English)
- A toolkit on Volunteerism for Disaster Preparedness and Response (Hindi)
- Programme Planning Sheet for NGOs

20. Mainstreaming DRR and CCA into developmental schemes /plans /workshops.

A series of State-level Brainstorming consultation meetings on “Mainstreaming disaster risk reduction (DRR) and climate change adaptation (CCA) into various development sectors” were held in June 2014 at Armsdale Building Conference hall and in HIPA in September, 2014. These workshops were organized as part of the GOI –UNDP project, and facilitated by the Himachal Pradesh State Disaster Management Authority. The workshops were attended by representatives from State level line departments such as: Education, Health, H.P. University, Rural Development, HIMUDA, Panchayati Raj, Agriculture, Horticulture, Nauli University- Solan, Forests, HIMURJA, HPSEBL, Urban Development, Revenue, Tourism & Civil Aviation, PWD,

Irrigation & Public Health, H.P State Road Project, Science, Technology & Environment and representatives from district administration etc.

After the detailed deliberations and discussions, the participants discussed the needs and modalities of integrating DRR and CCA in various developmental activities being undertaken by the departments/agencies. It was also felt that efforts should be made to mainstream DRR & CCA through ongoing schemes/programmes of line departments. Following sectors were identified for the developing strategy and action plan for mainstreaming DRR & CCA:-

- (i) Public Works Department
- (ii) Education Department
- (iii) Rural Development Department

It was also decided that the State Government will make a concerted and coordinated effort for integrating strategies, and assessing potential risks as part of development planning, and allocating resources for risk reduction into sectoral plans. The State Planning Commission will be consulted for inter-sectoral convergence of various line departments for DRR mainstreaming and allocation of necessary resources

21. Strengthening of forecasting mechanism in the state of Himachal Pradesh:

For providing forecast to water and atmospheric hazards is provided by the network of IMD , universities and snow avalanche study establishment besides district level rain gauge stations located at district headquarters. The existing network was found to be inadequate and in order to further strengthen it the State Govt. facilitated the establishment of Doppler weather radar at Shimla. Necessary support in acquiring land and other required facilities was provided to IMD. DMC will further facilitate the establishment of Doppler weather Radars in Chamba and kangra districts.

22. Training needs Assessment (TNA):

Disaster management being a multidisciplinary and sophisticated task requiring professional approach in its handling was identified a critical factor in dealing with this subject at different levels. Govt. realized that there is wide gap in the knowledge and skills of the disaster

managers to cater to the requirements of disaster risk reduction and climate change adaptation.

In order to put in place a pragmatic HRD strategy for holistic management of disasters, the Govt. of H.P conducted a Training Needs Assessment (TNA) exercise by involving various stakeholders with the technical assistance from UNDP India. The outcome of the study helped in assessing the exiting capacity and capabilities on one hand and identifying the gaps on the other. The workshop was designed in a manner that the participants were first sensitized about the hazard profile of the state and climate change adaptation, followed by development of department specific action plans. All participating departments were categorized into groups taking into consideration the nature of their work, expertise available, training gaps, role in DRR and Climate Change Adaptation. The findings were compiled in the form of report for follow up action by all concerned.



23. BUDGET:

Under the 13th Finance Commission grants Govt. of India, Ministry of Home affairs (Disaster management division) had released grants of Rs. 20.00 crores for the period 2010-11 to 2014-15 at the rate of Rs. 4.00 crores per year. The approved perspective plan for capacity building for disaster response implemented using these grants is placed at Annexure. An expenditure of

Rs. 17,32,98,795 has been incurred so far and the balance has been kept for the pending committed liabilities of consultancy charges of Emergency operation centers and Hazard Risk Vulnerability Analysis.

The position of Budget for the schemes implemented by the DMC is as follows:

Under 14th Finance commission award Government of India, Ministry of Home Affairs (MHA) has sanctioned grants under State Disaster Response Fund (SDRF) to the tune of Rs. 1304 Crores both as central and State share in the ratio of 90:10. The grant includes provision of 5% for capacity building over a period of five years (2015-2020).

Expenditure statement of the budget under the 13th FC is given as per annexure

ANNEXURES

SDMA Structure

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

Section 3 the Disaster Management Act 2005 lays down the establishment of State Disaster Management Authority at the State Government levels. Accordingly, for the State, the SDMA was notified vide notification No. Rev. D(F) 4-2/2000-V dated 1-06-2007. The constitution of the SDMA is as under:-

i)	Hon'ble Chief Minister	Chairman
ii)	Sh. Kaul Singh Thakur (Hon'ble Revenue Minister)	Co-Chairman
iii)	Sh. Rajinder Rana(Ex- MLA)	Vice Chairman
iv)	Chief Secretary	Member
v)	Additional Chief Secretary(Home)	Member
vi)	Additional Chief Secretary (PWD)	Member
vii)	Additional Chief Secretary (Health)	Member
viii)	Director General of Police	Member
ix)	Additional Chief Secretary (Revenue)	Member Secretary

State Executive Committee (S.E.C)

In continuation of this department's Notification of even No. dated 5th May, 2009 and in exercise of the powers conferred by sub-section(1) of section 20 the Disaster Management Act, 2005 the Governor Himachal Pradesh is now pleased to re-constitute the State Executive Committee to assist the State Authority in the performance of its functions and to coordinate

action in accordance with the guidelines laid down by State Authority and ensure the compliance of the directions issued by the State Government under the Act ibid, consisting of the following members as specified in Sub-section(2) of the section 20 of the said Act, namely :-

i)	Chief Secretary	Chairperson
ii)	Additional Chief Secretary(Revenue)	Member Secretary
iii)	Additional Chief Secretary(Home)	Member
iv)	Additional Chief Secretary(Health)	Member
v)	Additional Chief Secretary (PWD)	Member

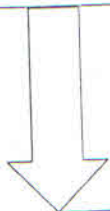
Advisory Committee of SDMA

In Exercise of the powers conferred by Sub Section (1) of section 17 of the Disaster Management Act 2005, the State Disaster Management Authority has constituted the Advisory Committee to assist the Authority and to make recommendations of different aspects of Disaster Management.

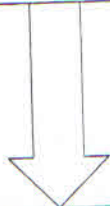
Organisation Structure of HP SDMA

The HP SDMA has been constituted under the chairmanship of Chief Minister of Himachal Pradesh. Revenue Minister has been nominated as member. Chief Secretary is the Chief Executive Officer of the SDMA. ACS cum FC (Revenue), Principal Secretary (Home), Principal Secretary (PWD/I & PH), Principal Secretary (Health) and Director General of Police have also been notified as member. Secretary (Revenue) is the Member Secretary of the Authority. As on today the organizational structure of the HP SDMA is as under:

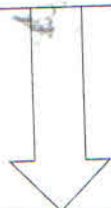
HP State Disaster Management Authority



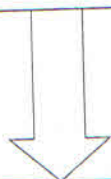
Chairman (Hon'ble Chief Minister)



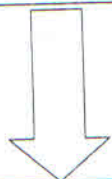
State Executive Committee
(Headed by Chief Secretary)



Additional Chief Secretary (Revenue)



Special/Deputy Secretary (Revenue)



Disaster Management Cell

Government of Himachal Pradesh
Disaster Management Cell
Department of Revenue

No. Rev. (DMC) (A)1-1/2010

Dated Shimla-2 the 9th June, 2011

NOTIFICATION

In continuation of this department's Notification of even No. dated 5th May, 2009 and in exercise of the powers conferred by sub-section (1) of Section 20 the Disaster Management Act, 2005 the Governor Himachal Pradesh is now pleased to re-constitute the State Executive Committee to assist the State Authority in the performance of its functions and to coordinate action in accordance with the guidelines laid down by State Authority and ensure the compliance of the directions issued by the State Government under the Act *ibid*, consisting of the following members as specified in sub-section(2) of the Section 20 of the said Act, namely:-

(1) Chief Secretary	Chairperson
(2) Principal Secretary (Revenue)	Member Secretary
(3) Principal Secretary (Home)	Member
(4) Principal Secretary (Health)	Member
(5) Principal Secretary (PWD)	Member

By Order


Principal Secretary (Revenue)

Endst. No. As above.

Dated Shimla-2, the 9th June, 2011

Copy forwarded to the following for information:

1. Chief Secretary, Himachal Pradesh, Shimla-2.
2. All the Principal Secretaries/Secretaries to the Govt. of H.P. Shimla-2.
3. Principal Secretary to Hon'ble Chief Minister, H.P.
4. Secretary to Governor, Himachal Pradesh.
5. Secretary (IT) to the Govt. of H.P. for pasting on the Website.
6. ALR-cum-Under Secretary (Law) Govt. of H.P.
7. All the Divisional Commissioners. in H.P.
8. All the Deputy Commissioners, in H.P.
9. All the Head of the Departments.
10. The Director, Public Relations, H.P. Shimla-2.
11. The Controller, Printing & Stationery, H.P. Shimla-5 for publication in the gazette.
12. All Sub-Divisional Officers (C) in H.P.
13. Private Secretary to all Ministers, H.P. Shimla-2.
14. Guard File.


Special Secretary (Revenue) to the
Govt. of H. P. Shimla-2.

Dated Shimla-2, the 10th September, 2014.

NOTIFICATION

In exercise of the powers conferred by Sub Section(1) of Section 17 of the Disaster Management Act 2005, the Chairperson of Himachal Pradesh State Disaster Management Authority is pleased to nominate the following official/non-official experts as Members of the Advisory Committee to assist the Authority and to make recommendations on different aspects of Disaster Management:-

1. Col.(Retd.) H.S.Chauhan, C/O Indian Mountaineering Foundation, 6, Benito Juarez Road, New Delhi-110021.
2. Shri Arun Sharma, State Geologist (Retd.), R/O H-10, Dev Boomi Green Apartments, Deoanghat, Solan.
3. Dr. S.P. Katyal, VPO Chopal, Distt. Simla.
4. Shri Bal Krishan Deur, Chief Fire Officer (Retd.), Mohalla Sapri, Chamba.
5. Sh. S.C. Negi, VPO Nesang, Distt. Kinnaur.
6. Dr. Suman Rao, C/O Pt. Padam Dev Complex, The Mall, Shimla.
7. Prof. Bhupinder Singh Marh, Professor in Geography, H.P. University, Simla-5.

In accordance with the provisions of Section 4 of HP State Disaster Management Rules, 2011, official members shall be governed by their official position and non-official members shall be paid sitting allowance as admissible to the Grade-1 Officers of the State Government.

By Order

Principal Secretary(Revenue) to the
Government of Himachal Pradesh.

SR



Government of Himachal Pradesh
Department of Revenue
"Disaster Management"

↓ J.S. (Rev)
3/2 → 2-271
S.O. (DMC)

No. Rev (DMC) (F) 4-2/2000-VII Dated, Shimla

18 th January, 2011

NOTIFICATION

In exercise of the powers conferred by sub section 1 (a) of Section 48 of the Disaster Management Act, 2005 (53 of 2005), the Governor of Himachal Pradesh is pleased to constitute the State Disaster Response Fund (SDRF) for meeting any threatening disaster situation or disaster.

By Order

Principal Secretary (Revenue) to the
Government of Himachal Pradesh

Endst.No. As above

Dated, Shimla-2

18 th January, 2011

Copy forwarded to the following for information:-

1. The Chief Secretary to the Govt. of Himachal Pradesh, Shimla-2
2. All the Principal Secretaries/ Secretaries to the Govt. of Himachal Pradesh, Shimla-2
3. The Principal Secretary to Hon'ble Chief Minister, H.P.
4. The Secretary to Governor, Himachal Pradesh, Shimla-2
5. The Secretary (IT) to the Govt. of H.P. Shimla for pasting on the website.
6. The ALR-cum-Deputy Secretary (Law) Govt. of H.P. Shimla-2
7. All the Divisional Commissioners in Himachal Pradesh
8. All the Deputy Commissioners in Himachal Pradesh
9. All the Heads of Departments in Himachal Pradesh
10. The Director, Information & Public Relations, H.P. Shimla-2
11. The Controller, Printing & Stationery Department, H.P. Shimla-5 for publication in the Gazette.
12. All the Sub-Divisional Officer (C) in Himachal Pradesh
13. Private Secretary to all Ministers, H.P. Shimla-2
14. Guard File

Deputy Secretary (Revenue) to the
Government of Himachal Pradesh

GUIDELINES FOR GRANT-IN-AID TO NON-GOVERNMENTAL ORGANIZATIONS FOR DISASTER MANAGEMENT

1. PREAMBLE

The State of Himachal Pradesh is prone to multiple disasters. Of the total 33 identified hazards by High Powered Committee (HPC), the State is vulnerable to 25 hazards. Every year, the State faces the fury of vagaries of nature causing havoc to life and property. Due to topographical, metrological and geological variability across the State, the incidence of cloudbursts, flash floods, avalanches, draughts, and other natural calamities hit the State often. In the disaster prone map of the country, Himachal Pradesh has attained the dubious distinction of falling in first five states in respect of hazards such as earthquakes, flash floods, landslides, avalanches and forest fires. The following specificities further accentuate the disaster vulnerability of the people in the state:

- Physical isolation & tough terrain.
- Scattered nature of settlements & hamlets.
- Harsh climatic conditions.
- High construction cost.
- Inadequate infrastructure.
- Inadequate road connectivity
- Fragility of eco-system.
- Non availability of adequate land.
- Poor or inadequate communication infrastructure.
- Dependency of 70% people on agriculture and allied sectors for their livelihood.
- Heavy dependence on rains and inadequate irrigation.
- Substantial population of livestock (52, 26,388).
- Vulnerability to climate change.

With such an alarming history of vulnerability the increasing prevalence of disasters has become a critical concern of people and governments. The impact of any calamity manifests not merely in loss of physical assets or loss of life but also in mental trauma that sustains for long. Socio-economic studies have revealed that the secondary effects and indirect costs of disasters have long term effects on societies regardless of their level of development. It

is ironical that the poor and weaker sections of society who have the least capacity to cope with the situation are affected the most

Considering the detrimental impacts of disasters and the current local capacities to cope with them actions focusing on disaster risk reduction and enhancing disaster resilience of the communities are highly required. Govt. alone cannot tackle this problem in isolation hence for addressing the existing gaps a multi-level, multidimensional coordination and collaboration among all stakeholders is required.

Historically the community and non Government organizations have been playing a significant role in providing humanitarian assistance to disaster affected people. In the recent past the role of NGO's in disaster management has started changing from providing post disaster relief to strengthen pre-disaster preparedness and mitigation through capacity building, public awareness campaigns mock exercises workshops and conferences. Notwithstanding the proposal contribution of the NGO's CBDs and faith based organizations who have extended humanitarian relief assistance to disaster affected community at time of devastating disasters & crisis there is large scope for improving the engaging the NGO's and other Civil Society Organizations in DM.

2. INSTITUTIONAL & LEGAL FRAMEWORK:-

The primary responsibility of dealing with disasters rests with the State Government. The Disaster Management Act – 2005 provides the Statutory Legitimacy for the required institutional mechanism at the National, State and District level for drawing up and monitoring the implementation of Disaster Management Plans. The proactive approach in the Disaster Management Act – 2005 to address disaster risk and vulnerability through pre-disaster preparedness and mitigation also envision accountability and multi stakeholder participation.

The Disaster Management Act -2005 under section 38 (2) (a) 22 (2) (j) and 30 (2) (XIX) mandate every State Government, SEC of SDMA and DDMA respectively for collaboration with stakeholders agencies including NGO's to act in an equitable and non discriminatory manner for the purpose of assisting or protecting the disaster affected communities or providing relief to the affected communities or while dealing with any effects of threatening disaster situation.

As per the provisions in the Act and subsequent formulation of Guidelines the DMC Revenue Department organized a meeting of all NGO's working in the State of Himachal Pradesh for establishing GO-NGO network. State level NGO Task Force and coordination platform on Disaster Management was formulated for implementing the provisions in the state disaster management plan that envisages the formation of village level disaster management committees.

The following guidelines are formulated delineating the role of NGO's in DM and regulating the financial support for DM initiative in the State of Himachal Pradesh.

3. ROLE OF NGO'S :-

The government of Himachal Pradesh believes that many devastating effects of potential hazards can be prevented by enhancing the capacity of community to respond as it is these communities who are on the frontline when it comes to fending off immediate impacts of calamities. The State Disaster Management Plan recognizes that NGO's and other voluntary groups are the most effective means of achieving an efficient communications link between the disaster management agencies and the affected community and can also play an important role in creating public awareness, capacity building and knowledge management.

The Government, therefore, intends to engage the NGO's and other civil society organizations for mobilizing the communities and resources for addressing the objectives as laid down in National Guidelines. The SDMA & DDMA's and other key line departments will give due priority in involving NGO's for improving the effectiveness of DM especially for the following:-

- i) Utilizing & mobilizing the potential of existing organizations like SHGs, Youth Groups, farmer groups, village health committees village education committees for creating awareness and strengthening disaster preparedness at the local level.
- ii) Facilitate introducing thematic expertise and good practices and implementation of government programmes through large social mobilization exercises.
- iii) In addressing the specific needs of PWD and in preparing resource inventories.
- iv) Facilitate formation and participate in State & District level task forces.
- v) Assist in developing and participate in State & district level GO-NGO inter agency coordination mechanisms.
- vi) Assist in developing, piloting validation and updating of district level contingency and preparedness plans.
- vii) Facilitate training, simulation & mock drills of different stakeholders and facilitate detailed assessment of current needs and capacities at different levels including the community level.
- viii) Establish linkage with authorities for hazard monitoring and provide last mile connectivity for early warning dissemination.
- ix) Facilitate & establish mechanisms for public information dissemination before, during and after disasters. collect, manage process & share data during & after disasters.
- x) Research, develop, document and disseminate good practices and traditional coping strategies for replication and scale up.
- xi) As mitigation measures Capacity mapping & capacity building of construction workers in disaster resistant construction techniques.
- xii) Awareness, education & sensitization of end users including house owners families, students, teachers, volunteers including CBO members in disaster risk reduction of all importance hazards
- xiii) During rehabilitation and reconstruction phase for taking care of needs of PWDs and other vulnerable groups & providing, organizing emergency health care and psychosocial care & support.

4. ELIGIBILITY CRITERIA FOR THE SELECTION OF NGOs:

Any NGO/CBO or other community based organization fulfilling the following criteria can apply under the scheme:-

1. Applicant should be a registered organization under the Societies Registration Act, 1986 / Himachal Pradesh Societies Registration Act, 2006 / Indian Trust Act /Indian religious and Charitable Act for more than three years.
2. Should have a proven experience of under taking activities related to disaster management or any relevant field such as Natural Resources Management , Environment etc
3. Should have well-trained volunteers, infrastructure and the required managerial expertise for undertaking awareness and capacity development programmes.
4. Should not have been Black-listed by any agency in the past.
5. Should agree to abide by the guidelines and the norms of the HPSDMA.

5. SELECTION PROCEDURE:

1. Submission of duly filled in Programme Planning Sheet (Annexure-B) and Detailed Proposal by the NGO,clearly mentioning the proposed number of camps, details of activities and the locations to be covered under the programme.
2. The Expert Committee as constituted by SDMA will select the Proposals on the basis of the eligibility criteria ,experience merit ,usefulness and relevance of the proposal to the state.
3. The decision on providing the quantum of financial support will be taken by the Expert Committee on case to case basis by taking in to consideration the contents , level of efforts involved and its relevance .
4. The NGO selected for Grant-in-Aid shall be intimated by the DMC within one month of receiving the application.
5. Any appeal against the refusal of financial support or non acceptance of the proposal would be decided by Additional Chief Secretary/ Principal secy. (Revenue) to the Govt. of H.P., whose decision shall be final and binding on applicant.

6. COMPOSITION OF THE EXPERT COMMITTEE

The programme proposals will be received round the year. The proposals will be examined by an Expert Committee with the following composition:

- i. Special Secretary (Revenue-DMC) – Chairman
- ii. Advisor Planning or his nominee member
- iii. Nominee of Finance Department. member
- iv. Prof. & Head (DMC, HIPA) member
- v. Convener, HP-IAG – Member member
- vi. Expert to be nominated by Govt. member

7. MONITORING AND EVALUATION:

Monitoring and evaluation will be done by a team of at least two persons including an independent consultant and an expert appointed by the HPSDMA. The team will submit the Evaluation report to the Expert Committee within one month time.

8. INDICATIVE BUDGET:

Grant-in-aid to NGO for organizing awareness programme under this scheme is governed by the following table which contains the indicative budget for organizing one awareness camp for one day.

S. No.	Item	Amount (in Rs.)
1	Resource material	1500
2	Honorarium for Resource Persons/volunteers	2000
3	Transportation Cost (for Staff, Volunteers)	1000.00
4	Food & Refreshments (for staff, volunteers & Resource Persons & Tea and light refreshment to the Participants)	2000.00
5	Communication / Photography / Stationery etc.	500.00
6	Contingency	500.00
Total		7500.00

The budget presented above is indicative only. The expert committee will take appropriate decision taking in to consideration the proposal as whole. The proposal with respect to capacity development or any other aspects of disaster management shall be evaluated on case by case bases.

9. MEMORANDUM OF UNDERSTANDING:

A standard MOU has been developed for agreement between the HPSDMA and the qualified participating NGOs, containing detailed terms of reference and obligations of NGOs and the HPSDMA. This will bring in transparency and accountability in the system and also ensure clear understanding of the mutual agreement between the two parties. The HPSDMA and the NGO would enter into the following MoU to undertake the above stated activities under the NGO Grant-in-Aid Scheme.

Memorandum of Understanding (MoU)

Made on the ___ of _____, 201__
between

_____ (Name of the NGO/CBO)

and

Himachal Pradesh State Disaster Management Authority (HPSDMA)

For Awareness Generation about Disaster Management

This MoU made on the ___ day of _____, 201__

between

_____ (Name _____ of _____ the
NGO)

a registered society under the Societies Registration Act _____, having its office at

_____ (hereinafter referred to as _____) working in district _____
and _____

Himachal Pradesh State Disaster Management Authority (HPSDMA)

An authority constituted under the Disaster Management Act 2005, having its office at the **Department of Revenue, Himachal Pradesh Secretariat, Shimla - 171002** (hereinafter referred to as HPSDMA) working in the State of Himachal Pradesh.

1. Parties of MoU

This MoU is an agreement between the Himachal Pradesh State Disaster Management Authority; hereafter called HPSDMA and _____ (Name of NGO).

2. Duration of MoU

This MoU will be operative from the date of its signing by the parties and remain in force till _____. The MoU can be renewed through mutual agreement by the parties.

3. Responsibilities of the partner NGO/CBO

The NGO will be responsible for the timely implementation of the programme-related activities in the district. The camps will be held within the district where the NGO has its office and major functional area. The major tasks to be undertaken by the selected NGO are given below:

- a) Organize awareness generation camps or capacity building workshops at different locations in the district, especially in rural and remote settlements.
- b) Inform HPSDMA in advance about the dates and venue of the awareness generation activities / camps planned in the district.
- c) Prior to the camp, the NGOs shall formally communicate with the concerned institution, organisation and/or officials.

- d) Encourage volunteerism for disaster preparedness and response by mobilizing people to volunteer with HPSDMA.
- e) Ensure that a major event is organized on the days of historic importance and relevance {e.g. Anniversary of 1905 Kangra Earthquake (4 April) and the International Day for Disaster Reduction (13 October)}.
- f) Disseminate the IEC material provided by the HPSDMA among the people participating in the awareness camps or similar events.
- g) Adhere to the NDMA Guidelines on the 'Role of NGOs in Disaster Management' (2010) and the 'Sphere Humanitarian Charter' (2011).
- h) Participate in the programme review meeting as and when held by HPSDMA.
- i) Constitute and strengthen the Inter Agency Group at district-level for better coordination among the Governmental and Non-governmental organizations.
- j) Submit an activity report (with photographs) after each camp/workshop/event (preferably via Email). All participating NGOs shall also submit a final (cumulative) report (both in soft and hard copy) before the end of the financial year.
- k) Submit the audited Utilization Certificate, financial expenditure statement and copy of Records as required.

4. Responsibilities of the HPSDMA

The HPSDMA will be responsible for the following tasks:

- a) Organize orientation / capacity building workshops for the NGOs on different topics related to disaster management on a regular basis (see indicative list of priority areas at Annexure-A).
- b) Sanction Grant-in-Aid for the NGO as per the Guidelines and make timely payment of the sanctioned amount to the NGO.
- c) Regularly provide the IEC material, technical assistance, guidance or any other relevant information to the participating NGO.
- d) Communicate with the District Administration about the work being undertaken by the NGOs and to ensure better coordination between the NGO and the local administration.
- e) Issue a Certificate of Recognition against the participation of the NGO at the end of the programme.

5. Termination of MoU

The parties will have rights to withdraw from the commitments made through this MoU by giving a notice of 30 days in writing given by either party, on mutually agreed terms and conditions and consent.

Agreed and signed on __ day of _____, 201__.

Representative of the NGO

Special Secretary (Revenue-DM)

Annexure-A: Indicative List of Priority Activities for NGOs' Participation

- i. Promotion of awareness about disaster preparedness, capacity building, sensitization, training etc. at grassroots level.
- ii. Promotion of new and innovative technologies, techniques, processes, products etc. for effective disaster management.
- iii. Promotion of cost-effective technologies and techniques related to disaster risk reduction (e.g. construction of earthquake-resistant buildings etc.).
- iv. Capacity building of skilled manpower through trainings (masons, carpenters etc.).
- v. Conducting workshops / seminars to deliberate on the issues of local risks and vulnerabilities (with local community, representatives of PRIs, CBOs, educational institutions and other stakeholders).

Budget exp. under 13th F.C. grants

Item/activity	Exp. 2010-11	Exp. 2011-12	Exp. 2012-13	Exp. 2013-14	Exp. 14-15	Total
1 Training & Capacity building of Stakeholders and functionaries.	3885201	5523788	5544809	9070201	25320754	49344753
i) Preparation and printing of training material	144835	458115	538365	585431	2173254	3900000
ii) Capacity building of training Institutions to conduct trainings.	3740366	5065673	5006444	8484770	23147500	45444753
2 Strengthening of SDMA/DDMA	0	4276313	3387972	2521416	16669870	26855571
i) SDMA Website	0	322008	302509	147861	944496	772378
ii) Conduct of KAP Studies	0	2186488	0	0	10768128	3130984
iii) Awareness Generation.	0	1430077	1506624	1293720	4957246	14998549
iv) Admn., Travelling & other overhead charges.	0	337740	1578839	1079835	0	7953660
3 DMPs on the basis of HRVA	0	1493320	3320269	1118145	12216831	13148565
i) Conduct of HRVA of the State	0	153320	3295269	1118145	5016831	9583565
ii) Preparation of DMP	0	1340000	25000	0	7200000	8565000
4 Setting up of EOCs and Emergency	0	10508381	128118	33479797	22090090	65206386
i) Setting up of EOC	0	875490	128118	610000	22090090	23703698
ii) Purchase of SAR equipment and creation of storage facilities.	0	9632891	0	32869797	0	42502688
5 Support to DM Cell in ATI HIPA	0	0	4200000	5000000	10800000	20000000
TOTAL	3885201	21801802	16581168	51189559	87097545	180555275
Abstract				Committed Liabilities:		
Total Funds received under 13th FC		20,00,00,000		1.HVRA	1,43,77,856	
Total expenditure as mentioned above:		180555275		2. EOC	48,00,000	
Balance		19444275		Total	1,91,77,856	
Interest accrued		73,89,119				
Exp. Out of Interest		6841454				
Balance		547665				
Total Balance		19992390			19177856	814534

Proposed Plan for 2015-2020 under 14th FC capacity building

Sr. No.	Name of Activity	Provision in 13 th F.C	Proposal for 14 th FC 5% of SDRF 1304-Cr=65.20 Cr						Total	Remarks					
			15-16 3%	16-17 3%	17-18 3%	18-19 3%	19-20 3%								
1.	Training & Capacity building of Stakeholders and Functionaries.														
			Preparation and Printing of Training Material	39.00	3.00	5.00	5.00	5.00	5.00	10.00	28.00	For preparation/printing of IEC material/reports			
			Awareness Generation and Capacity Building of ATIs and other Training Institutions to conduct training.	523.00	50.00	50.00	60.00	80.00	110.00	350.00	350.00	CB through ATIs i.e. HIPA, RTI, Institute of Mountaineering and Allied Sports and other stakeholders.			
			Funds to districts for Training, Capacity Building and Awareness.	--	150.00	150.00	150.00	150.00	150.00	750.00	750.00	Funds for Districts for trg. CB and Awareness Generation of various stakeholders at State/District level.			
			2. Strengthening of SDMA/DDMAs												
						SDMA Website	04.60	-	-	1.00	1.00	2.00	4.00	4.00	For updation of Website
						Conduct of KAP Studies	32.00	-	-	-	-	-	-	-	----
						Awareness Generation	155.00	-	-	-	-	-	-	-	----
						Administrative, TA and other overheads charges.	80.00	10.00	10.00	10.00	10.00	15.00	55.00	55.00	For the implementation of AWP 2015-16 2019-20 for hiring of vehicles, TA/DA, purchase of hardware, consumable/stationery to implement the AWP.
			3. DMPS on the basis of HRVA												
Development Support Staff at SDMA, DDMAs and ATIs	--	120.00				120.00	125.00	140.00	150.00	655.00	655.00	For engagement of technical Staff at State/Dist. level to coordination/liaison between SDMA-DDMA.			
Conduct of HRVA of the State	253.00	-				-	-	-	-	-	-	----			
	Preparation of DMPS	93.40	5.00	5.00	5.00	5.00	10.00	30.00	30.00	For updation/addition in 1 SDMP, 12 Nos DDMPS and departmental Plans of all De					

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Dy. Secretary (Revenue)
Joint G.O. J.P.D.

	Enhancing Institutional and Community Resilience		---	250.00	260.00	344.00	350.00	320.00	1524.00	Under this component efforts will be made to enhance the resilience of Institutions and vulnerable communities to cope with disasters by implementing scalable demonstrative pilot initiatives. Preparedness, response and mitigation measures/activities will be implemented by designing community led pilot initiatives in the State.
	Enhancing resilience of Institutions and vulnerable Communities to cope with natural disasters by implementing scalable demonstrative pilot initiatives.									
5.	Setting up of EOCs and Emergency Response Centres.									
	Setting up of EOCs	264.00	60.00	50.00	30.00	20.00	10.00	170.00	For the completion of DEOCs except Kangra, Mandi districts and State Level SEOC for which funds will be provided by NDMA.	
	Purchase of SAR equipment and creation of Storage facilities.	356.00	60.00	94.00	50.00	58.00	84.00	346.00	Purchase of essential equipments for Search & Rescue and emergency response and creation of storage facilities.	
									Included in CB and Training head	
6.	Support to DM Cell in ATI HIPA	200.00	-	-	-	-	-	-		
	Total:	2000.00	708.00	744.00	780.00	819.00	861.00	3912.00	---	


 Dy. Secretary (Revenue)
 to the Govt. of H.P.
 Shimla-171002