Annual Report
2024 - 25

Himachal Pradesh State Disaster Management Authority
(HPSDMA)

Government of Himachal Pradesh
Department of Revenue
(Disaster Management Cell)
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VISION

"To build a safer and disaster resilient Himachal by developing a holistic, proactive, multi-disaster, technology-driven and community-based strategy for disaster management through collective efforts of all Government Agencies and Non-Governmental Organizations. The entire process will center-stage the community and will be provided momentum and sustenance through the collective efforts of all government agencies and Non-Governmental Organizations"

MISSION

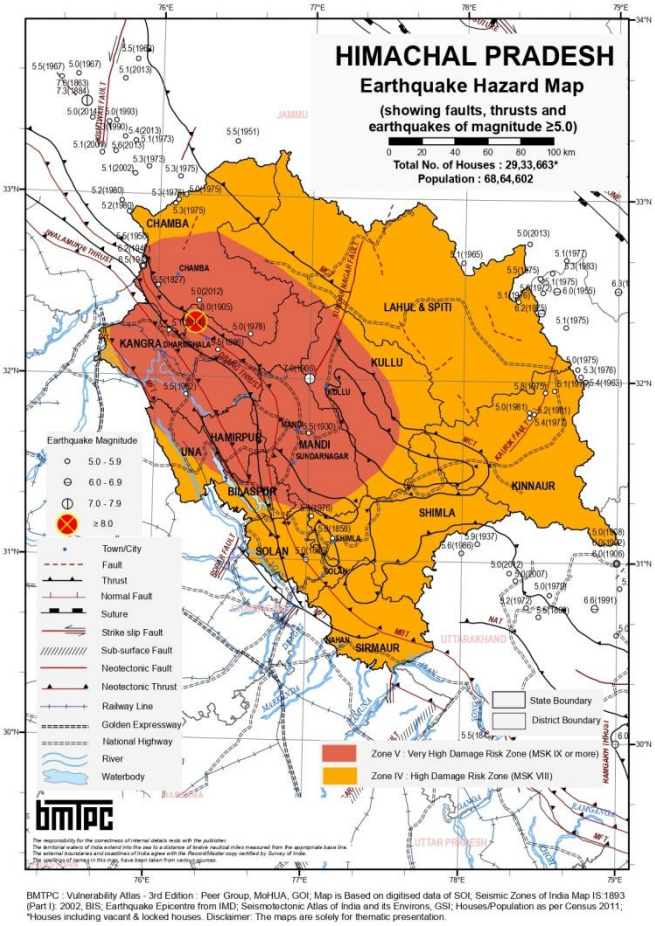
- To work as a think tank for the Government by providing assistance in policy formulation from DRR Lens and;
- To facilitate in reducing the impact of disasters through Planning and promoting training and capacity building services including strategic learning.
- System development and expertise promotion for effective disaster mitigation.
- Promoting awareness and enhancing knowledge and skills of all stakeholders and general people.
- Networking and facilitating exchange of information, experience and expertise.
- Research & Development and documentation of best practices.

Index Table

1. Introduction

1.1 Geographical Settings of Himachal Pradesh

Himachal Pradesh, situated in northern India, stands out for its captivating landscapes, diverse topography and cultural richness. Positioned in the western Himalayas, the state's geographical coordinates range from approximately 30.0668° N to 33.2549° N in latitude and from about 75.7065° E to 79.1378° E in longitude.



BMTPC : Vulnerability Atlas - 3rd Edition : Peer Group, MoHUA, GOI; Map is Based on digitised data of SOI; Seismic Zones of India Map IS:1893 (Part I): 2002, BIS; Earthquake Epicentre from IMD; Seismotectonic Atlas of India and its Environs, GSI; Houses/Population as per Census 2011; *Houses including vacant & locked houses. Disclaimer: The maps are solely for thematic presentation.

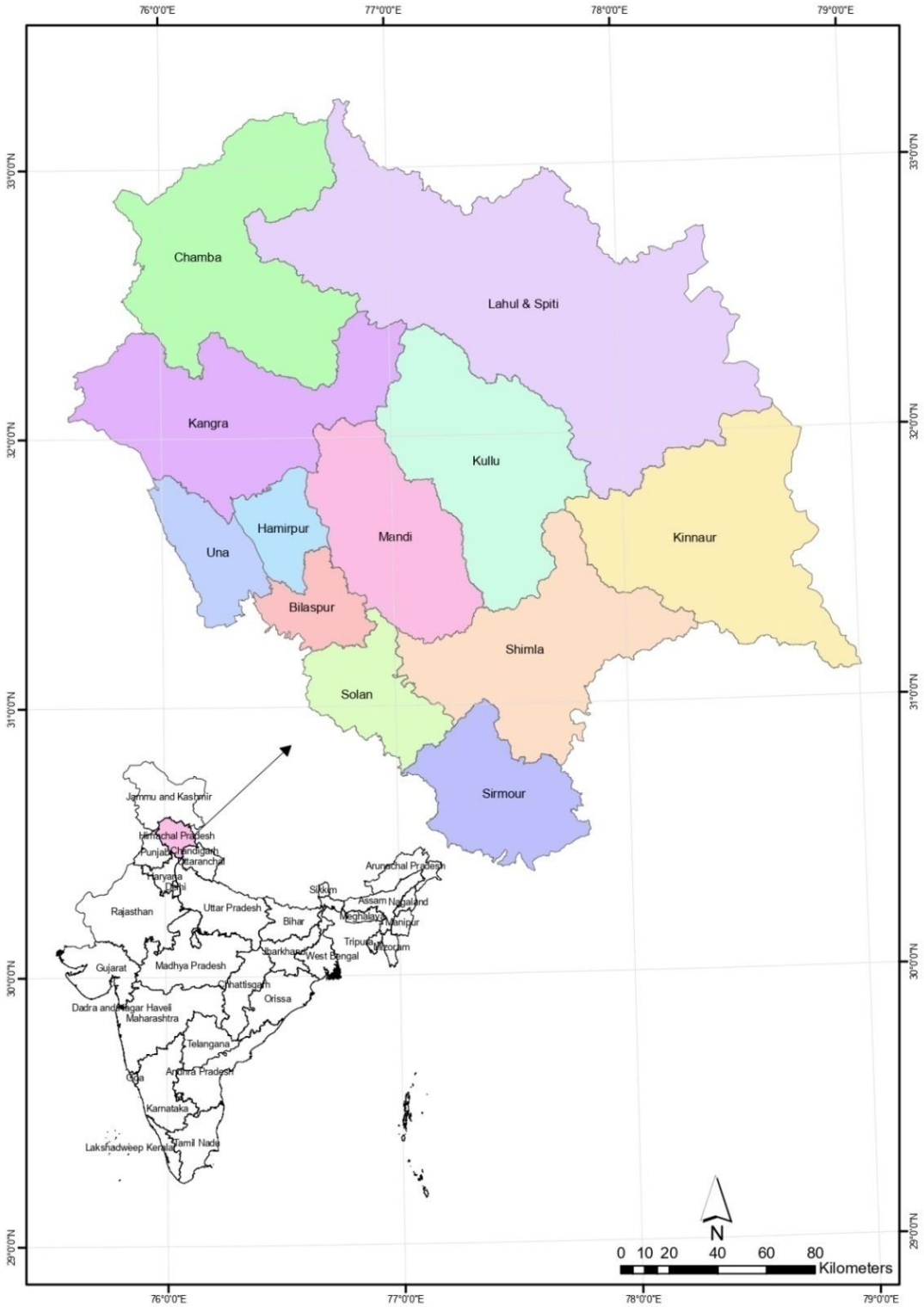
Bordered by the Himalayan mountain range to the north and sharing boundaries with Jammu and Kashmir, Punjab, Haryana, and Uttarakhand, Himachal Pradesh also has an international border with China to the east. Its capital, Shimla, renowned for colonial architecture and scenic beauty, was a significant summer capital during the British Raj.

The state's topography features mountains, valleys, and rivers like Beas, Sutlej, Ravi, and Chenab. From subtropical climates in the south to alpine conditions in the north, Himachal Pradesh experiences diverse ecosystems and weather patterns due to varying altitudinal zones.In essence, Himachal Pradesh's geographical introduction, coupled with its latitude and longitude, highlights its unique location in the western Himalayas. This distinct positioning contributes to the state's exceptional natural beauty and cultural heritage, making it a celebrated destination in India.

Himachal Pradesh showcases a complex geological history shaped by tectonic activities, sedimentation and diverse geological processes. Situated in the western Himalayas, the state's formation is attributed to the collision between the Indian and Eurasian tectonic plates, resulting in the upliftment of the Himalayan mountain range.Key geological features include the Main Central Thrust (MCT), a significant structure separating the Lesser Himalaya from the Higher Himalaya. The Lesser Himalaya predominantly consists of sedimentary rocks, while the Higher Himalaya comprises metamorphic rocks undergoing intense metamorphism due to tectonic forces.

Quaternary deposits, including glacial moraines and fluvial sediments, contribute to the varied landscapes shaped by glaciers and rivers. Himachal Pradesh falls under seismic zones IV and V, indicating moderate to high seismic activity, making it susceptible to earthquakes.Rich in metallic minerals like copper, lead, zinc, and silver, Himachal Pradesh hosts several mines. Non-metallic minerals such as limestone, gypsum, and slate are also present in the state.

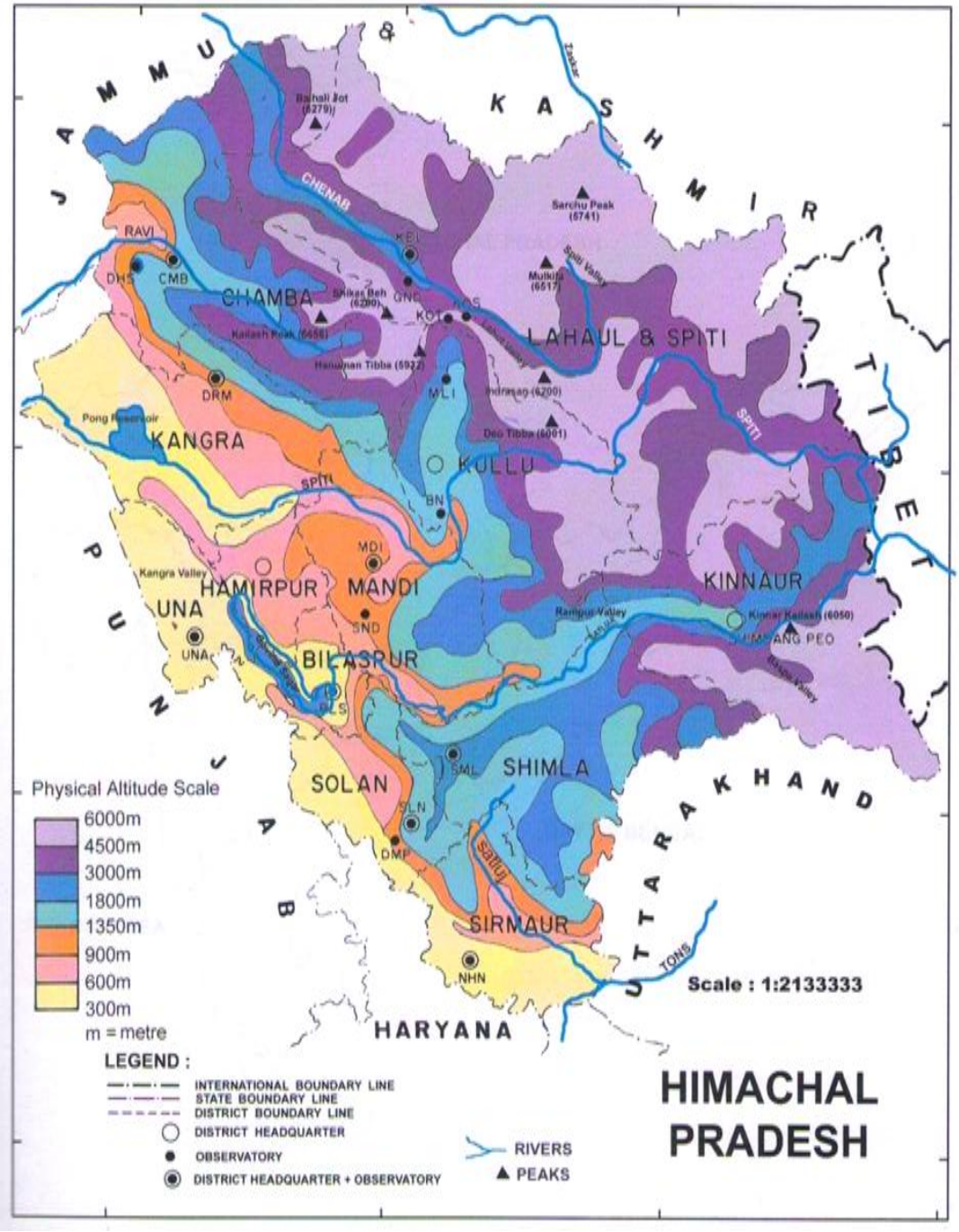
The geological setting contributes to natural hazards, including landslides, particularly during the monsoon, and the risk of Glacial Lake Outburst Floods (GLOFs) from melting glaciers. Understanding the state's geology is vital for assessing hazards, managing mineral resources and appreciating the dynamic processes that have shaped its scenic beauty and environmental challenges over geological time scales.



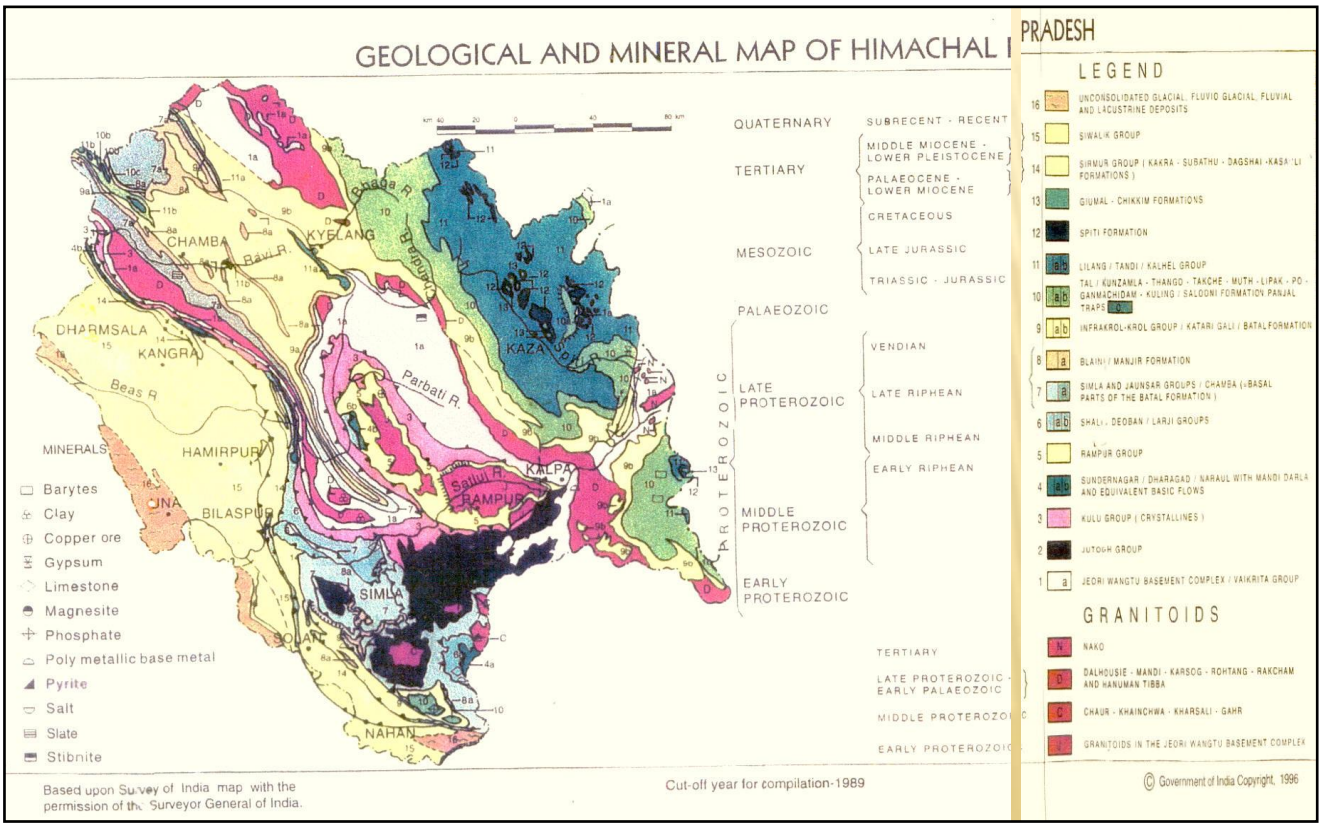
Location Map of Himachal Pradesh

1.2 Geology & Geomorphology:

Himachal Pradesh with its complex geological structures presents a complicated topography with intricate mosaic of mountainous ranges, hills and valleys. Composed of recent Alluvium, Shiwalik hills are made up of rocks such as sandstone, shale and clay that came into existence during the Eocene, Miocene and Pliocene period. The central part that extends from Chamba district in the north to Shimla district in the south is mainly represented by Jatog group of rocks which originated in middle Proterozoic period. In the north eastern portion unclassified



Granites borders the central part in between Kullu, eastern Shimla, Lahaul-Spiti and parts of Kinnaur district. The eastern greater Himalaya presents the Triassic formation which is found in Kaza tehsil of Lahaul Spiti district. The oldest rocks are Granites found at Jeori - Wangtu and Bandel near Largi in Kullu district. These granites date back to a stage of the crust at a time when India was located 8000 Km southwest of its present position.



1.3 Climate:

The climate varies across the state with the altitude. In the southern low tracks between an altitude of 400-900 it is hot sub humid type, between 900-1800m altitude warm & temperate, between 900-2400 m cool & temperate, cold alpine & glacial above 2400-4800 m altitude. Bilaspur, Kangra, Mandi, Sirmour, and Una districts experience sub tropical monsoon, mild and dry winter and hot summer. Shimla district has tropical upland type climate with mild and dry winter and short warm summer. Chamba district experiences, humid subtropical type climate having mild winter, long hot summer and moist all season. Kullu district experience mainly humid subtropical type of climate with mild winter moist all season, long hot summer and marine. During the period from January to February heavy snowfall in higher reaches create conditions for low temperature throughout the state making it unpleasant and series of western disturbances also affect the state.

Climate Pattern of Himachal Pradesh

Climate Pattern	Districts
Sub-tropical Monsoon (Cwa type) Mild and dry winter, hot summer	Bilaspur, Kangra, Mandi, Sirmour, Una, Hamirpur, Solan, Chamba

Sub-tropical Monsoon (Cwb type) Mild and dry winter, moderate hot summer	Shimla, Parts of Chamba
Sub-tropical monsoon (Cfa type) Without dry winter with hot summer	Chamba, Major parts of Kullu, Mandi
Sub-tropical monsoon (Cfb type) Without dry winter with moderate hot summer	Minor parts of Kullu
Humid continental (Dwb type) Severe and dry winter, warm summer	Kinnaur
Humid continental (Dfb type) Severe winter moist all seasons, short warm summer	Lahaul&Spiti

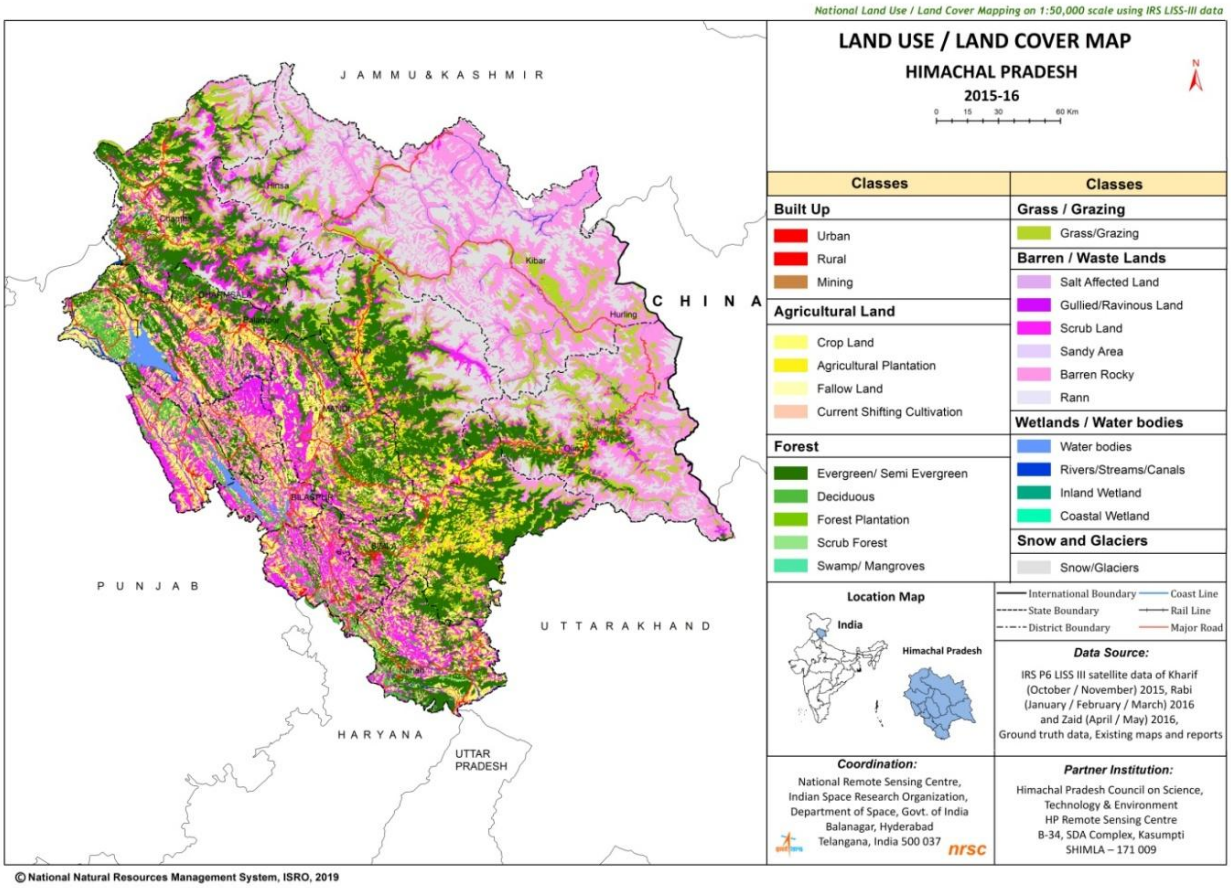
1.4 Land use:

District and category wise distribution of Land Use / Land Cover in Himachal Pradesh (2015-16)

L 1	L 2	Bilaspur	Chamba	Hamirpur	Kangra	Kinnaur	Kullu	Lahul and Spiti	Mandi	Shimla	Sirmaur	Solan	Una	Grand Total
Agriculture	Crop land	416.42	567.25	395.66	1583.12	16.19	80.74	53.81	920.50	460.09	793.62	546.92	580.71	**6415.05**
	Current Shifting cultivation													
	Fallow			1.81	0.26				0.63	0.04				**2.74**
	Plantation	0.12	109.45	4.23	81.82	138.43	565.39	36.55	306.43	917.79	14.03			**2174.25**
Barren/unculturable/ Wastelands	Barren Rocky	1.07	656.85		204.70	2542.44	458.01	6401.04	5.56	225.75	17.49	3.88	4.79	**10521.58**
	Gullied / Ravinous Land	27.12		13.08	2.15				15.78		1.55	16.62	6.16	**82.47**
	Rann													
	Salt Affected Land													
	Sandy Area	0.79	0.77	1.72	0.37	3.21	0.07	47.20	0.13	0.06	4.80	0.85	4.29	**64.27**
	Scrub Land	389.40	1032.35	396.44	923.42	296.52	511.40	260.22	1012.48	565.48	716.96	802.26	545.97	**7452.90**
Builtup	Mining	0.87		0.08	4.32		0.31	0.07	1.54	0.13	6.82	4.58	5.47	**24.18**
	Rural	13.63	22.57	26.51	27.11	14.08	22.08	6.04	44.47	41.76	25.92	22.82	43.02	**310.02**
	Urban	5.51	9.18	10.51	125.48	2.55	12.39	0.84	12.29	28.17	22.17	49.85	18.15	**297.11**
Forest	Deciduous	120.11	62.06	24.77	297.60	9.52	10.87	54.11	109.38	14.09	170.94	166.63	232.56	**1272.65**
	Evergreen/Semi evergreen	46.32	2075.82	185.66	1526.73	632.92	1925.78	145.10	1167.84	2293.88	818.46	209.43	1.70	**11029.64**
	Forest Plantation		0.77		0.76	0.49								**2.02**
	Scrub Forest	3.37	31.89	0.52	3.70	6.96	18.32	8.09	35.67	14.23	33.89	3.35	0.98	**160.95**
	Swamp / Mangroves													
Grass / Grazing	Grass / Grazing	11.40	1154.91	12.33	231.11	1193.84	919.28	1419.09	257.43	460.30	130.54	75.37	4.06	**5869.65**
Snow and Glacier	Snow and Glacier		713.26		263.53	1481.33	922.24	5225.73		76.89				**8682.97**
Wet lands / Water bodies	Inland Wetland				1.03		0.09	1.49				0.04	0.04	**2.69**
	Coastal Wetland													
	River/Stream/Canals	17.36	81.30	44.68	211.37	62.00	55.49	173.98	49.55	31.14	66.55	30.85	52.27	**876.54**
	Water bodies	113.50	9.55	0.00	250.42	0.50	0.55	1.65	10.30	1.20	1.26	2.55	39.83	**431.31**

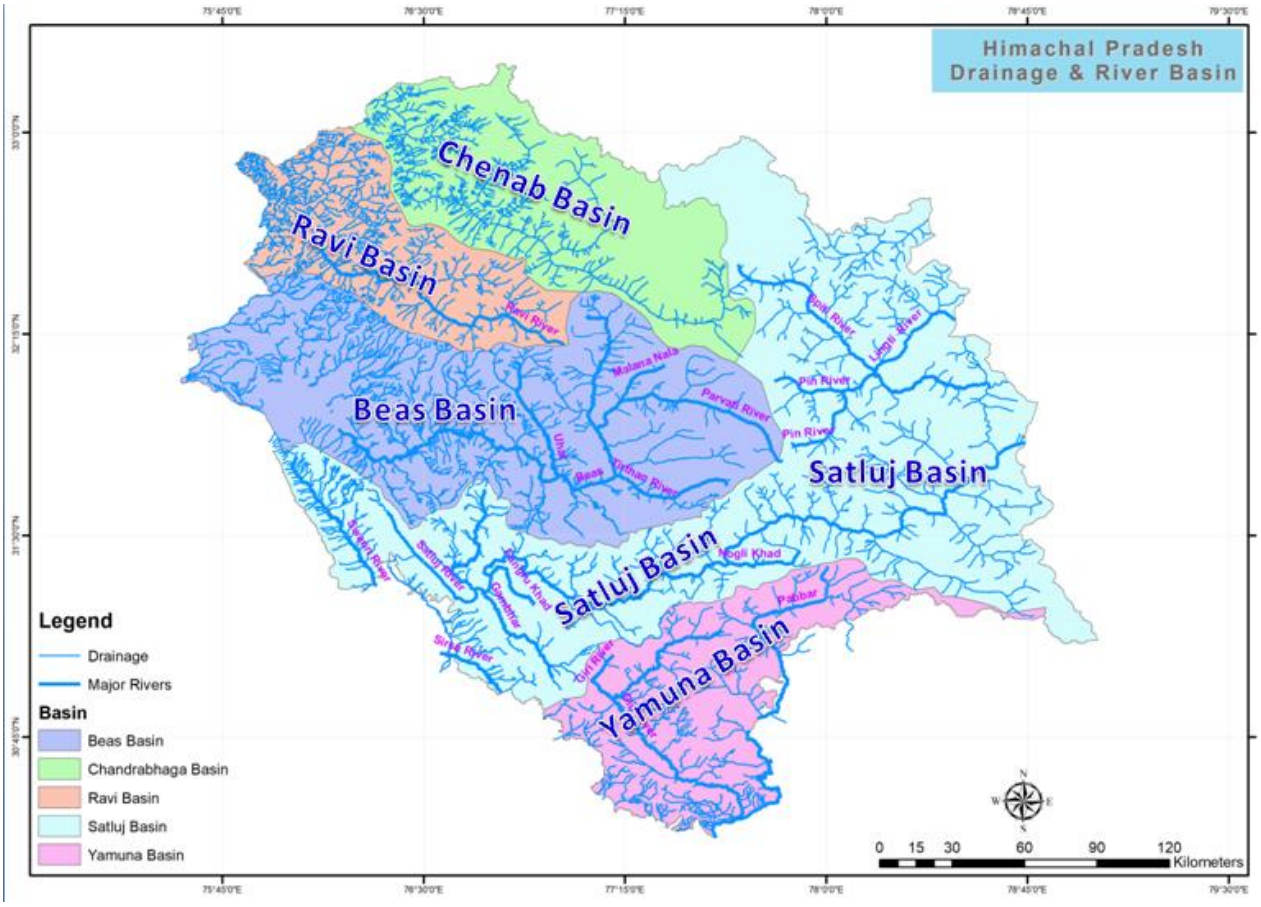
(Above statistics are provisional)

Source: https://bhuvan-app1.nrsc.gov.in/2dresources/thematic/LULC503/MAP/HP.pdf



1.5 Rivers and Catchments:

Himachal Pradesh is traversed by five major perennial rivers—Satluj, Beas, Ravi, Chenab, and Yamuna—which form an integral part of the state's geographical and ecological landscape. While the rugged and mountainous terrain of the region limits the full utilization of these rivers, they offer immense potential for hydro-electric power generation, making them a vital resource for the state's energy needs. The river catchment areas associated with these rivers significantly influence the hydrology, agriculture, and disaster vulnerability of the region, particularly in relation to floods and landslides.



1.6 Lakes/Reservoirs:

Himachal Pradesh is indeed blessed with a variety of water bodies, both natural and man-made, serving various purposes across the state. Among these are the significant reservoirs like Govind Sagar, which spans into Bilaspur and Una districts, primarily utilized for hydro-electricity generation, irrigation, and flood control. Formed by the Bhakra Dam on the Sutlej River, it stands as one of India's largest reservoirs. Additionally, the Pong Dam Reservoir, located in Kangra district, contributes to hydro-electricity generation, irrigation, and fisheries, also known as Maharana Pratap Sagar. Another crucial reservoir is the Pandoh Dam Reservoir in Mandi district, crucial for regulating water flow and preventing floods in the Beas River. Natural wonders include Chandertal Lake in Lahaul and Spiti district, revered for its beauty and clarity, often referred to as the "Lake of the Moon." Renuka Lake in Sirmaur district holds religious significance as the embodiment of the goddess Renuka and is the largest natural lake in Himachal Pradesh. Meanwhile, Manimahesh Lake in Chamba district, believed to be Lord Shiva's abode, is surrounded by the majestic Himalayas. These water bodies serve not only practical purposes but also hold cultural, religious, and ecological importance, drawing tourists and devotees from across the country.

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1.7 Hazard Profile of Himachal Pradesh

The state of Himachal Pradesh is susceptible to various natural and man-made hazards, encompassing earthquakes, landslides, flash floods, snowstorms, avalanches, droughts, dam failures, domestic and wild fires, road, rail, and air accidents, stampedes, boat capsizing, as well as biological, industrial, and hazardous chemical incidents. Among these hazards, earthquakes pose the most significant threat to the state. Historical records indicate that Himachal Pradesh has experienced more than 80 earthquakes with a magnitude of 4 and above on the Richter Scale. According to the seismic zoning map by the Bureau of Indian Standards (BIS), seismic zoning map five districts of the State, namely Chamba (53.2%) Hamirpur (90.9%), Kangra(98.6%), Kullu (53.1%), Mandi (97.4%) have 53 to 98.6 percent of their area liable to the severest design intensity of MSK IX or more, the remaining area of these districts being liable to the next severe intensity VIII. Two districts, Bilaspur (25.3%) and Una (37.0%)also have substantial area in MSK IX and rest in MSK VIII. The remaining districts also are liable to intensity VIII.

The state of Himachal Pradesh faces multiple natural and man-made hazards, including high seismic intensities, which pose a significant threat to its predominantly Category A houses with inadequate earthquake-resistant features. Landslides are frequent, exacerbated by human activities like deforestation and road cutting. While widespread floods are not a major concern, flash floods are increasing, causing substantial damage. The rise in road connectivity has led to a surge in road accidents and loss of lives. Forest fires both anthropogenic and natural contribute to the degradation of the rich flora and fauna, impacting the ecological balance.

Known as the "Land of Gods," Himachal Pradesh boasts famous temples attracting a large number of devotees. Unfortunately, instances like the 2008 stampede at Naina Devi temple highlight the potential dangers in overcrowded religious sites. The state's air and land transport infrastructure, including airports, helipads, ropeways and paragliding activities, adds to the risk of accidents. Road accidents and incidents like boat capsizing during transportation in water reservoirs are common leading to numerous casualties. Furthermore, cases of snakebites and electrocution are prevalent during the monsoon season. Himachal Pradesh faces a multitude of challenges, emphasizing the need for comprehensive disaster management strategies and heightened awareness to mitigate these risks effectively.

1.8 District Wise Disaster Vulnerability of the State:

Considering the proneness of the state towards different kinds of natural hazards, a broad district wise vulnerable status was devised for the state depending upon the vulnerability towards different hazards. Vulnerability matrix was developed based on the qualitative weightage which was given in the scale of 0-5 for different hazards such as earthquakes, landslides, avalanches, industrial hazards, construction type and density of population. District wise matrix was prepared by evaluating the risk severity. The evaluation also gives Weightage to the density of population likely to be affected. The matrix also includes the evaluation of hazards likely to be induced on account of development of projects such as hydel projects, roads industries etc.

In case of earthquake vulnerability, the district Kangra ,Hamirpur and Mandi falls in very high vulnerable category on the basis of the matrix devised. The districts which falls in high earthquake vulnerability are Chamba, Kullu, Kinnaur and part of Kangra and Shimla districts, where as the moderate

and low vulnerable districts are Una, Bilaspur , Sirmour and Solan, Shimla and Lahaul &Spiti districts respectively.

The landslide vulnerability in case of Chamba, Kullu, Kinnaur and part of Kangra and Shimla districts is high followed by Kangra, Mandi, Bilaspur, Shimla, Sirmour and Lahaul &Spiti districts falling in moderate vulnerable category. The areas falling in low vulnerable category are in the districts of Una, Hamirpur and Solan.

The avalanche hazard vulnerability map suggest that the districts of Lahaul &Spiti and Kinnaur are very high vulnerable followed by Chamba, Kullu and part of Kangra and Shimla as moderate vulnerable areas where as the remaining districts fall in the category where avalanche hazards are nil.

The flood hazard vulnerability map indicates that the areas falling in the districts of Chamba, Kullu,Una and Kinnaur falls in high vulnerable districts where as the Lahaul &Spiti, Mandi, Shimla , Kangra,Hamirpur, Bilaspur, Solan and Sirmour falls in moderate and low vulnerability areas.

The overall vulnerability of the state on the basis of the matrix clearly suggests that the district Chamba, Kinnaur Kullu and part of Kangra and Shimla falls in very high vulnerable risk. Similarly district Kangra, Mandi, Una ,Shimla and Lahaul and Spiti falls in high vulnerable risk status. The district Hamirpur, Bilaspur, Solan and Sirmour falls in moderate vulnerable risk status. The disaster management strategies and infrastructure required to be evolved by taking the above factors into consideration.

2. Institutional Mechanism

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)	Hon'ble Revenue Minister	Co-Chairman
iii)	Chief Secretary	Chief Executive Officer
iv)	Additional Chief Secretary(Home)	Member
v)	Additional Chief Secretary (PWD)	Member
vi)	Additional Chief Secretary (Health)	Member
vii)	Director General of Police	Member
viii)	Additional Chief Secretary (Revenue)	Member Secretary

2.1 Roles and Responsibilities of HPSDMA

Subject to the provisions of Section 18 of the DM Act 2005, a State Authority shall have the responsibility for laying down policies and plans for disaster management in the State. Without prejudice to the generality of provisions contained in sub-section (1), the State Authority may:

i. Lay down the State Disaster Management Policy.
ii. Approve the State Plan in accordance with the guidelines laid down by the National Authority.
iii. Approve the Disaster Management Plans prepared by the Departments of the Government of the State.
iv. Lay down guidelines to be followed by the departments of the Government of the State for the purposes of integration of measures for prevention of disasters and mitigation in their development plans and projects and provide necessary technical assistance, therefore.
v. Coordinate the implementation of the State Plan.
vi. Recommend provision of funds for mitigation and preparedness measures.
vii. Review the development plans of the different departments of the State and ensure that prevention and mitigation measures are integrated therein.
viii. Review the measures being taken for mitigation, capacity building and preparedness by the departments of the Government of the State and issue such guidelines as may be necessary.

The Chairperson of the State Authority shall, in the case of emergency, have power to exercise all or any of the powers of the State Authority but the exercise of such powers shall be subject to ex post facto ratification of the State Authority.

2.2 State Executive Committee

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**	**Chief Executive Officer**
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

2.2.1 Functions of the State Executive Committee –

(1) The State Executive Committee shall have the responsibility for implementing the National Plan and State Plan and act as the coordinating and monitoring body for management of disaster in the State.

(2) Without prejudice to the generality of the provisions of sub-section (1), the State Executive Committee may-

a) Coordinate and monitor the implementation of the National Policy, the National Plan and the State Plan;
b) Examine the vulnerability of different parts of the State to different forms of disasters and specify measures to be taken for their prevention or mitigation,
c) Lay down guidelines for preparation of disaster management plans by the departments of the Government of the State and the District Authorities;
d) Monitor the implementation of disaster management plans prepared by the departments of the Government of the State and District Authorities;
e) Monitor the implementation of the guidelines laid down by the State Authority for integrating of measures for prevention of disasters and mitigation by the departments in their development plans and projects;
f) Evaluate preparedness at all governmental or non-governmental levels to respond to any threatening disaster situation or disaster and give directions, where necessary, for enhancing such preparedness;
g) Coordinate response in the event of any threatening disaster situation or disaster,
h) Give directions to any Department of the Government of the State or any other authority or body in the State regarding actions to be taken in response to any threatening disaster situation or disaster,
i) Promote general education, awareness and community training in regard to the forms of disasters to which different parts of the State are vulnerable and the measures that may be taken by such community to prevent the disaster, mitigate and respond to such disaster,
j) Advise, assist and coordinate the activities of the Departments of the Government of the State, District Authorities, statutory bodies and other governmental and non-governmental organizations engaged in disaster management,
k) Provide necessary technical assistance or give advice to District Authorities and local authorities for carrying out their functions effectively,
l) Advise the State Government regarding all financial matters in relation to disaster management;
m) Examine the construction, in any local area in the State and, if it is of the opinion that the standards laid for such construction for the prevention of disaster is not being or has not been followed, may direct the District Authority or the local authority, as the case may be, to take such action as may be necessary to secure compliance of such standards;
n) Provide information to the National Authority relating to different aspects of disaster management,
o) Lay down, review and update State level response plans and guidelines and ensure that the district level plans are prepared, reviewed and updated;
p) Ensure that communication systems are in order and the disaster management drills are carried out periodically;

q) Perform such other functions as may be assigned to it by the State Authority or as it may consider necessary.

2.2.2 State Executive Committee (SEC) Meetings 2024 - 2025

During the FY 2024-25 , the Himachal Pradesh State Executive Committee (SEC) held three key meetings to review, monitor, and guide disaster management initiatives across the state. The **23rd meeting** was conducted on **28th May 2024**, the **24th meeting** on **5th October 2024**, and the **25th meeting** on **21st February 2025**. These meetings focused on crucial policy decisions, approval of disaster mitigation projects, assessment of ongoing programs, and review of the implementation status of decisions taken in previous meetings.

The detailed reports of these meetings are available at: https://hpsdma.nic.in/Index1.aspx?lid=1434&lsid=1502&pid=12&lev=2&langid=1.

2.3 District Disaster Management Authority (DDMA)

A District Disaster Management Authority (DDMA) has been established for every district in the State of Himachal Pradesh to effectively carry out the various functions assigned under the Disaster Management Act, 2005. The composition of the DDMA is in accordance with sub-section (2) of Section 25 of the said Act, comprising key officials and representatives responsible for disaster preparedness, mitigation, and response at the district level.

S.No.	Designation	Role
i.	**Deputy Commissioner**	**Chairperson (Ex-officio)**
ii.	Superintendent of Police	Member
iii.	Chief Medical Officer	Member
iv.	Superintending Engineer, PWD	Member
v.	Superintending Engineer, I&PH	Member
vi.	Superintending Engineer, MPP & Power	Member
vii.	Chairperson of the Zila Parishad	Member

Powers and functions of District Authority

1. The District Authority shall act as the district planning, coordinating and implementing body for disaster management and take all measures for the purposes of disaster management in the district in accordance with the guidelines laid down by the National Authority and the State Authority.

2. Without prejudice to the generality of the provisions of sub-section (1), the District Authority may

i. Prepare a disaster management plan including district response plan for the district.

ii. Coordinate and monitor the implementation of the National Policy, State Policy. National Plan, State Plan and District Plan;

iii. Ensure that the areas in the district vulnerable to disasters are identified and measures for the prevention of disasters and the mitigation of its effects are undertaken by the departments of the Government at the district level as well as by the local authorities;

iv. Ensure that the guidelines for prevention of disasters, mitigation of its effects, preparedness and response measures as laid down by the National Authority and the State Authority are followed by all departments of the Government at the district level and the local authorities in the district,

v. Give directions to different authorities at the district level and local authorities to take such other measures for the prevention or mitigation of disasters as may be necessary,

vi. Lay down guidelines for prevention of disaster management plans by the department of the Government at the districts level and local authorities in the district,

vii. Monitor the implementation of disaster management plans prepared by the Departments of the Government at the district level;

viii. Lay down guidelines to be followed by the Departments of the Government at the district level for purposes of integration of measures for prevention of disasters and mitigation in their development plans and projects and provide necessary technical assistance therefor;

ix. Monitor the implementation of measures referred to in clause (viii);

x. Review the state of capabilities for responding to any disaster or threatening disaster situation in the district and give directions to the relevant departments or authorities at the district level for their up gradation as may be necessary;

xi. Review the preparedness measures and give directions to the concerned departments at the district level or other concerned authorities where necessary for bringing the preparedness measures to the levels required for responding effectively to any disaster or threatening disaster situation,

xii. Organize and coordinate specialized training programmes for different levels of officers, employees and voluntary rescue workers in the district;

xiii. Facilitate community training and awareness programmes for prevention of disaster or mitigation with the support of local authorities, governmental and non-governmental organizations,

xiv. Set up, maintain, review and upgrade the mechanism for early warnings and dissemination of proper information to public

xv. Prepare, review and update district level response plan and guidelines;

xvi. Coordinate response to any threatening disaster situation or disaster,

xvii. Ensure that the Departments of the Government at the district level and the local authorities prepare their response plans in accordance with the district response plan,

xviii. Lay down guidelines for, or give direction to, the concerned Department of the Government at the district level or any other authorities within the local limits of the district to take measures to respond effectively to any threatening disaster situation or disaster,

xix. Advise, assist and coordinate the activities of the Departments of the Government at the district level, statutory bodies and other governmental and non-governmental organizations in the district engaged in the disaster management;

xx. Coordinate with, and give guidelines to, local authorities in the district to ensure that measures for the prevention or mitigation of threatening disaster situation or disaster in the district are carried out promptly and effectively;

xxi. Provide necessary technical assistance or give advise to the local authorities in the district for carrying out their functions;

xxii. Review development plans prepared by the Departments of the Government at the district level, statutory authorities or local authorities with a view to make necessary provisions therein for prevention of disaster or mitigation;

xxiii. Examine the construction in any area in the district and, if it is of the opinion that the standards for the prevention of disaster or mitigation laid down for such construction is not being or has not been followed, may direct the concerned authority to take such action as may be necessary to secure compliance of such standards;

xxiv. Identify buildings and places which could, in the event of any threatening disaster situation or disaster, be used as relief centers or camps and make arrangements for water supply and sanitation in such buildings or places;

xxv. Establish stockpiles of relief and rescue materials or ensure preparedness to make such materials available at a short notice;

xxvi. Provide information to the State Authority relating to different aspects of disaster management;

xxvii. Encourage the involvement of non-governmental organizations and voluntary social-welfare institutions working at the grassroots level in the district for disaster management;

xxviii. Ensure communication systems are in order, and disaster management drills are carried out periodically;

xxix. Perform such other functions as the State Government or State Authority may assign to it or as it deems necessary for disaster management in the District.

2.4 LOCAL AUTHORITIES: Functions of the local authority.

(1) Subject to the directions of the District Authority, a local authority shall-

a) Ensure that its officers and employees are trained for disaster management,
b) Ensure that resources relating to disaster management are so maintained as to be readily available for use in the event of any threatening disaster situation or disaster,
c) Ensure all construction projects under it or within its jurisdiction conform to the standards and specifications laid down for prevention of disasters and mitigation by the National Authority, State Authority and the District Authority,
d) Carry out relief, rehabilitation and reconstruction activities in the affected area in accordance with the State Plan and the District Plan.

(2) The local authority may take such other measures as may be necessary for the disaster management.

3. Ongoing State Level Schemes

3.1 Policy for Engagement of Interns at the Himachal Pradesh State Disaster Management Authority (HPSDMA) District Disaster Management Authority (DDMA) :

Internship programmes are designed to provide students with the professional experience, in furtherance of their educational pursuits and are oriented to benefit them with practical experience. The HP-SDMA/DDMA(s) aims to provide an excellent internship programme on different dimensions of Disaster Management(DM)/Climate Change Adaptation (CCA) to young interns from multi-disciplinary backgrounds with following objectives : -

i. To complete his/her professional preparation program in a controlled and supervised field experience.
ii. This program will serve as an opportunity for students to gain understanding and orient students to the systems, processes and schemes on Disaster Management/ Disaster Risk Reduction (DRR).
iii. Enable interns to contribute innovative ideas in the area of DRR and CCA strategies.
iv. Promote a wider and better public understanding on the concerns of DRR/CCA and strategies to deal with them at local and global level.
v. Encourage documentation of best practices in the field of DRR from various districts across the state.
vi. Develop capacities (knowledge, attitudes and skills) of young students to create a future pool of academically and practically well-versed professionals.

In the fiscal year 2024-25, a total of **32 students** were shortlisted and recommended to participate in internships. These internships were to be carried out in various District Disaster Management Authorities (DDMAs) and at the Himachal Pradesh State Disaster Management Authority (HPSDMA) as part of a specific scheme or program. The recommendation suggests that these students were selected to gain practical experience and hands-on training in the field of disaster management within the mentioned authorities.

3.2 School Safety Project (SSP) Safe Schools in Emergencies and Disasters

The concept of "School Safety" encompasses creating secure environments for children from their homes to schools and back, addressing various risks such as natural disasters, human-made threats, violence and emergencies. The National Disaster Management Authority (NDMA) in India formulated the National School Safety Policy Guidelines in 2016, aiming for a safe learning environment for all children, teachers and stakeholders. The policy emphasizes inclusive and holistic approaches, capacity building, community-based disaster risk reduction, integrating risk education into the curriculum and linking school safety with existing government schemes. The Hon'ble Supreme Court, through its August 2017 order, directed the implementation of the School Safety Policy by all concerned authorities and state governments.

The convergence of the Right to Education Act and the National Disaster Management Act establishes a strong foundation for promoting school safety, ensuring that students and teachers remain safe during all phases, including preparedness, response and recovery. The RTE Act guarantees free and compulsory education and recognizes the importance of safe infrastructure. The National Disaster Management Act mandates State Disaster Management Authorities to integrate disaster measures into development plans, necessitating collaboration with the State Education Department. The implementation framework emphasizes reducing disaster risk in schools, preparing the next generation to face challenges and aligning with the National School Safety Policy of 2016.

3.2.1 Objectives of the Scheme

To prepare Education department and schools for emergencies and to ensure that the schools are prepared and resilient to face disasters, remain functional in post disaster scenario and act as places for shelter and relief.

a) To initiate policy level changes for ensuring safe school environment.
b) To sensitize children and the school community on disaster preparedness and safety measures.
c) To motivate direct participation of key stakeholders in activities that would help building towards a disaster resilient community.
d) To promote capacity building of officials, teachers and students.
e) To prepare the Disaster Management Plans of all the schools in the State.
f) To carry out Information, Education and Communication (IEC) activities in schools and associated environment.
g) To implement non-structural mitigation measures in all schools.
h) To carry out RVS of all schools and structural audit of the select schools.
i) To institutionalize school safety in the Education Department.
j) To build a resilient society and develop "a culture of safety" in the State.

3.2.2 Implementation Partners

The Department of Education through:-

i. SCERT State Nodal Agency &implementing agency for 6 districts namely, Solan, Shimla, Kinnaur, Sirmour, Bilaspur, and Una.
ii. GCTE Dharamshala implementing agency for 6 districts of the State namely, Kangra, Chamba, Hamirpur, Mandi, Kullu and Lahaul &Spiti.
iii. DIETs-Respective Districts
iv. State Institute of Management, Administration & Training (SIEMAT)-SSA & RMSA
v. Block Resource Centres (BRCC)

3.2.3 Knowledge Partners

i. National Disaster Management Authority
ii. National Institute of Disaster Management
iii. United Nations Development Programme

3.2.4 Components of Scheme on School Safety

Component I Advocacy, Training and Capacity Building
Component II Information, Education and Communication activities
Component III Preparation of the School DM plans
Component IV Non-structural Measures
Component V RVS of all schools & Structural Safety Audit of the Selected Schools
Component VI Project Management and Implementation Support.

School Safety Management Information System

District wise status of Schools with Disaster Management Plan Initiated and Drills conduct for the Academic **Year 2024-25**

Sr. No.	District	Total Schools	DMP In Progress	DMP No Action Taken	Drills Conducted	Drills not Conducted.	DMP Completed	Achievement DMP Completed	Achievement Initiated DMP	Achievement Drills Conducted	Drills Conducted in all Schools
1	Bilaspur	1025	707	318	397	310	378	37%	69%	56%	39%
2	Chamba	1886	1828	58	1752	76	1398	74%	97%	96%	93%
3	Hamirpur	962	894	68	792	102	747	78%	93%	89%	82%
4	Kangra	3155	2469	686	1810	659	1093	35%	78%	73%	57%
5	Kinnuar	309	309	0	251	0	250	81%	81%	100%	81%
6	Kullu	1243	723	520	358	365	207	17%	58%	50%	29%
7	L&S	267	114	153	53	61	27	10%	43%	46%	20%
8	Mandi	2891	2091	800	1820	271	1518	53%	72%	87%	63%
9	Shimla	2650	1600	1050	1115	485	693	26%	60%	70%	42%
10	Sirmaur	1665	1009	656	346	663	211	13%	61%	34%	21%
11	Solan	1404	724	680	364	360	169	12%	52%	50%	26%
12	Una	926	692	234	445	247	302	33%	75%	64%	48%
	Total	18383	13102	5281	9503	3599	6993	38%	71%	73%	52%

3.3 Scheme for Creation of Task Force of Youth Volunteers for Disaster Preparedness and Response

The challenges associated with managing disasters and emphasize the need for effective measures throughout all phases of the disaster management cycle. The disaster management cycle typically includes mitigation, preparedness, response and recovery. Each phase presents its own set of challenges and complexities, requiring dedicated time, capabilities and resources to address effectively. One specific challenge highlighted is the need for human resources, as people are crucial in delivering quality services related to disaster risk reduction (DRR). In response to this, a proposed solution is the implementation of a scheme aimed at creating a cadre of youth volunteers within the state. The objective of this scheme is to enhance the state's capacity for effective disaster risk reduction.

According to the scheme, approximately 10-20 volunteers from each gram panchayat (a local self-government unit in India) will be selected and trained in Search and Rescue (SAR) operations and medical first aid. This training aims to equip the youth volunteers with the necessary skills and knowledge to effectively respond to disasters, particularly during the critical phases of search and rescue and providing initial medical assistance.

By establishing a cadre of trained youth volunteers distributed across the state, the scheme aims to strengthen the overall disaster response capabilities. These volunteers can play a vital role in supporting local communities during emergencies, thereby contributing to the effectiveness of disaster risk reduction efforts in the region. The emphasis on youth involvement not only addresses the immediate need for manpower but also fosters a sense of community engagement and empowerment in disaster management.

During the year 2024 – 25 the year, approximately 24,466 volunteers have undergone training as part of the scheme, spanning across the districts of Himachal Pradesh. This concerted effort reflects a significant commitment to bolstering community resilience and preparedness in the face of potential disasters. By dispersing training initiatives across the state, authorities aim to ensure widespread awareness and readiness, thereby fostering a culture of safety and proactive engagement at the grassroots level. These trained volunteers serve as vital assets in the implementation of various safety measures, contributing to the overall resilience of the region against unexpected emergencies.

District Wise Status of Volunteers and Masons Trained 2024-25

District	Total Panchayat	Creation of Task Force of Youth Volunteers for Disaster Prepa redness and Response		
		Target for Volunteers @15 Per Panchayat	Achieved Nos.	% Achievement
Bilaspur	176	2640	1480	**56%**
Chamba	309	4635	1511	**33%**
Hamirpur	248	3720	1858	**50%**
Kangra	814	12210	10460	**86%**
Kinnaur	73	1095	882	**81%**
Kullu	235	3525	1715	**49%**
Lahaul&Spiti	45	675	102	**15%**
Mandi	559	8385	2870	**34%**
Shimla	412	6180	1489	**24%**
Sirmaur	259	3885	744	**19%**
Solan	240	3600	1411	**39%**
Una	245	3675	1944	**53%**
Total	**3615**	**54225**	**26466**	**49%**

3.4 Scheme for Training of Masons, Carpenters & Bar Binders on Hazard Resistant Construction

The Disaster Management Act, 2005 outlines the responsibilities of State Governments and their departments in ensuring that construction activities take into account the vulnerability of the state to various hazards. Further, the act emphasizes the need for training and capacity building programs for all stakeholders involved in disaster management.

In line with these directives, the Disaster Management Cell of the Himachal Pradesh State Disaster Management Authority (HPSDMA) conducted a study in 2012 titled "Evolving Strategy for Capacity Building of Masons, Carpenters, and Bar Binders at Panchayat Level for Safe Construction Practices in Himachal Pradesh." The study's findings revealed that despite the growth in construction activity driven by economic demands, there was a persistent shortage of skilled construction workers in the state.

To address this issue, a new scheme has been proposed. The scheme focuses on the training and capacity building of masons, carpenters, and bar binders in every gram-panchayat (local self-government unit) of the state, specifically on safe construction practices. Initially, the plan is to train five masons from every village within the state.

This scheme aims to enhance the skills and knowledge of construction workers at the grassroots level, ensuring that they are well-equipped to implement safe construction practices that consider the state's vulnerability to various hazards. By targeting masons, carpenters and bar binders at the village level, the scheme intends to have a cascading effect, promoting safer construction practices throughout the state. This proactive approach aligns with the principles of disaster risk reduction, emphasizing the importance of preparedness and mitigation measures to minimize the impact of disasters on infrastructure and communities.

District Wise Status of Volunteers and Masons Trained 2024-25

District	Total Panchayat	Training of Masons, Carpenters & Bar Binders on Hazard Resistant Construction		
		Target for Masons @5 Per Panchayat	Achieved Nos.	% Achievement
Bilaspur	176	880	22	**3%**
Chamba	309	1545	271	**18%**
Hamirpur	248	1240	278	**22%**
Kangra	814	4070	1079	**27%**
Kinnaur	73	365	0	**0%**
Kullu	235	1175	46	**4%**
Lahaul&Spiti	45	225	0	**0%**
Mandi	559	2795	926	**33%**
Shimla	412	2060	147	**7%**
Sirmaur	259	1295	0	**0%**
Solan	240	1200	368	**31%**
Una	245	1225	176	**14%**
Total	**3615**	**18075**	**3313**	**18%**

3.5 Amateur and Community Radio (HAM) for "Alternate Communication during Emergencies"

The Government of Himachal Pradesh launched and notified a scheme on October 13, 2023, to promote Amateur and Community Radio (HAM) as an alternative communication system during emergencies. This initiative aligns with Section 22, Subsection (p) of the Disaster Management Act, 2005, and the provisions of Sections 3.6.1(x) and 6.12.1 of the Himachal Pradesh State Disaster Management Policy, 2011. The objective of the scheme is to strengthen emergency communication by establishing HAM radio networks, identifying and mobilizing volunteers and licensed operators, and building their capacity through systematic training.

Under this initiative, three batches comprising 134 volunteers have been trained so far. Out of these, 33 individuals have successfully qualified for HAM Radio licensing, enabling them to operate as certified amateur radio operators during emergency situations. These trained volunteers form a critical part of the state's disaster communication infrastructure, especially in remote and disaster-prone areas where conventional systems may fail. The scheme continues to serve as a model for integrating community-based communication solutions into disaster risk reduction and emergency response frameworks.

Batch No.	Training Period	No. of Participants	Exam Date	No. of Applicants Appeared	No. of Qualified Candidates	Restricted Grade	General Grade
1st Batch	5th – 9th Feb 2024	46	23rd Aug 2024	21	**18**	12	6
2nd Batch	21st – 26th Oct 2024	42	13thFeb 2025	19	**15**	12	3
3rd Batch	24th to 29th March 2025	46	-	-	**-**	-	-
Total	-	**134**	**-**	**40**	**33**	**12**	**9**

3.6 Up scaling of Aapda Mitra Scheme

The **Up scaling of Aapda Mitra Scheme** has been successfully implemented in the State of Himachal Pradesh, with the objective of strengthening community-level disaster response capabilities through trained volunteers.

Under the scheme, a total of 1,500 Aapda Mitra volunteers have been trained in disaster response operations across nine districts of the state. These volunteers form a vital part of the community-based disaster risk reduction framework and are expected to play a crucial role in immediate response during emergencies.

The district-wise distribution of trained volunteers is as follows: Chamba – 200, Hamirpur – 100, Kangra – 300, Kinnaur – 100, Kullu – 100, Lahaul & Spiti – 100, Shimla – 200, Solan – 200,andUna – 200. Each trained volunteer has also been provided with an **Emergency Responder Kit (ERK)** to support their operational readiness during emergency situations.

In addition to training and equipment distribution, the **procurement of Emergency Essential Resource Reserve (EERR)** has been undertaken, and all volunteers have been insured for threeyears**,** ensuring their safety and welfare while responding to disasters. This initiative has significantly enhanced the State's preparedness and resilience at the community level and aligns with the objectives of building a culture of safety and risk reduction under the Disaster Management Act, 2005.

3.7 Yuva Aapda Mitra Scheme

Under the preparedness and capacity building funding window of the National Disaster Response Fund (NDRF), a Memorandum of Understanding (MoU) has been signed between the National Disaster

Management Authority (NDMA) and the Himachal Pradesh State Disaster Management Authority (HPSDMA) on 29-08-2024 to strengthen disaster preparedness at the community level.

As part of this initiative, the Yuva Aapda Mitra Scheme (YAMS) will be implemented in nine districts of Himachal Pradesh—Chamba, Hamirpur, Kangra, Kinnaur, Kullu, Lahaul & Spiti, Shimla, Solan, and Una. The scheme is being executed in collaboration with the National Cadet Corps (NCC), National Service Scheme (NSS), Nehru Yuva Kendra Sangathan (NYKS), and Bharat Scouts & Guides (BS&G).

Under this program, a total of 4,070 youth volunteers will undergo a seven-day residential training on disaster response, receive Emergency Response Kits (ERKs), and be covered under Life & Medical Insurance for three years. This includes 1,500 cadets from NCC, 750 volunteers from NSS, 750 volunteers from NYKS, and 1,070 volunteers from BS&G. The District Disaster Management Authorities (DDMAs) will oversee the implementation of the scheme at the district level, while the training will be conducted at ABVIMAS and Home Guard & Civil Defence training centers.

Furthermore, under the Upscaling of Aapda Mitra Scheme, 20 volunteers from Himachal Pradesh are undergoing an advanced Master Trainer (Training of Trainers – ToT) program at the Central Training Institute, Kot Bhalwal, Jammu (UT J&K) from 3rd March 2025 to 20th March 2025. These master trainers will play a crucial role in strengthening disaster management efforts and training volunteers under the Yuva Aapda Mitra Scheme across the state.

This initiative will supplement the state scheme "Creation of Task Force of Youth Volunteers for Disaster Preparedness and Response," under which over 30,000 volunteers have been trained to date. It highlights the state government's commitment to building a well-trained volunteer force, enhancing emergency response capabilities and strengthening disaster resilience in vulnerable regions of Himachal Pradesh.

4 India Disaster Resource Network (IDRN) is a web-based inventory of equipment and human resources available with the government and private agencies across the country, which can be mobilized during emergencies and disasters. It is a critical tool for disaster managers at the district, state, and national levels to ensure effective response by accessing updated information on locally available resources.

During the financial year **2024–25**, concerted efforts were made to update the inventory records on the IDRN portal across various districts of Himachal Pradesh. The district-wise status of updated records is as follows:

Sr. No.	District	Number of Records Updated
1	Bilaspur	2085
2	Chamba	511
3	Hamirpur	251
4	Kangra	225
5	Kinnaur	331
6	Kullu	1161
7	Lahaul-Spiti	20
8	Mandi	722
9	Shimla	54

10	Sirmaur	1004
11	Solan	969
12	Una	786
	Total	**8119**

This updated database enhances the state's disaster preparedness by enabling quicker access to vital resources and improving coordination during emergency response operations.

5 Revenue Management System

The Revenue Management System plays a crucial role in delivering timely and transparent financial relief to disaster-affected families in accordance with the provisions of the Relief Manual. This system enables streamlined processing of relief assistance by digitizing data disbursement procedures. Through efficient delivery of financial assistance online the system ensures that eligible beneficiaries receive compensation for losses related to housing, agriculture, livestock, and livelihoods due to natural disasters. The beneficiary may apply by logging into the citizen login portal and fill up the relevant form. After verification from field funcationaries the amount is disbursed directly into the bank account of beneficiary. This portal provides and end to end solution removing the hassle of processing applications online.

District wise Status of Relief Cases in Revenue Management System 2024-2025.

District	Pending at Patwari	Pending at Kanungo	Pending at Tehsildar	Pending at SDM	Total Rejected	Total Approved	Disbursed	Pending at Citizen	% Disbursed
Bilaspur	156	113	92	51	302	1847	1294	344	70%
Chamba	455	77	45	81	787	4333	3965	1074	92%
Hamirpur	180	88	20	16	492	1596	1223	378	77%
Kangra	644	171	102	91	2177	8918	4265	3558	48%
Kinnaur	45	5	2	2	357	1266	676	247	53%
Kullu	238	77	24	140	761	2180	473	893	22%
Lahul and Spiti	17	5	3	1	22	412	307	60	75%
Mandi	452	68	20	149	1702	7925	5729	2361	72%
Shimla	457	162	58	243	1851	7991	1659	2116	21%
Sirmaur	264	174	64	31	658	3087	2446	1215	79%
Solan	164	22	18	288	487	2123	1536	739	72%
Una	160	33	19	42	369	1216	692	298	57%
Total	3232	995	467	1135	9965	42894	24265	13283	57%

6 Marking the 119th Anniversary of Great Kangra Earthquake of 1905

Himachal Pradesh, situated in the northwestern part of the Indian Himalayan region, is known for its high seismic activity due to the youthful nature of the Himalayan mountain range, which is still in the process of formation. The tectonic configuration of the state has resulted in a significant history of both major and minor earthquakes. Records indicate that the state has experienced 7 earthquakes with magnitudes ranging from 6 to 6.9, along with 1 earthquake measuring 8 on the Richter scale. Besides this, there have been 43 earthquakes with magnitudes between 5 and 5.9, 22 earthquakes measuring 4 to 4.9, 141 earthquakes with magnitudes of 3 to 3.9, and approximately 1,200 earthquakes with magnitudes below 3.

The Kangra earthquake, which occurred on 4 April 1905, was one of the most devastating seismic events in the history of Himachal Pradesh, having a magnitude of 8.0 on the Richter scale. Its epicenter was at Kareri, near Dharamshala. The earthquake caused widespread destruction across the region, with significant damage to buildings, infrastructure, and loss of life. Estimates suggest that over 20,000 people lost their lives, and many more were injured or displaced. The quake also triggered landslides and caused extensive damage to property. The Kangra earthquake remains one of the deadliest earthquakes in India's history, highlighting the seismic vulnerability of the Himalayan region.

As per the BIS seismic zoning map, five districts of the state—namely Chamba (53.2%), Hamirpur (90.9%), Kangra (98.6%), Kullu (53.1%), and Mandi (97.4%)—have between 53 and 98.6 percent of their area liable to the severest design intensity of MSK IX or more, the remaining area of these districts being liable to the next severe intensity, VIII. Two districts, Bilaspur (25.3%) and Una (37.0%), also have substantial areas in MSK IX and the rest in MSK VIII. The remaining districts are also liable to intensity VIII.

Despite the probable maximum seismic intensities being high, the house types mostly fall under Category A, consisting of walls made of clay mud, unburnt bricks, or random rubble masonry without any earthquake-resisting features. All such houses are liable to total collapse if intensity IX or more actually occurs in the future, and will suffer severe damage—called "destruction"—with very large cracks and partial collapses even in intensity VIII areas. Also, the burnt-brick houses, classified as Category B, as built in Himachal Pradesh, do not have the earthquake-resisting features—namely good cement mortar, seismic bands, and roof tying, etc. Therefore, they will also be liable to severe damage under intensity IX as well as intensity VIII whenever such an earthquake occurs. This became quite evident even in the M5.7 Dharamshala earthquake of 1986.

Earthquakes don't kill people; unsafe buildings do. Therefore, ensuring the safety of buildings is crucial, especially in earthquake-prone regions like Himachal Pradesh. Adhering to the norms set by the Bureau of Indian Standards (BIS) codes ensures that structures are designed and constructed to withstand seismic activity to the best extent possible. This includes factors such as proper foundation design, use of earthquake-resistant materials, reinforcement techniques, and adherence to building codes for structural integrity. For existing buildings, retrofitting measures can be implemented to improve their safety and resilience against earthquakes. This may include strengthening weak structural elements, securing non-structural components, and implementing emergency preparedness measures.

When searching for a place to stay, it's essential to prioritize safety considerations. This involves assessing the structural integrity of the building, its compliance with building codes, and its location in relation to seismic risk zones.

Ultimately, investing in building safety not only protects lives but also minimizes property damage and ensures community resilience in the face of natural disasters like earthquakes.

Creating a family emergency plan is also important to ensure everyone's safety and well-being during challenging times, especially in the event of natural disasters like earthquakes. Initiating conversations about emergency preparedness is essential, highlighting the importance of planning for various scenarios such as earthquakes, fires, or floods. It's imperative to assist families in identifying potential risks in their area and customizing their plan accordingly. Emphasizing the establishment of communication channels within the family and allocating responsibilities to each member—including mapping out evacuation routes and compiling essential information—is vital. Furthermore, families must prioritize assembling an emergency kit containing essentials like water, non-perishable food, first aid supplies, flashlights, batteries, and a portable radio to effectively handle situations. Regular practice of the emergency plan through drills and simulations, along with staying informed about potential hazards and updating the plan accordingly, further enhances preparedness. By adhering to these guidelines, families can ensure readiness and resilience in the face of adversity.

The Himachal Pradesh State Disaster Management Authority (HPSDMA), in its first meeting held on 7 December 2011, decided to conduct various awareness generation activities to mark this occasion and to prepare the general public to face such disasters in the future. In this regard, recognizing the critical need for awareness and readiness, HPSDMA mandated the implementation of various initiatives aimed at educating and empowering the populace to confront such eventualities. Among these directives, the organization of mock drills—particularly the 'drop, cover, hold' exercises—was emphasized across the state's districts.

Furthermore, instructions were issued to Panchayati Raj Institutions to utilize the upcoming Gram Sabha meetings in April as forums for disseminating information on earthquake-resistant construction techniques and preparedness measures at the grassroots level. On April 4, 2024, district administrations diligently executed a range of activities as per the directives, fostering community engagement and dialogue on crucial disaster mitigation strategies. The ensuing glimpses and report encapsulate the collective efforts undertaken, reflecting the commitment to fostering resilience and safeguarding communities against unexpected calamities.

April 4th, 2024

Disaster Awareness Day

ग्राम सभा एजेंडा

4 अप्रैल 1905 को हिमाचल प्रदेश के कांगड़ा क्षेत्र में विनाशकारी भूकंप आया था। इस भूकंप की तीव्रता 7.8-7.9 थी तथा तक़रीबन 6 किमी की अनुमानित गहराई पर आया । इस भूकंप को पश्चिमी हिमालय क्षेत्र में अब तक का सबसे अधिक व्यक्तिओं की जान लेने वाला भूकंप मन जाता है। इसमें 20,000 से अधिक लोग मारे गए और 53,000 घरेलू मवेशी भी मारे गए। भूकंप से लगभग 1,00,000 इमारतें ध्वस्त हो गई थी। कांगड़ा, मैक्लोडगंज और धर्मशाला शहरों की अधिकांश इमारतें पूरी तरह से नष्ट हो गईं थी। प्रभावित क्षेत्र को पानी देने वाले पहाड़ी जलसेतुओं के नेटवर्क को भी भारी क्षति हुई थी । भूकंप के प्रभाव से उबरने की कुल लागत 2.9 मिलियन (1905) रुपये आंकी गई।

एचपीएसडीएमए ने 7 दिसंबर 2011 को आयोजित अपनी पहली बैठक में इस अवसर को चिह्नित करने और युवा पीढ़ी को सामना करने के लिए तैयार करने के लिए सभी सरकारी और निजी शैक्षणिक संस्थानों में शेकआउट ड्रिल तथा विभिन्न कार्यक्रमों को आयोजित करने का निर्णय लिया गया था। हर वर्ष इस दिन को आपदा जागरूकता दिवस के तौर पे याद किया जाता है। यह दिन आपदाओं के विभिन्न पहलुओं के बारे में जागरूकता पैदा करने के लिये एक महत्वपूर्ण दिन है। यह राज्यव्यापी अभियान राज्य, जिला और समुदाय स्तर पर चलाया जाता है और अप्रैल माह में विभिन्न प्रकार के कार्यक्रम और गतिविधियाँ आयोजित की जाती हैं।

हिमाचल प्रदेश में हाउसिंग सेक्टर (लोगों के घरों को) अभूतपूर्व क्षति और हानि के मुख्य कारण

2023 मानसून आपदा के दौरान लोगों के घरों को गंभीर रूप से नुक्सान हुआ है। 2600 से अधिक घर पूरी तरह नष्ट हो गये हैं और 11,000 से अधिक घर क्षतिग्रस्त हो गये हैं। भूमि धंसने के कारण 200 से अधिक गांवों में गंभीर विनाश हुआ, जिससे 1772 घर और लगभग 12,000 लोग प्रभावित हुए। इतने बड़े पैमाने और व्यापक क्षति और विनाश के संभावित कारण इस प्रकार हैं:-

क. **घरों की खराब निर्माण गुणवत्ता:** यह भी देखा गया है कि घरों को नुकसान मुख्य रूप से कई कारणों से हुआ है, जैसे:

- ✓ मकानों का निर्माण तीव्र ढलानों के साथ असुरक्षित स्थानों पर किया गया था,
- ✓ मकानों की नींव ठोस चट्टानों पर न होकर असंगठित सामग्री (unconsolidated soil) पर थी,
- ✓ निर्माण की गुणवत्ता ख़राब थी,
- ✓ आरसीसी मकानों का निर्माण अप्रशिक्षित राजमिस्त्रियों द्वारा किया गया है - आरसीसी मकानों का डिजाइन और निर्माण केवल योग्य इंजीनियरों की देखरेख में ही किया जाना चाहिए।

ख. **खराब/अनुचित जल निकासी प्रणाली:** कई मामलों में यह देखा गया कि खराब या कोई जल निकासी नहीं थी, जल निकासी में या उसके आसपास निर्माण, जल निकासी का अतिक्रमण, और आपदा प्रभावित क्षेत्रों में बारिश के जल की निकासी के प्रावधानों का अभाव था।

ग. **घरों के निर्माण के लिए असुरक्षित स्थान:** ज्यादातर मामलों में घरों का निर्माण खड़ी ढलानों, ढीली मिट्टी, नालों और झरनों के पास किया गया है और ऐसे क्षेत्रों में निर्माण किया गया है जहां भूस्खलन और भूमि धंसने का खतरा है। परंपरागत रूप से हमारे पूर्वजों द्वारा इन स्थानों पर घर बनाने से परहेज किया जाता था क्योंकि ये स्थान सुरक्षित निर्माण के लिए उपयुक्त नहीं थे।

घ. **पारंपरिक निर्माण प्रथाओं को त्यागना:** हमारे पूर्वजों ने भूकंप, भूस्खलन, भूमि धंसाव आदि जैसी विभिन्न आपदाओं का अनुभव करने के बाद सुरक्षित निर्माण प्रथाओं की कला में महारत हासिल की थी। 'धज्जी दीवार' और 'काठ कुहनी' से बने घर इसका एक जीवंत उदाहरण हैं। समय के बदलाव और नई निर्माण सामग्री की उपलब्धता के साथ, हमने अपने पारंपरिक ज्ञान को त्याग दिया है।

ङ. **पहाड़ियों और ढलानों की अवैज्ञानिक कटाई:** पहाड़ियों और ढलानों की अवैज्ञानिक कटाई भूस्खलन के कारणों में से एक है जो घरों और अन्य सार्वजनिक एवं निजी संपत्तियों को नुकसान पहुंचा रही है।

च. **निर्माण तथा टूटे हुए मकानों के मलबे का अवैज्ञानिक निपटान:** राज्य में पहाड़ी/ढलान काटने - सड़कों के निर्माण, घरों के निर्माण और पुनर्निर्माण, और अन्य निर्माण परियोजनाओं के माध्यम से बहुत सारे निर्माण और विध्वंस मलबा (demolition waste)

उत्पन्न हो रहे हैं। इसे वैज्ञानिक तरीके से उचित तरीके से निपटाने यानी रिसाइक्लिंग करने या निर्दिष्ट डंपिंग स्थलों पर डंप करने के बजाय, इसे पहाड़ियों से नीचे लुढकाया जा रहा है या असुरक्षित स्थानों पर डंप किया जा रहा है। यह सामग्री नीचे की ओर तबाही मचा रहा है और भूस्खलन का कारण बनने के अलावा जल आपूर्ति योजनाओं, बस्तियों और बुनियादी ढांचे को नुकसान पहुंचा रही है।

तैयारी की आवश्यकता

- जलवायु परिवर्तन अब एक वास्तविकता है और जलवायु अनुमानों के अनुसार, यदि हम अच्छी तरह से तैयारी नहीं करते हैं, तो अत्यधिक वर्षा की घटनाएं और परिणामी क्षति का भविष्य में घटित होने की संभावना है। इसके अलावा, भूकंप, भूस्खलन आदि जैसे विभिन्न खतरों के प्रति राज्य की अत्यधिक संवेदनशीलता को देखते हुए, इन घटनाओं के लिए भी तैयारी करने की आवश्यकता है। वे कहते हैं, ***"भूकंप नहीं मारते, असुरक्षित घर मारते हैं"।*** यह बात बिल्कुल सत्य और समय परीक्षित है। चूंकि, राज्य भूकंप के प्रति अत्यधिक संवेदनशील है, इसलिए हमें सुरक्षित निर्माण प्रथाओं को अपनाने और बढ़ावा देने की आवश्यकता है।

कुछ महत्वपूर्ण बिंदु जिन्हें चरम मौसम की घटनाओं के लिए तैयारी करते समय और हमारे घरों का निर्माण करते समय ध्यान में रखा जाना चाहिए, वे इस प्रकार हैं:

चरम मौसम की घटनाएँ (Extreme Weather Events)

✔ स्थानीय स्तर पर, जल निकासी प्रणाली के निर्माण और रखरखाव पर ध्यान देने की आवश्यकता है जो अत्यधिक वर्षा पैटर्न के कारण उत्पन्न वर्षा जल का भार उठाने में सक्षम हो। सभी ग्राम पंचायतों द्वारा इसे समयबद्ध तरीके से लागू करने के लिए मनरेगा/जीपीडीपी के तहत विशिष्ट कार्य योजना बनाई जानी चाहिए। शहरी क्षेत्रों में भी ऐसी ही कवायद की जरूरत है।

✔ जल निकासी के किनारे सभी अतिक्रमण को समयबद्ध तरीके से हटाया जाना चाहिए ताकि हम अगले मानसून के लिए तैयार रहें।

✔ असुरक्षित स्थानों जैसे जल चैनलों के पास, खड़ी ढलानों, ढीली मिट्टी, और भूस्खलन और भूमि धंसने की आशंका वाले क्षेत्रों पर किसी भी निर्माण की अनुमति नहीं दी जानी चाहिए।

✔ पहाड़ी कटाई और घरों और बुनियादी ढांचे के निर्माण से उत्पन्न होने वाले सभी कचरे के निपटान के लिए योजना बनाने की आवश्यकता है। इसे यथासंभव सीमा तक रीसायकल किया जाना चाहिए और चिन्हित किए गए सुरक्षित स्थानों पर डंप किया जाना चाहिए।

✔पहाड़ियों की चरणबद्ध कटाई होनी चाहिए और पहाड़ियों की वर्टीकल कटाई की अनुमति नहीं दी जानी चाहिए। इंजीनियरिंग और बायो-इंजीनियरिंग दोनों उपायों का उपयोग करके ढलान स्थिरीकरण उपायों को एक साथ अपनाया जाना चाहिए।

<u>सुरक्षित निर्माण पद्धतियाँ</u>

✔ घर स्थिर एवं कठोर चट्टान पर स्थित होना चाहिए। नींव इतनी गहरी होनी चाहिए कि वह कठोर एवं ठोस चट्टान को छू सके।

✔ सभी इमारतों को भूकंप प्रतिरोधी बनाने के लिए भूकंपीय क्षेत्र IV और V के लिए निर्धारित राष्ट्रीय भवन कोड का पालन करते हुए निर्माण किया जाना चाहिए।

✔ दो मंजिला भार वहन करने वाली इमारत को एक इकाई बनाने के लिए प्लिंथ लिंटेल और देहली स्तर पर पर्याप्त सहायक बैंड प्रदान किए जाने चाहिए।

✔ जहां तक संभव हो स्थानीय राजमिस्त्री की सेवाओं का उपयोग करते हुए 'धज्जी दीवार' और 'काठ कुहनी' जैसी पारंपरिक निर्माण प्रथाओं को अपनाया जाना चाहिए। इसके अलावा प्रशिक्षित एवं प्रमाणित राजमिस्त्रियों को प्राथमिकता दी जानी चाहिए। एसडीएमए (SDMA) 2019 से राजमिस्त्रियों को सुरक्षित निर्माण प्रथाओं का प्रशिक्षण दे रहा है।

✔ ईंट और पत्थर की चिनाई वाले निर्माणों में प्लिंथ, खिड़की और छत के स्तर पर भूकंपीय बैंड बिछाना आवश्यक है। वर्टीकल आरसीसी सलाखों का उपयोग कोनों पर, दरवाजे और खिड़कियों जैसे खुले स्थानों के पास किया जाना चाहिए।

✔ निर्माण स्थानीय खतरों जैसे भूकंप, भूस्खलन, आग, बिजली, हवा आदि के प्रति प्रतिरोधी होना चाहिए।

✔ सभी आरसीसी भवनों का निर्माण स्ट्रक्चरल इंजीनियर की सलाह और देखरेख में ही किया जाना चाहिए। स्थानीय राजमिस्त्री ऐसी संरचनाओं के डिजाइन और निर्माण के लिए प्रशिक्षित नहीं हैं।

✔ **वर्तमान प्रणाली में मेसन निर्माण अभ्यास का निर्णय लेता है:** हालाँकि, मालिक को इमारत के संरचनात्मक पहलुओं के बारे में खुद को जागरूक करना चाहिए और सुरक्षित निर्माण प्रथाओं के बारे में पता होना चाहिए कि क्या करें और क्या न करें। मालिक ज्यादातर महंगे पेंट, प्लंबिंग और इलेक्ट्रिकल फिक्स्चर, लकड़ी के पैनलिंग विवरण आदि पर ध्यान केंद्रित करते हैं, जो महत्वपूर्ण हैं लेकिन सुरक्षित निर्माण प्रथाओं की कीमत पर नहीं।

परंपरागत निर्माण पद्धतियाँ को अपनाना

हमारे पूर्वजों द्वारा विभिन्न आपदाओं का अनुभव करने के बाद सुरक्षित निर्माण प्रथाओं की कला में महारत हासिल की थी। 'धज्जी दीवार' और 'काठ कुहनी' शैली से बने घर इसका एक जीवंत उदाहरण हैं। ये दोनों ही पद्धतियाँ भूकंप रोधी हैं। इन पद्धतियों को आज के समय में भी प्रोत्साहन देने की ज़रुरत है। आज के परिवेश में इन मकानों में लकड़ी के स्थान पे आरसीसी का प्रयोग किया जा सकता है.

कॉन्फाइन्ड भवन निर्माण (confined masonry) तकनीक।

विगत 100 वर्षों में कॉन्फाइन्ड भवन निर्माण तकनीक, अप्रबलित निर्माण (unreinforced masonry) व प्रबलित काँक्रीट के ढाँचों (reinforced concrete frame) पर आधारित निर्माण तकनीकों के विकल्प के रूप में उभर कर सामने आयी है। वास्तव में कॉन्फाइन्ड भवन निर्माण तकनीक में उपरोक्त दोनों ही तकनीकों की विशेषताओं का समावेश होता है। कॉन्फाइन्ड भवन निर्माण तकनीक में ईंट या काँक्रीट ब्लाक से बनायी गयी प्रत्येक दीवार के चारों ओर क्षैतिज (horizontal) व लम्बवत् (vertical) प्रबलित काँक्रीट के कॉन्फाइनिंग मेम्बर्स (confining members) की रचना की जाती है।

कॉन्फाइनिंग मेम्बर्स की उपयोगिता:

- दीवार पर लगने वाले भूकम्पीय बलों (in-plane and out-of-plane) का सामना करने के लिये चिनाई की दीवारों को स्थिरता (stability) व अखंडता (integrity) को बढ़ाते हैं (कॉन्फाइनिंग मेम्बर्स क्षतिग्रस्त दीवार को अच्छी तरह से एक साथ बाँधे रह सकते हैं).
- पार्श्विक भूकम्पीय बलों (lateral earthquake loads) की स्थिति में दीवारों की प्रतिरोधक क्षमता को बढ़ाते है, तथा
- भूकम्पीय बलों की स्थिति में दीवारों को भगुरता (brittleness) को कम करते हैं और इस प्रकार भवन की भूकम्प प्रतिरोधक क्षमता को बढ़ाते हैं।

आज के इस परिवेश में हमें परंपरागत निर्माण पद्धतियाँ को अपनाने की तथा आरसीसी को हतोत्साहित की ज़रुरत है ताकि भूकंप रोधी संरचनाओं का निर्माण किया जा सके।

नोट: अधिक जानकारी के लिए कृपया अपने जिला आपदा प्रबंधन प्राधिकरण (डीडीएमए) से संपर्क करें; टोल फ्री नंबर 1077; या राज्य आपदा प्रबंधन प्राधिकरण (एसडीएमए); टोल फ्री नंबर 1070; वेबसाइट: hpsdma.nic.in

A detailed report and glimpses of the district-wise activities undertaken on April 4, 2024, are available at: https://hpsdma.nic.in

Mock drills across state mark Kangra earthquake of 1905

Students, staff and DDMA members with Vijay Sekhani at HPTU.

Participants told to learn of dangers, take precautions

OUR CORRESPONDENT

HAMIRPUR, APRIL 4

Mock drills are important as these drills prepare people to be ready to act during disasters and build confidence among them.

This was stated by Commandant of Home Guards Vijay Sekhani while addressing students and staff of Himachal Pradesh Technical University during the mock drill organised here today.

He said districts in lower hills of the state were earthquake-prone and people living in these areas must know and observe precautions.

The government had started disaster preparedness programmes on the completion of 119 years of the disastrous earthquake of 1905 that left thousands dead, with many more rendered homeless.

Debi in lower hills of the state earthquake-prone: Vijay Sekhani

The mock drill was conducted by Jawans of Home Guards and teams of fire-fighting staff.

In a message, Deputy Commissioner and chairman of District Disaster Management Authority Anagh Singh said mock drills not only make people aware about disaster management techniques, but also help in evaluating readiness of government machinery for handling disasters.

The DDMA would also organise mock drills in schools when they restart after vacations, he added.

Building safety event held in Sirmaur

NAHAN, APRIL 4

The Sirmaur Disaster Management Authority took a proactive step towards enhancing building safety with a one-day district-level workshop focused on repair and retrofitting of buildings with respect to potential disasters.

The workshop held at Nahan garnered participation from a diverse array of departments, and was presided over by Additional District Magistrate LR Verma. In his address, Verma underscored the importance of preparedness, citing historical tragedies such as the devastating earthquake that struck Kangra on April 4, 1905. He reminded attendees of the staggering loss of life and property due to the disaster, with approximately 20,000 human lives and 50,000 heads of cattle lost, along with the destruction of about one lakh homes.

Drawing parallels to contemporary times, Verma highlighted the pressing need for proactive measures to mitigate similar risks, emphasising that the loss of life and property could be even higher today.

The workshop, conducted under the guidance of experts of Central Building Research Institute, Roorkee, aimed to equip stakeholders of Sirmaur with valuable insights into both the construction of new buildings and the retrofitting of existing structures.

Experts such as SK Negi, Dr Ajay Chaurasia and Ashish Kapoor provided detailed technical knowledge on various aspects of building safety, including architectural planning, material selection and structural reinforcement.

LR Verma emphasised the potential benefits of the expert guidance for technical officers across various engineering departments of the district. He urged all participants to leverage the knowledge gained from the workshop, and to disseminate it among their peers and colleagues, stressing the importance of collective action in ensuring community resilience. The workshop, facilitated by district Revenue Officer Chetan Chauhan, saw enthusiastic participation from a wide range of departments — including engineering, architecture, disaster management, public works, etc. The inclusive engagement underlined the collaborative effort needed to address the multifaceted challenges of building safety and disaster preparedness. Throughout the day, attendees delved into detailed discussions on technical aspects of construction and retrofitting with a focus on developing effective project reports tailored to the district's seismic vulnerabilities.

The exchange of knowledge and expertise is expected to catalyse efforts towards building a safer and more resilient Sirmaur. As the threat of natural disasters looms large, initiatives like this workshop serve as important milestones in Sirmaur's journey towards enhancing preparedness and safeguarding the wellbeing of its residents. — OC

Officials during the one-day district-level workshop on building safety in Nahan.

The ruins of the Brajeshwari Temple in Kangra, 1905.

DEVASTATING LOSSES

- Additional District Magistrate LR Verma underscored the importance of preparedness, citing the devastating earthquake of Kangra.
- He reminded attendees of the staggering loss of life and property due to the disaster, noting that approximately 20,000 human lives and 50,000 heads of cattle were lost due to the earthquake.
- Around one lakh homes were destroyed, rendering many homeless.

Evacuation training at DC office, hospital in Kinnaur

OUR CORRESPONDENT

RAMPUR, APRIL 4

An earthquake evacuation mock drill was organised at the Deputy Commissioner office complex, Kinnaur, this morning to mark the Kangra earthquake of 1905.

All the employees of the Deputy Commissioner's office participated in the mock drill.

Kinnaur District Magistrate Amit Kumar Sharma, in his address, said the tribal Kinnaur district fell under the sensitive category with regard to earthquakes and the district administration should be prepared at all times to deal with disasters. Area residents should also be informed about disaster management from time to time, he added.

Sharma said awareness should be created so that emergency situations could be dealt with immediate effect. On this day in 1905, 20,000 people lost their lives in Kangra.

Talking lessons from [illegible] incidents, the district administration was taking effective steps for disaster management, he said.

Personnel from the Fire Corps, Home Defence, Fire Department, Health Department, and the Police Department participated in the mock drill and demonstrated their working capacity during the disaster, Sharma added.

Apart from this, a mock drill was held at Regional Hospital Reckong Peo. On this occasion Kinnaur Superintendent of Police Srishti Pandey, Sub-Divisional Officer Mayank Shashank Gupta, Assistant Commissioner Vijay Kumar Pooh, Tehsildar Kalpana Singh, Kalpa Tehsildar Kuchan Thakur and officers and employees of various departments were present.

An evacuation drill in Reckong Peo on Thursday morning.

Disaster Day training at HPU

TRIBUNE NEWS SERVICE

SHIMLA, APRIL 4

Students of the Himachal Pradesh University here today participated in an evacuation mock drill organised at the Ambedkar Bhawan under the joint aegis of the Dean of Student Welfare (DSW) and the Security Office of the university.

The mock drill was demonstrated by the Home Guard and Civil Defence, Himachal Pradesh. The training was conducted by Company Commander Sukh Dev Party Incharge and Platoon Commander Sant Dutt, the Chief Trainer and the entire training team of the Home Defence and Civil Defence Central Training Institute, Sangri.

On this occasion, DSW Mamta Mokta said the only objective of the mock drill was to make the students of the university aware so that no mistake is made at the time of a disaster.

Participants at the mock drill at HPU, Shimla, on Thursday.

"Due to the earthquake in Kangra on April 4, 1905, about 20,000 people had lost their lives, as a result, every year on this day, a mock drill is organised as Disaster Day so that people can be trained and be equipped with techniques to deal with disasters," the DSW said.

She also said even in the current situation, where an increase in heart attacks is being noted, a mock drill was conducted to react quickly and take the patient to the hospital safely. The students of the university completed this training with great enthusiasm.

"In this exercise, students were given information about first aid and how to ensure participation in the safety of the family, society, and the general public in the event of a disaster," she said.

Disaster preparedness tested at D'sala DC office

DHARAMSHALA, APRIL 4

Deputy Commissioner Himang Rahvi on Thursday said it was important for residents to be aware about disaster management. The risk of natural disasters like earthquakes as well as man-made disasters had increased in modern times, he added. Addressing the employees at the mock drill organised on Kangra Earthquake Memorial Day at the DC office premises on Thursday, the DC said special focus was being given to disaster management so that the damage caused by disasters could be reduced.

He said plans had been prepared for disaster management at district and subdivision levels and in this regard and training workshops were also organised regularly at various levels. Aapda Mitras had also been trained at the village level so that relief and rehabilitation works could be started immediately at the time of a disaster, he added.

He said builders were given training to construct earthquake resistant building structures, adding that to reduce the risk, expert opinion should be taken for proper land use and building construction so that one does not have to suffer any kind of loss during the disaster.

Advocating the basic mantra of 'hold, cover and hold', the DC advised the gathering to lie down in an open space as soon as earthquake tremors are felt.

"If you cannot leave the house, cover your head and bend down and hold on to some hard object like a table or stool," he said.

During the mock drill, as soon as the siren sounded in the DC office, employees became alert and to protect themselves, slowly walked out of their offices and gathered at a safe place. — OC

7. Symposium on Disaster Management 16th May, 2024

The National Disaster Management Authority (NDMA), in collaboration with the Central Command of the Indian Army (KAL COMMAND) and the Uttar Pradesh State Disaster Management Authority (UPSDMA), organized a comprehensive Symposium and Table-Top Exercise on Disaster Management in Lucknow on Thursday.

event witnessed active participation from a wide range of stakeholders, including central ministries, State Disaster Management Authorities (SDMAs), disaster management institutions, and early warning agencies from the states of Himachal Pradesh, Uttarakhand, Uttar Pradesh, and Madhya Pradesh.

Key technical and scientific organizations such as the India Meteorological Department (IMD), National Remote Sensing Centre (NRSC), National Centre for Seismology (NCS), Central Water Commission (CWC), and the Geological Survey of India (GSI) under the Ministry of Mines also participated in the exercise.

The primary objective of the symposium and table-top exercise was to simulate emergency situations, helping stakeholders to understand and exercise their roles and responsibilities during disasters. It also aimed to provide a learning platform where disaster managers could engage with domain experts on latest trends, best practices, and advancements in disaster preparedness and response.

The thematic scope of the event covered a broad range of contemporary disaster scenarios relevant to the four participating states, including earthquakes, landslides, floods, and avalanches. The discussions focused on enhancing coordination between civil and military authorities and improving inter-agency communication during emergency response operations.

The event brought together representatives from key departments such as railways, road transport and highways, civil aviation, health and family welfare, and the Ministry of Environment, Forest and Climate Change. Institutions like the National Institute of Disaster Management (NIDM) and revenue and disaster management departments of the participating states were also represented.

This landmark event served as a strategic platform for knowledge exchange, capacity building, and collaborative planning, reaffirming the need for a multi-disciplinary and integrated approach to disaster risk reduction in India. It strengthened institutional coordination and enhanced readiness among key responders to mitigate the impact of future disasters.

8. 8th Edition of State-wide Mega Mock Exercise on Flood, Flash Floods, Landslides & GLOFs

The 8th edition of the State-wide Mega Mock Exercise on Floods, Flash Floods, Landslides, and Glacial Lake Outburst Floods (GLOFs) in Himachal Pradesh was conducted in three stages:

- **Stage 1 – Orientation & Coordination Workshop (07.06.2024):**
  Attended by key officials and stakeholders from the state and district administrations, as well as representatives from NDRF, CWC, Defence Services, and other relevant agencies.
- **Stage 2 – Table-Top Exercise (TTEx) (12.06.2024):**
  Involved scenario-based planning and coordination drills to test preparedness and response strategies.
- **Stage 3 – Physical Mock Exercise (14.06.2024):**
  Implemented across districts with physical participation of Incident Response Teams (IRTs) as per their assigned roles under the Incident Response System (IRS).

As part of the exercise, **Himachal Pradesh State Disaster Management Authority (HPSDMA)** distributed IEC (Information, Education, and Communication) materials on landslides, floods, and GLOFs. The IEC material on GLOFs was formally launched by the **Hon'ble Revenue Minister, Government of Himachal Pradesh**, demonstrating the state's commitment to disaster risk reduction and public preparedness.

Debriefing Session Overview

The debriefing session conducted by Director-cum- Ex Offcio Special Secretary Sh. D.C. Rana (I.A.S) after the mock drill revealed several important gaps and areas for improvement in the disaster preparedness and response efforts. Here are the key points discussed during the session:

Observer Feedback

- **District-Level Disaster Management Plans**: Emphasize the importance of localized strategies by ensuring each district prepares and regularly updates its disaster management plan to address specific regional challenges effectively.
- **Resource Inventory**: Continue efforts to create and maintain a comprehensive resource inventory at the district level. This inventory is crucial for efficient resource allocation and timely response during disaster situations.
- **Inundation Maps**: Utilize the inundation maps prepared by the DM-cell through HRVA for different water levels in all river basins. These maps are invaluable for assessing potential damage and planning appropriate response efforts.
- **Dam Authority Involvement**: Leverage the significant role of the Dam Authority in planning and conducting disaster preparedness exercises. Their facilities and expertise should continue to be extensively utilized for training and simulation exercises.

- **Community Participation**: Maintain and expand the involvement of vulnerable community members in disaster preparedness exercises. This participation enhances the realism of response activities and raises awareness among the broader population.
- **Learning from Shortcomings**: Document and address shortcomings observed during the Table Top Exercises (TTEx) and other mock exercises. Continuous improvement based on these insights is vital for enhancing disaster preparedness.
- **Synergy and Coordination**: Foster better synergy and coordination among various agencies involved in disaster response by incorporating valuable suggestions and inputs from all stakeholders during the exercises.
- **Media Coverage**: Encourage extensive media coverage of disaster preparedness exercises. This serves as an effective tool for public education and awareness, which are essential components of disaster preparedness and response.
- **Incorporation of IRS**: Need to integrate IRS concepts into these plans to ensure a structured and efficient response during disasters.
- **Updated Resource Inventory in respective DDMPs**: There was recognition of the importance of including an inventory of all available resources in the respective DDMPs. A comprehensive resource inventory is crucial for efficient resource allocation during disaster response.
- **Pre-designated Responsibilities**: The need for pre-designated responsibilities for officers and departments was emphasized. Clearly defined roles and responsibilities ensure an organized and prompt response during a disaster, avoiding confusion and delays.
- **Livestock Evacuation and Sheltering**: It was observed that there was no plan in place for the evacuation and sheltering of livestock during the mock drill. This is an essential aspect of disaster preparedness, especially in agricultural regions.
- **Participation of Volunteers and NGOs**: The debriefing session highlighted that the participation of volunteers and non-governmental organizations (NGOs) was negligent during the exercise. Involving these stakeholders is crucial, as they often play a significant role as first responders and in providing assistance.
- **Communication Skills**: It was noted that functionaries appointed for disaster response were not well-skilled in communicating through wireless radio sets. Effective communication is vital during disaster situations, and training should be provided to improve these skills.

Key Challenges Faced

Disaster response demands a “Whole of the Govt. Approach”, hence participation of the entire Govt. machinery is must in such exercises which have direct bearing on performance of the Govt. in actual situations.

1. There is no participation of AD & HODs, Incident Response Team Members. This was also noticed in many districts where neither DC nor his/her ADC/ADM participated in all the activities of the exercise. (All Departments and Districts).

2. Different officers participated on different dates so they were not aware of what was their role and what was expected from them. This affected the effectiveness and outcome of the mock exercise. (All Departments and Districts).
3. The 'Sachet App' could not be utilized to disseminate messages due to limitations. This needs to be resolved with NDMA. Access control of the App can be given till district level. (Action by DMC)

What Needs Improvement

1. The Police Wireless network operates through repeater at Jakhu. This results in information loss. There is no direct communication with districts. There is need to have direct communication link with all districts from the State EOC/Shimla enabling direct and single broadcast from State HQ. Besides, in view of the importance of communication in disaster there is need to have a dedicated channel for disasters. (Action by Police Department)
2. The IDRN database of Chamba, Hamirpur, Kinnaur, Mandi, Shimla, and Una is very low. Shimla district has made lowest data entry. There are a lot of resources with PSUs and private sector. The DDMAs need to make data entry in mission mode and keep it updated on monthly basis. (Action by All DDMAs). Summary of the data uploaded in the IDRN is as under:

Database Updation District Wise Report of Himachal Pradesh State (15-Jan-2013 To 15-Jun-2024)

District	NO OF RECORDS UPDATED
Bilaspur	6195
Chamba	841
Hamirpur	401
Kangra	1500
Kinnaur	732
Kullu	2048
Lahul Spiti	617
Mandi	1364
Shimla	1012
Sirmaur	5211
Solan	1609
Una	702

3. There was lack of clarity among the departments about their roles and responsibilities. The ESFs prepared at State and district level need to be disseminated frequently with them. (Action by DMC and all DDMAs)
4. Lack of coordination and participation of Health and Medical Education Departments was visible at all level. DDMAs need to take Medical Colleges, Regional and local hospitals along when preparing for the exercise. (Action by Health & FW Department and all DDMAs)

Suggestions

- Successful Coordination: Ensure effective coordination among various agencies and stakeholders to streamline disaster response efforts and improve resource allocation during crises.
- Frequent Mock Drills: Conduct regular mock drills with diverse scenarios such as landslides and flash floods to enhance preparedness and response capabilities among emergency responders.
- Strengthening Medical Facilities: Invest in upgrading district-level medical facilities to ensure they are well-equipped to provide prompt and effective post-disaster medical care
- Community-Level IEC Activities: Enhance Information, Education, and Communication (IEC) activities conducted by DDMA to improve disaster awareness and preparedness among community members.
- Communication Methods: Promote the use of alternative communication devices like VHF sets and Sat Phones to ensure reliable communication during emergencies, especially in areas with disrupted conventional communication.
- Use of Drones: Integrate drone technology for surveillance and assessment in disaster affected areas to facilitate rapid response planning and resource allocation.
- Learning from Shortcomings: Encourage stakeholder departments to thoroughly analyze and learn from mock exercise shortcomings to refine response strategies and operational procedures.
- Communication Training: Provide comprehensive training on alternate communication devices (e.g., VHF, HAM Radio) to DEOC members, IRTs, and key officers to enhance communication resilience during crises.
- Community Education: Conduct mass awareness campaigns on disaster mitigation and response strategies to empower communities and foster proactive participation in disaster preparedness efforts.
- Involvement of NGOs and Local Volunteers: Actively involve trained NGOs and local volunteers in disaster response efforts to bolster first response capabilities and community resilience.

Recommendations

- Purpose of Mock Exercise: Ensure mock exercises thoroughly test and refine SOPs, equipment readiness, training effectiveness, communication protocols, infrastructure adequacy, and technological preparedness.
- Attitude: Foster a positive and proactive attitude among all participants, ensuring key IRT members and essential functionaries actively engage and participate in mock exercises.
- Preparedness: Enhance preparedness through comprehensive scenario visualization, vulnerability mapping, installation of warning systems, identification of safe zones, evacuation planning, and resource pre-positioning.
- Evacuation Planning: Improve evacuation plans by mapping routes, identifying suitable camp locations with adequate capacities, and conducting regular drills to familiarize responders and communities.

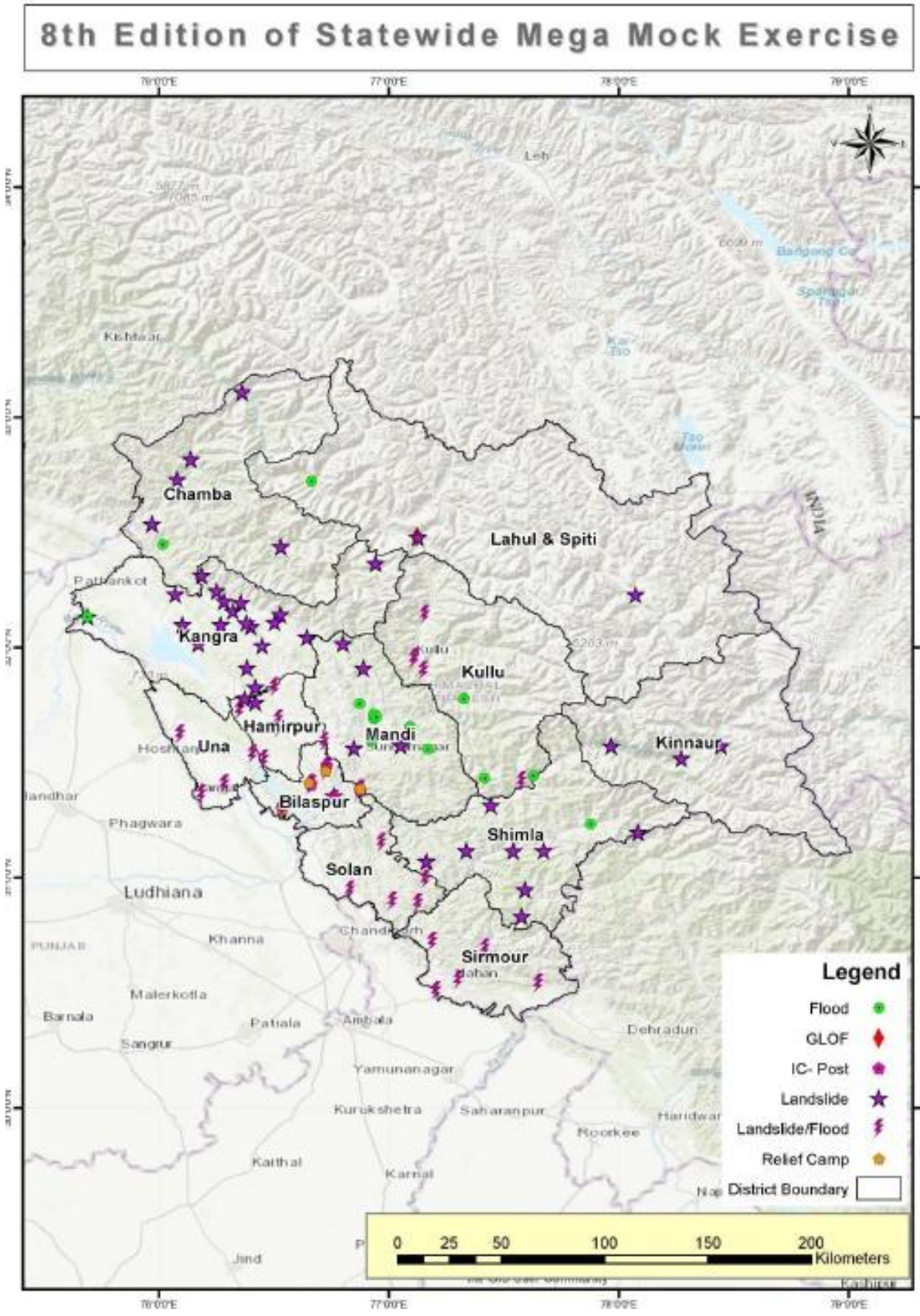
- Communication: Establish a unified communication frequency to maintain effective coordination and communication continuity during emergencies, particularly in areas prone to mobile network disruptions.
- Incident Response System: Strengthen the Incident Response System (IRS) by addressing operational weaknesses and collaborating with national disaster management authorities for support and guidance.
- Volunteer Response: Ensure effective coordination and utilization of volunteers (e.g., NCC, NYK, NGOs, Aapda Mitra, Home Guards) to supplement professional response capabilities during disasters.
- Common Alert Protocol (CAP): Implement and standardize CAP for streamlined responses across all disaster scenarios, utilizing technology and tools effectively for timely alerts and updates.
- Coordination of Uniform Forces: Enhance coordination among uniformed forces, designated first responders, and multi-agency responders to optimize resource utilization and response efforts.
- Strengthen SDRF: Equip and train the State Disaster Response Force (SDRF) with updated skills and equipment to proficiently handle diverse disaster situations.
- Relief and Response Camps: Properly equip and manage relief and response camps with mapped resources, essential equipment, and tools to support affected populations effectively during emergencies.
- Hospital Disaster Management Plans: Update and involve medical professionals in hospital disaster management plans, including participation in training exercises to enhance emergency response capabilities.
- Relief Camp Arrangements: Ensure relief camps are adequately stocked with clothing, medical supplies, and toiletries to provide essential support to affected populations in a dignified manner.
- Victim Record Keeping: Implement efficient systems for recording victim information using technology like laptops or iPads to facilitate smooth relief operations and maintain accurate records.
- GLOF Threat Management: Mitigate GLOF threats through early warning systems, community awareness programs, and regular mock exercises in vulnerable areas to minimize potential impact.
- Industrial Disasters: Implement and ensure effectiveness of the Mutual Aid Scheme for industrial disasters, providing comprehensive training for medical responders and utilizing NDRF capabilities through regular mock drills.
- Continuous Improvement: Address identified gaps and shortcomings through regular evaluation and improvement of disaster response strategies and capabilities for more effective real-life responses.

Actionable Points from the Mock Exercise

1. The field officers and members of IRT need to keep themselves updated about the IRS system and Dos and Don'ts of the Mock Exercises. (All Departments and Districts).
2. The entire DDMA should participate in all phases of the mock exercise. (Action by all DDMAs)
3. There is need to also conduct surprise exercises, at least one in each district which may be triggered by the DMC or DDMAs. (Action by DMC and all DDMAs)

4. Members of the IAG at the State and district level should participate in the exercise throughout. (Action by DMC and all DDMAs).
5. Participation of NCC and NSS may also be ensured in these exercises. (Action by DMC and all DDMAs)
6. Response agencies like Fire Services and Health Department need training and equipping for dealing with industrial disasters. (Fire Services & Health & FW Department)
7. There is need to create green corridors for the movement of emergency vehicles in case of emergencies and this should also be practiced during the mock exercise. (Action by District Administration)
8. We may conduct training on IRS and ESFs before the actual conduct of mock drill. (Action by DMC and all DDMAs)
9. During the exercise use of drones was envisaged by DMC but SEOC received no drone footage from any of the sites. This may be made mandatory for all district in future. (Action by all DDMAs)
10. Sites for prophylactic evacuation should be identified in advance and dialogue with the residents may be established and detailed planning carried out before the actual event. (Action by all DDMAs)

A detailed report of the mock exercise is available at: https://hpsdma.nic.in/


8th Edition of Statewide Mega Mock Exercise
Chamba
Lahul & Spiti
Kangra
Kullu
Hamirpur
Mandi
Una
Kinnaur
Bilaspur
Shimla
Solan
Sirmour
Legend
Flood
GLOF
IC- Post
Landslide
Landslide/Flood
Relief Camp
District Boundary
0 25 50 100 150 200
Kilometers

ग्लोफ़ (हिमनद झील के टूटने से बाढ़)

क्या करें

- ग्लेशियर झील के फटने से अचानक नदी व नालों का जलस्तर कई गुना बढ़ जाता है इस बढ़े हुए जल-स्तर से घरों, सड़कों, पुलों इत्यादि को नुक्सान हो सकता है ।
- अपने आस पास के नदी नालों में पानी के बढ़ते स्तर व आवाज के प्रति सतर्क रहें तथा यदि कोई चेतावनी मिलती है तो सुरक्षित स्थान पर चले जाएँ ।
- अपने पड़ोस के लोगों को तुरंत सूचित करें।
- स्थानीय प्रशासन द्वारा जारी की गयी प्रारंभिक चेतावनियों को सुने।
- चूँकि भूकंप, भूस्खलन आदि द्वारा GLOF (ग्लेशियर लेक आउटबर्स्ट फ्लड) उत्पन्न हो सकता है, इसलिए ऐसी घटनाओं के समय विशेष रूप से सतर्क रहें।
- आपातकालीन किट तैयार रखें – पीने का पानी, खाद्य पदार्थ, प्राथमिक चिकित्सा सामग्री टीचें, रेडियो और अतिरिक्त बैटरियों का एक किट तैयार रखें ।
- बिजली उपकरण बंद करें – अपने घर के मुख्य बिजली स्विच और गैस आपूर्ति को बंद करें ।
- पानी पीने से पहले उबालें – पानी के शुद्ध होने पर संदेह हो तो उससे उबाल कर पिएं।
- सुरक्षित स्थान पर रहें – सरकारी निर्देशों का पालन करें और जब तक यह सुरक्षित न हो घर वापस न जाएँ ।
- कमजोर संरचनाओं से दूर रहें – बिजली के खम्भों, तारों और पेड़ों से दूर रहें ।
- पानी का उपयोग ध्यान से करें – स्वच्छ पानी का संचय करें और उसका बुद्धिमानी से उपयोग करें।

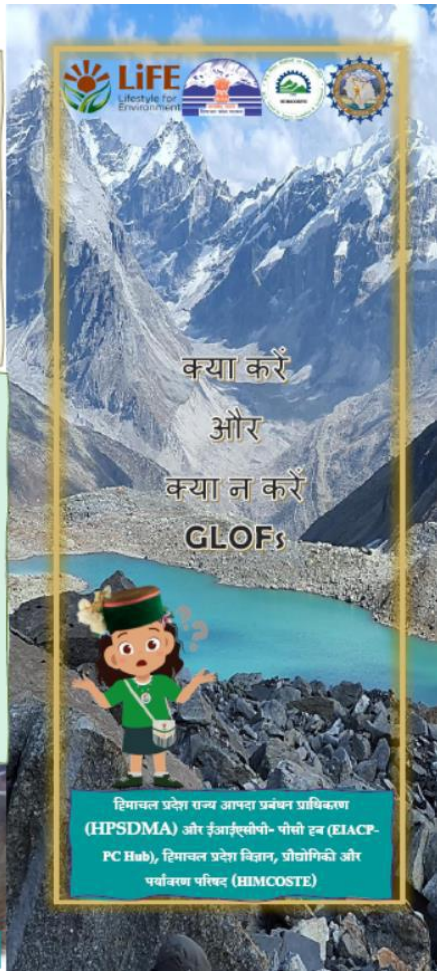
क्या ना करें

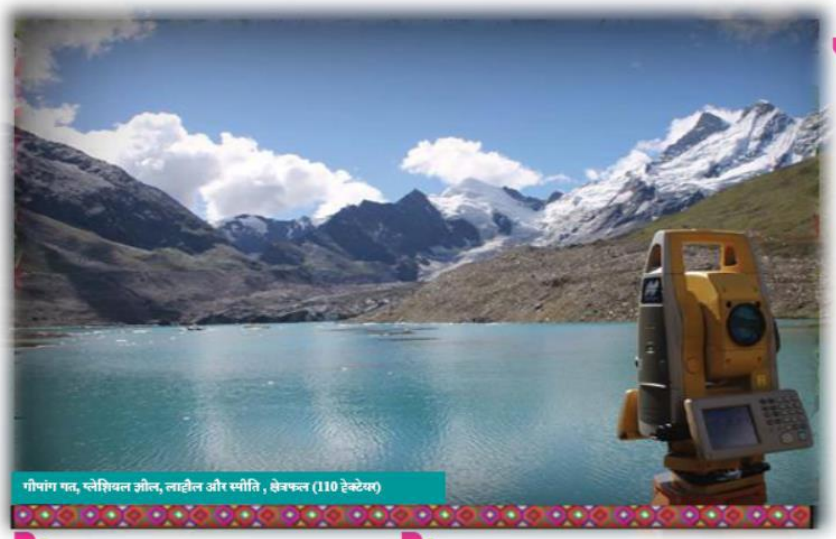
- बहते पानी में न चलें – धाराएँ भ्रामक हो सकती है और उथले, तेज बहते पानी से आप गिर सकते हैं ।
- तेज बहते पानी में न तैरें - आप बह सकते हैं या पानी में किसी वस्तु से टकरा सकते हैं ।
- बाढ़ग्रस्त क्षेत्र से न गाडी चलाएं – आपको अचानक से होने वाले गड्ढे दिखाई नहीं देंगे और आधा मीटर बाढ़ का पानी भी कार को बहा सकता है । बाढ़ के पानी में गाडी चलाने से आसपास की सम्पति को भी अतिरिक्त नुक्सान हो सकता है ।
- ऐसा कोई भी खाना न खाएं जो बाढ़ के पानी के संपर्क में आया हो।
- अफवाहों पर विश्वास न करें – केवल विश्वसनीय और आधिकारिक स्रोतों से मिली जानकारी पर विश्वास करें।

बाढ़ की तैयारी के लिए किट

- नकद
- पीने का पानी
- सात दिनों तक चलने वाला गैर-विनाशकारी खाद्य पदार्थ।
- प्राथमिक चिकित्सा किट
  - ✓ आवश्यक दवाइयाँ
  - ✓ चोटों के लिए मलहम
  - ✓ कैंची
  - ✓ मेडिकल चिपकने वाला टेप
  - ✓ पट्टी
  - ✓ ओआरएस
- टॉर्च, कपड़े और बैटरी
- टॉयलेटरीज-स्वच्छता संबंधी सामान
- महत्वपूर्ण दस्तावेज़
- बुजुर्गों और शिशुओं के लिए भोजन, डायपर, दवाइयाँ आदि।


समुदी टापू, ग्लेशियल झील – खेक्फल (165 हेक्टेजर), लाहौल और स्पीति





गोपांग गत, ग्लेशियल झील, लाहौल और स्पीति , क्षेत्रफल (110 हेक्टेयर)

हिमाचल हिमालय में रावी, चिनाब, सतलुज और ब्यास हिमपोषित बेसिन हैं। जैसे-जैसे तापमान बढ़ रहा है, इन बेसिनों के ग्लेशियर पीछे हट रहे हैं और इस प्रक्रिया में ग्लेशियरों के सामने बड़ी संख्या में ग्लेशियर झीलों का निर्माण हो रहा है। हिमाचल प्रदेश में 2019 के डेटाबेस के अनुसार कुल 1,117 झीलों की पहचान की गई है।

सतलुज बेसिन की झीलों की संख्या	चिनाब बेसिन की झीलों की संख्या	ब्यास बेसिन की झीलों की संख्या	रावी बेसिन की झीलों की संख्या	कुल ग्लोफ
562	424	93	38	1117

हिमाचल प्रदेश में GLOFs की संख्या

ग्लेशियर और हिमनद झीलें

- ग्लेशियर बर्फ का एक ऐसा ढेर है जो सघन बर्फ से बना होता है और जो अपने वजन के कारण जमीन पर बहता है। जब ग्लेशियर पिघलते हैं, तो पानी जमा हो जाता है और झीलें बन जाती हैं जिन्हें ग्लेशियल झीलें कहते हैं। इन झीलों का निर्माण ग्लेशियरों के सामने के हिस्सों में अवरोध के कारण हो रहा है और इनमें पानी की बड़ी मात्रा है।
- ग्लेशियल लेक आउटबर्स्ट फ्लड (GLOF) वह बाढ़ है जो तब होती है जब ग्लेशियल झील का मोरेन बांध टूट जाता है और पानी की भारी मात्रा विस्थापित हो जाती है। इससे जान-माल का गंभीर नुकसान हो सकता है।

ग्लेशियल लेक आउटबर्स्ट फ्लड (GLOF) तब होता है जब ग्लेशियर या मोरेन द्वारा बांधा गया पानी अचानक छूट जाता है। यह कई कारकों के कारण हो सकता है जैसे :

- कटाव: निरंतर पानी का प्रवाह समय के साथ प्राकृतिक बांध को नष्ट कर सकता है।
- पानी का दबाव: पानी के दबाव के निर्माण से बांध विफल हो सकता है।
- हिमस्खलन या चट्टानें गिरना: ये पानी को विस्थापित कर सकते हैं और बांध के ऊपर से पानी भर सकता है।
- भूकंप: भूकंपीय गतिविधि बांध को कमजोर या तोड़ सकती है।
- ग्लेशियर का पतन: यदि ग्लेशियर का एक बड़ा पर्याप्त हिस्सा टूट जाता है और बड़े पैमाने पर अपने आधार पर एक हिमनद झील में पानी को विस्थापित करता है।

	Mock Exercise (14-06-2024)							
	No. of Simulation Sites	No. of Observers	No. Institution Evacuation Drills	No. Office Evacuation Drills	No. of NGOs Participation	No. of Volunteers Utilised	No. of Aapda Mitra Utilised	IEC Material Distributed on Floods/Flash Floods/GLOFs/
State								
Bilaspur	6	7	4	5	3	62	N/A	160
Chamba	11	11	2	17	6	220	17	250
Hamirpur	6	6	258	15	5	35	12	60
Kangra	29	7	1500	22	4	160	56	750
Kinnaur	3	5	0	0	0	0	0	220
Kullu	5	7	4		4	35	20	600
Lahaul Spiti	5	5	4	0	0	32	8	60
Mandi	12	13	700	0	3	147	17	300
Shimla	10	11	1	0	0	12	0	250
Sirmaur	5	6	232	7	5	180	N/A	350
Solan	6	5	900	0	0	0	9	200
Una	5	6	5	3	2	24	44	500
Total	**103**	**89**	**3610**	**69**	**32**	**907**	**183**	**3700**

9. Celebration of Mass Awareness Campaign for International Day for Disaster Risk Reduction (IDDRR) - SAMARTH 2024

The Himachal Pradesh State Disaster Management Authority (HPSDMA) celebrated the International Day for Disaster Risk Reduction (IDDRR) on 13th October 2024 through its annual mass awareness campaign **SAMARTH-2024**, under the global theme "**Empowering the Next Generation for a Resilient Future**." The campaign aimed to foster disaster resilience among youth and local communities by promoting preparedness, safe construction, and disaster risk governance. A wide range of activities were held at the state, district, and community levels, with extensive use of Information, Education, and Communication (IEC) tools through multimedia platforms. Traditional media, such as *nukkad nataks* and kala jatha, were also used to spread messages on disaster preparedness.

A significant highlight was the orientation workshop held on 13th September 2024 at the HP Secretariat, Shimla, targeting engineers from Town & Country Planning and Urban Development Departments, with expert sessions by CBRI Roorkee. Community awareness programs were facilitated by SIAG and DIAG units, while on **2nd October**, over **300 engineers and 1,500 technical assistants** mobilized awareness activities in Panchayats statewide during Gram Sabha meetings.

The state-level function held on **14th October 2024 at The Ridge and Gaiety Theatre, Shimla**, was graced by the Hon'ble Chief Minister and featured the inauguration of a **three-day exhibition (13–15**

October). Live demonstrations on firefighting, CPR, and earthquake-resistant construction techniques were conducted. Key launches included **Kavach-1 and Kavach-2 guidebooks**, a **WebGIS portal for SDMF monitoring**, and the **Resilient Model Village in Bawasani**. A **MoU with CBRI Roorkee** was also signed for setting up Technology Demonstration Units. The Chief Minister emphasized leveraging modern technology and community participation for effective disaster management. SAMARTH-2024 successfully enhanced disaster awareness and reinforced HPSDMA's commitment to building a resilient Himachal Pradesh.

Chief Minister's Address: Hon'ble CM emphasized community engagement and the use of modern technology for effective disaster management.SAMARTH-2024 effectively raised awareness on disaster risk reduction across Himachal Pradesh. Through multi-level coordination and community involvement, HPSDMA reinforced its vision of building a safer, disaster-resilient state.

Objectives

- Promote safe construction practices and disaster risk governance.
- Foster community-level disaster preparedness.
- Involve youth and local communities in disaster risk reduction.
- Leverage technology for effective disaster response and communication.

Key Activities during SAMARTH-2024

- **IEC Campaign through Multi-Media**

- **News Flashes, Documentaries, and Videos:** Produced and disseminated content emphasizing disaster risk governance and the Sendai Framework.
- **Social Media Engagement:** Active use of Twitter, Facebook, and YouTube to amplify campaign messages.
- **Radio and TV Jingles:** Focused on topics such as landslides, flash floods, and safe construction practices.
- **Traditional Folk Media:** Street plays (*Nukkad Natak*), visual vans, and *Kala Jatha* performances were conducted statewide.

Preparatory Meeting of SAMARTH – 2024 with Line Departments

- **Workshops by TCP & UD Departments**

- Conducted workshops targeting urban planners, engineers, architects, and masons.

As part of the comprehensive statewide campaign SAMARTH-2024, commemorating the International Day for Disaster Risk Reduction (IDDRR), a half-day orientation and preparatory workshop was organized on September 13th, 2024, for engineers from the Town & Country Planning and Urban Development Departments. Held in hybrid mode at the HP Secretariat, Shimla, the workshop aimed to raise awareness on disaster-resilient construction practices and equip participants to promote safe urban planning. Eminent experts, including Er. Ajay Chourasia and Er. S.K. Negi from CBRI Roorkee, delivered insightful lectures on disaster-resistant design principles and technical guidelines. The interactive sessions provided a platform for discussing challenges in implementing safe construction practices at the Urban

Local Body (ULB) level. This workshop set the stage for the month-long SAMARTH-2024 campaign, emphasizing the critical role of engineers in fostering disaster-resilient communities across Himachal Pradesh.

- **Community-Level Awareness Programs**

- SIAG and DIAG facilitated community-focused DRR activities.

- **Gram Panchayat-Level Activities**

To deliver disaster awareness programs during Gram Sabha meetings, the Rural Development Department (RDD) mobilized its extensive workforce, comprising over 300 engineers and 1,500 technical assistants. This initiative, conducted on October 2nd, 2024, spanned all Panchayats in Himachal Pradesh. RDD also engaged *Aapda Mitras* and collaborated closely with District Disaster Management Authorities (DDMAs) and technical personnel to ensure comprehensive outreach. To ensure a unified and focused approach, the Himachal Pradesh State Disaster Management Authority (HPSDMA) provided a detailed

agenda, facilitating the dissemination of crucial information on disaster resilience and management practices. This coordinated effort successfully empowered local communities and promoted a culture of disaster preparedness and safety at the grassroots level.

समर्थ, 2024
Suggestive Agenda of the Gram Sabha Meeting
ग्राम सभा की बैठक का सुझावात्मक एजेंडा
ग्राम सभा के लिए आपदा प्रबंधन विषय पर मुद्दा (Agenda)

भूमिका:-

वर्तमान में आपदा प्रबंधन सतत विकास की प्राथमिकता बन चुका है। ऐसे में स्थानीय स्तर पर आपदा हेतु पूर्व तैयारी व आपदाओं के जोखिमों को कम करने की जिम्मेदारी मुख्य रूप से पंचायती राज संस्थाओं, समुदाय आधारित संगठनों व ग्रामीण समुदाय की है। इसके लिए आवश्यक है कि पंचायत स्तर पर आपदा प्रबंधन के मुद्दे पर समझ विकसित करने व क्षमता वृदि पर ध्यान दिया जाए व पंचायती राज संस्थाओं के प्रतिनिधि आपदा प्रबंधन पर स्थानीय प्राधिकारी के रूप में अपने दायित्वों को समझें व इस महत्वपूर्ण विषय पर जन जागरूकता पर ध्यान केन्द्रित करें। आपदा प्रबंधन के विषय पर सभी प्रधानों व उप-प्रधानों के प्रशिक्षण की भी बहुत आवश्यकता है। आपदा प्रबंधन पर राज्य कार्यकारी समिति (एस०ई०सी०) ने निर्णय लिया है कि ग्राम पंचायत स्तर तक लोगों का आपदा प्रबंधन के प्रति जागरूक किया जाए।

आपदा प्रबंधन अधिनियम 2005 के अध्याय 6 की धारा 41 के अंतर्गत पंचायत प्रतिनिधियों के कर्तव्यों का वर्णन किया गया है-

अध्याय 6
स्थानीय प्राधिकारी (Local Authority)

"(1) स्थानीय प्राधिकारी (Local Authority) जिला प्राधिकरण (District Disaster Management Authority) के निर्देशों के अधीन रहते हुए-

(क) यह सुनिश्चित करेगा कि उसके अधिकारी और कर्मचारी आपदा प्रबंधन के लिए प्रशिक्षित हैं;

(ख) यह सुनिश्चित करेगा कि आपदा प्रबंधन से संबंधित संसाधनों का इस प्रकार अनुरक्षण किया जा रहा है जिससे वे किसी आपदा की आशंका की स्थिति या आपदा की दशा में सदैव उपयोग के लिए उपलब्ध रहेंगे;

(ग) यह सुनिश्चित करेगा कि उसके अधीन या उसकी अधिकारिता के भीतर सभी सन्निर्माण परियोजनाए राष्ट्रीय प्राधिकरण, राज्य प्राधिकरण और जिला प्राधिकरण द्वारा आपदाओं के निवारण और शमन के लिए अधिकथित मानकों और विनिर्देशों के अनुरूप है;

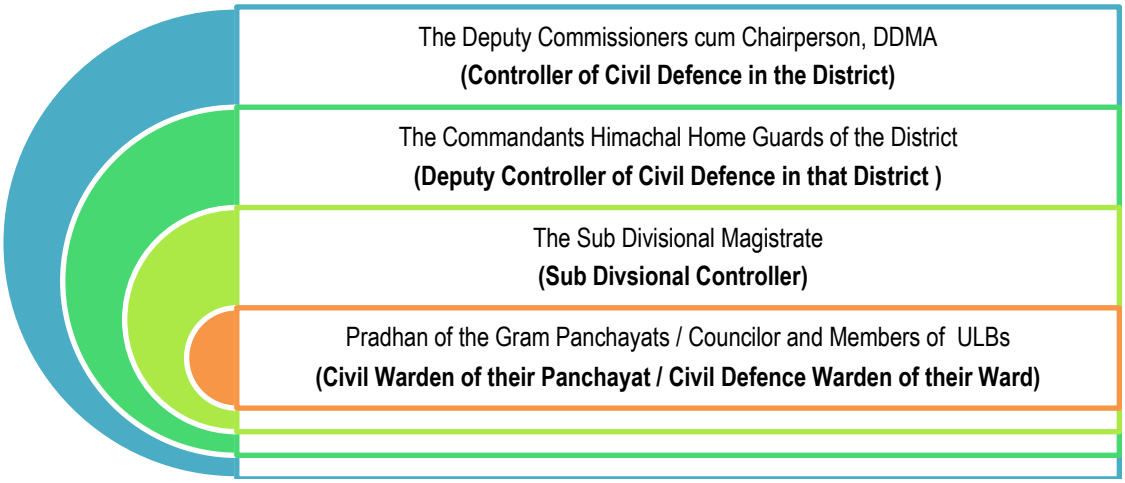
(घ) प्रभावित क्षेत्र में राज्य योजना और जिला योजना के अनुसार राहत, पुनर्वास और पुनर्निर्माण के क्रियाकलाप करेगा।

(2) स्थानीय प्राधिकारी (Local Authority) ऐसे अन्य उपाय कर सकेगा जिन्हें वह आपदा प्रबंधनके लिए आवश्यक समझे।"

सभी स्थानीय प्राधिकारी व पंचायत प्रधानों से अनुरोध है कि वे आगामी अक्तूबर / नवम्बर माह 2024 को होने वाली ग्राम सभाओं में आपदा प्रबंधन विषय पर एक मुद्दा भी शामिल करें। ग्राम सभा के लिए आपदा प्रबंधन विषय पर चर्चा हेतु मुद्दे निम्न प्रकार से है:-

- ग्राम सभा क्षेत्र में होने वाली आपदाओं तथा उनके प्रभाव को कम करने के लिए आवश्यक उपायों तथा कार्य योजना बनाने पर चर्चा।
- आपदा प्रबंधन अधिनियम 2005 कि धारा 41 में पंचायत को दी गई जिम्मेदारियों के बारे में चर्चा।
- पंचायती राज संस्थान (PRI) के सदस्यों ने आपदा प्रबंधन के सभी चरणों (आपदा से पूर्व,आपदा के दौरान और आपदा के बाद) आपदा के बाद प्रतिक्रिया चरण से आपदा केजोखिम को कम करने के लिए शमन और तैयारियों के चरणों तक महत्वपूर्ण भूमिका परबहस।
- सिविल डिफेंस एक्ट 1968 को सिविल डिफेंस (संशोधन) अधिनियम, 2009 द्वारा 2010 की अधिसूचना संख्या 3 द्वारा उपयुक्त रूप से संशोधित किया गया है, जिसमें आपदा प्रबंधन को नागरिक सुरक्षा कॉर्पस **(Civil Defense Corps)**के लिए एक अतिरिक्त भूमिका के रूप में शामिल किया गया है जिसमें सभी पंचायत प्रधानों को **Civil Defense Warden**का दर्जा दिया गया है।
- हिमाचल प्रदेश मे सिवल डिफेन्स की संरचना इस प्रकार है:
  - उपायुक्त एवं अध्यक्ष, डीडीएमए (DDMA) को जिलों में नागरिक सुरक्षा नियंत्रक के रूप में नियुक्त किया गया है।
  - जिलों के कमांडेंट हिमाचल होम गार्ड को उस जिले में नागरिक सुरक्षा के उप
  - नियंत्रक के रूप में सशक्त किया गया है।
  - उप मंडल मजिस्ट्रेट को उप मण्डल में नागरिक सुरक्षा कॉर्पस के सदस्य के
  - नामांकन की शक्ति का उपयोग करने के लिए उप-नियंत्रक के रूप में नियुक्त
  - किया गया है।
  - ग्राम पंचायत के संबंधित प्रधान को उनकी पंचायत का नागरिक सुरक्षा वार्डन
  - नियुक्त किया गया है।

    अतः प्रधान ग्राम पंचायत अपनी इस जिम्मेवारी को निभाने के लिए जागरूक हो ।
- हिमाचल प्रदेश राज्य आपदा प्रबंधन प्राधिकरण (HPSDMA) ने राज्य में बेहतर आपदा तैयारी और प्रतिक्रिया के लिए 10-15 युवा स्वयंसेवकों के कार्य बल के सृजन पर एकयोजना शुरू की है। इस के लिए सिविल डिफेंस जैसी एक संरचना की आवश्यकता है।
- प्रस्तावित सिविल डिफेन्स संरचना उन स्वयंसेवकों को सक्षम कर सकेगी जिन्हें राज्य मेंआपदा प्रबंधन के लिए प्रशिक्षित किया जाएगा।
- हालांकि, सिविल डिफेंस वालंटियर्स के प्रस्तावित ढांचे को मजबूत करने से राज्य की आपदा प्रबंधन क्षमता में जमीनी स्तर पर भी काफी वृद्धि होगी।
- ग्राम पंचायत स्तर पर प्रशिक्षित युवा स्वयंसेवक पंचायत प्रधान के अधीन कार्य करेंगे ताकि पंचायत स्तर पर आपदा प्रबंधन को मजबूत किया जा सके। पंचायत अपने क्षेत्र में 18-35वर्ष के युवाओं की प्रशिक्षण हेतु सूची तैयार करें।
- Civil Defenseका notified स्वरूप निम्न प्रकार से है:



- पंचायत आपदा प्रबंधन हेतु संलग्न संदेश को पढ़कर सुनाएँ।

अधिक जानकारी के लिए जिला आपदा प्रबंधन प्राधिकरण से संपर्क करेंया Toll freeनम्बर1077व 1070 पर संपर्क करें ।

अंतर्राष्ट्रीय आपदा जोखिम न्यूनीकरण (IDDR) दिवस

" समर्थे –2024"

आपदा प्रबन्धन जागरूकता अभियान

13 अक्टूबर को विश्व भर में "***अंतर्राष्ट्रीय आपदा जोखिम न्यूनीकरण (IDDR) दिवस***" के रूप में मनाया जाता है, ताकि आपदाओं के प्रति लोगों को जागरूक किया जा सके तथा आपदाओं से होने वाले जान व माल के नुकसान को कम किया जा सके। हिमाचल प्रदेश राज्य आपदा प्रबन्धन प्राधिकरण (HPSDMA) वर्ष 2011 से इस दिवस को "समर्थ" के रूप में मना रहा है, जिसमें लोगों को विभिन्न माध्यमों से जागरूक किया जाता है।

"हिमाचल ने यह ठाना है, आपदा को हराना है ।
प्रयास न जाए कोई व्यर्थ, बनेगें सक्षम, बनेगें समर्थ ॥"

हम सभी जानते हैं कि हिमाचल प्रदेश आपदाओं की दृष्टि से अति संवदेनशील है। आपदाएं हर व्यक्ति एवं जीवन के हर पहलू को प्रभावित करती हैं। इसीलिए आपदाओं से होने वाले नुकसान को कम करने के लिए हम सभी को प्रयास करने की आवश्यकता है।

ग्राम सभा की बैठक में निम्नलिखित मुद्दों पर मंथन किया जाना चाहिए।

- भूस्खलन शमनगतिविधियों के बारे में।
- सुरक्षित निर्माण प्रथाओं और पारंपरिक निर्माण को बढ़ावा देना।
- भवन निर्माण के लिएअसुरक्षित पहाड़ी की कटाई और उसके प्रभाव।
- सुरक्षित मलबेके निपटान की आवश्यकता।
- बारिश के जल की निकासी प्रणालीकी आवश्यकता।
- प्राकृतिक जल निकासी क्षेत्रों (नले एवं नदियों)में निर्माण को प्रतिबंधित करना।
- जलनिकासचैनलों केविंसकुलन पर ध्यान देना।

आपदाओं के प्रभाव को कम करने के कए कुछ उपाए इस प्रकार से हैं :-

- अपने आस पास के खतरों को पहचानें तथा उनके प्रभाव को कम करने का प्रयास करें ।
- घरों / भवनों का निर्माण इस प्रकार से करें कि वे भूकम्प एवंआपदा रोधी हो।

- पहले से बने घरों / भवनों की मजबूती की जांच करवाएं तथाआवश्यकतानुसार उन्हें सुदृढ़ करें।
- घर में आपातकालीन किट, जिसमें सूखा भोजन, आवश्यक दवाएं, टार्च, रेडियो तथा पीने के पानी इत्यादि को हमेशा तैयार रखें।
- आपातकालीन चिकित्सा प्राथमिक सहायता (Medical Fist Aid) व खोज एवं बचाव का प्रशिक्षण प्राप्त करें, जिसके लिए जिला आपदाप्रबन्धन प्राधिकरण से (1070 Toll Free Number) पर संपर्क करें ।
- आपदाओं की जानकारी प्राप्त करें तथा सुरक्षा के उपाए जानें ।
- पूर्व चेतावनी (Early Warning) के प्रति सजग रहें व समय रहते उचितकदम उठाएं।
- घरों / कार्यालयों में लगे अग्निशमन (Fire Fighting) के यंत्रों को चलानासीखें।
- अफवाहों पर ध्यान न दें व सही जानकारी के लिए Radio / TV पर सूचना प्राप्त करें।
- अपने परिवार की आपातकालीन योजना तैयार करें ।

10. Other Activities under Preparedness and Capacity Building 2024-25

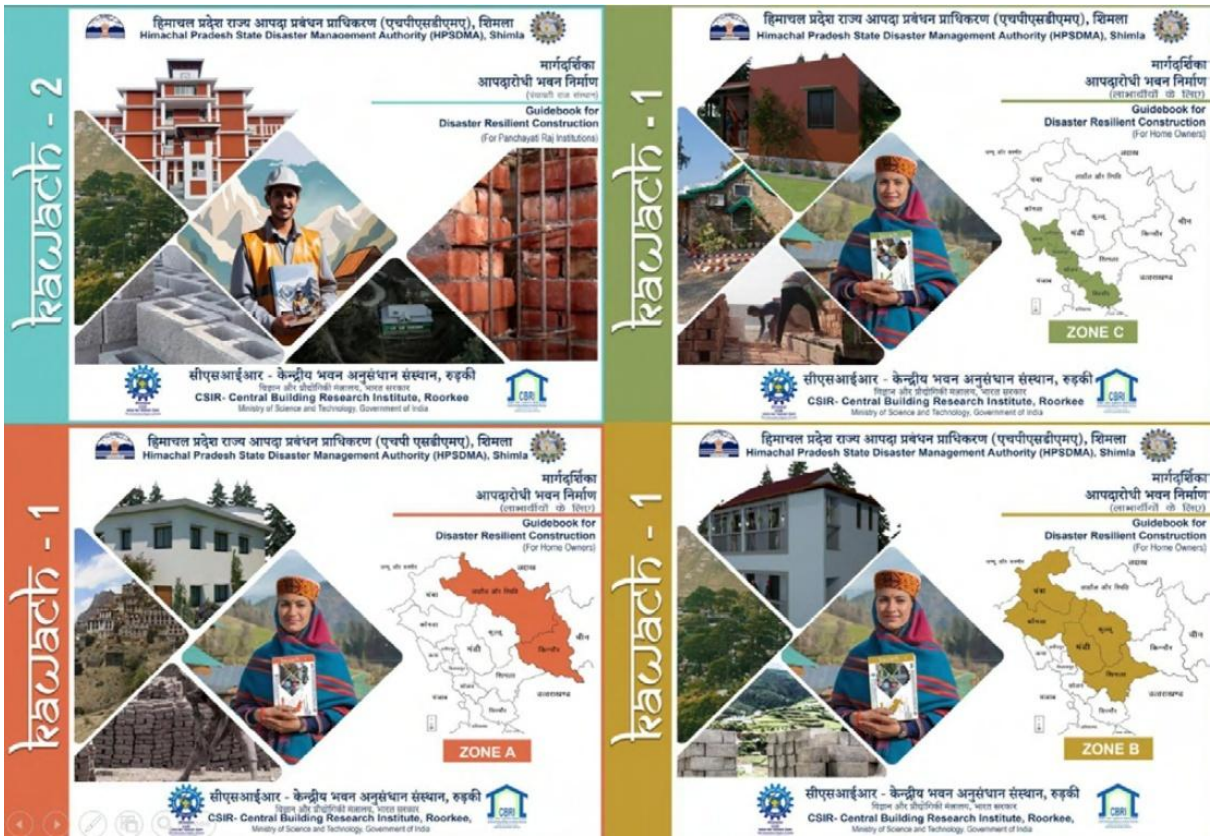
10.1 A five-day **Training of Trainers (ToT)–cum–Orientation Program** on Disaster Management was held from 29th April to 3rd May 2024 at the State Institute of Health & Family Welfare (SIH&FW), Parimahal, Shimla. Centered on the theme "Hospital Safety – Safe Hospitals in Emergencies and Disasters," the program was jointly organized by the Himachal Pradesh State Disaster Management Authority (HPSDMA), SIH&FW, and Bal Raksha Bharat (Save the Children). The primary objective was to strengthen the disaster preparedness and response capacities of healthcare professionals and disaster management nodal officers from the districts of Shimla, Solan, and Bilaspur. Participants were sensitized on various critical areas such as the development and implementation of Hospital Disaster Management Plans (HDMPs), triage systems, emergency logistics, GIS-based disease surveillance, maternal and child health in emergencies, and the integration of Water, Sanitation, and Hygiene (WASH) into disaster response strategies. The training followed a blended learning model comprising classroom lectures, group discussions, case studies, technical demonstrations, and a practical simulation exercise conducted during a field visit to IGMC, Shimla. Subject experts from HPSDMA, IIHMR, and Bal Raksha Bharat facilitated the sessions, offering technical insights and hands-on guidance. The program significantly contributed to reinforcing institutional readiness, promoting risk-informed planning, and enhancing inter-agency coordination between health and disaster management departments. As a result, participants gained deeper insights into healthcare system resilience and proposed actionable measures to improve emergency protocols and hospital safety mechanisms across the state, thereby contributing to a more robust disaster management framework in the health sector.

10.2 A four-day ***Training Programme on Child-Centric Disaster Risk Reduction (CCDRR)*** was organized by Himachal Pradesh State Disaster Management Authority (HPSDMA) from 10th to 13th June 2024 at its headquarters in Shimla. The training aimed to sensitize and build the capacity of officials and practitioners on integrating child-focused approaches in disaster risk reduction planning and response. The program commenced with an inauguration, pre-training evaluation, and introductory sessions led by Dr. Kumar Raka, who covered foundational concepts of Disaster Risk Management (DRM) and India's hazard profile. On the second day, sessions focused on the impact of disasters and climate change on children**,** with expert inputs from Shri Ranjan Kumar and Ms. Dolphi Raman (CRY) on gender-sensitive and disability-inclusive lifecycle approaches. The importance of child protection and rights in emergencies was also emphasized. Day three was dedicated to mental health and psychosocial care for children**,** followed by a field visit to schools and child care institutions. The fourth day featured discussions on home-to-school safety, group presentations, and strategies for reducing vulnerability. The program concluded with a post-

training evaluation, feedback, and a valedictory session. A State-Level Policy Workshop on CCDRR was held on 14th June to consolidate learnings and inform policy-level action.

10.3 The Himachal Pradesh State Disaster Management Authority (HPSDMA) successfully organized a **Q6 System Drone Pilot Training program for five officials from HPSDMA and AGiSAC**. The training focused on enhancing technical expertise in operating the advanced Q6 System Drone, which is equipped with key features such as megaphone-based alert broadcasting, emergency kit deployment, daylight and thermal imaging, and mapping and geotagging capabilities. The program followed a structured curriculum combining both theoretical and hands-on modules. Participants were introduced to Remote Piloted Aircraft (RPA) systems through equipment familiarization, covering drone components, payload specifications, and operational characteristics. This was followed by sessions on unpacking, assembly, and pre-flight checks, along with a demo flight and computer-based training (CBT). The flight operations module included mission planning, waypoint navigation, takeoff, and landing using BFT software. A dedicated session on battery management taught charging protocols and maintenance best practices. Critical aspects of flight safety and system maintenance were also covered, including emergency troubleshooting and logbook documentation. The training concluded with a comprehensive evaluation, including a 100-mark theory test and practical flying assessment. The program significantly strengthened the participants' ability to deploy drone technology for disaster response, surveillance, and risk mapping in the state.

10.4 Disaster-Resilient Construction Guidebooks: In collaboration with the Central Building Research Institute (CBRI), Roorkee, the Himachal Pradesh State Disaster Management Authority (HPSDMA) has taken a significant step toward enhancing disaster resilience in the rural built environment through the development of four specialized guidebooks focused on disaster-resilient construction. These publications, grounded in scientific research and practical field realities, are tailored to promote safer construction practices and reduce the risk posed by natural hazards such as earthquakes, which frequently affect the Himalayan region. The guidebooks aim to provide actionable, easy-to-understand guidance for both technical and non-technical stakeholders. One of the key guidebooks, Kavach–1, is designed especially for rural homeowners who often rely on informal construction methods. Recognizing the varied geological and seismic conditions of Himachal Pradesh, the guidebook categorizes construction guidelines into three seismic zones: Zone A (covering Lahaul & Spiti and Kinnaur), Zone B (including Chamba, Kangra, Mandi, Kullu, and Shimla), and Zone C (comprising Una, Hamirpur, Bilaspur, Solan, and Sirmaur). This zoning ensures that construction techniques are contextually appropriate and can be effectively implemented at the grassroots level. Kavach–1 demystifies the basics of disaster-resilient construction and empowers rural communities by illustrating proper site selection, layout planning, use of local materials, and safe construction sequences through simple graphics and instructions in local languages. The second publication, Kavach–2, caters to engineers and technical staff of the Rural Development and Panchayati Raj Departments who are often responsible for overseeing and advising on rural infrastructure development. This guidebook provides detailed technical recommendations, including structural reinforcement details, foundation design considerations, wall junction strengthening, roof anchoring methods, and retrofitting techniques for vulnerable structures. By focusing on engineering solutions that are practical, affordable, and locally viable, Kavach–2 seeks to instill a culture of safety among construction professionals working in rural and semi-urban settings. Together, these guidebooks aim to bridge the long-standing knowledge gap in disaster-safe construction in rural areas, where many homes are built without formal design or engineering input. The HPSDMA's initiative also aligns with the larger framework of community-based disaster risk reduction (CBDRR), recognizing that the resilience of a community begins with the safety of its homes. These resources serve not only as educational tools but also as advocacy instruments to raise awareness about the importance of safe construction among masons, local leaders, and the general public. By fostering informed decision-making at the village and block levels, the Kavach guidebooks contribute meaningfully to reducing structural vulnerabilities and ensuring long-term safety. The planned launch of these books during the Samarth-2024 campaign further underscores the state's commitment to institutionalizing disaster risk reduction practices in everyday life, particularly among rural populations who are often the most vulnerable. With these efforts, Himachal Pradesh is setting a pioneering example in mainstreaming disaster resilience into rural development and strengthening the preparedness of communities against future seismic threats.



Sr. No.	Date(s)	Training Programme on Safe Construction Practices at CBRI Roorkee (2024-25)	Total Number of Participants
1	Aug 19–23, 2024	Training Programme on Safe Construction Practices in Earthquake Engineering – Batch I	33
2	Sept 02–06, 2024	Training Programme on Safe Construction Practices in Earthquake Engineering – Batch II	38
3	Jan 27–31, 2025	Training Programme on Disaster Resilient Building Construction in Hills (For JE & TA of H.P.)	25
4	Feb 24–28, 2025	Training Programme on Disaster Resilient Building Construction in Hills (For JE & TA of H.P.) – Batch II	27

10.5 Directives are issued to Line Departments to integrate Disaster Risk Reduction (DRR) measures in development projects to address vulnerabilities due to landslides and soil erosion, particularly during monsoon seasons.

For infrastructure projects, the Departments are directed to carry out risk assessment in the enclosed format (Annexure-A) and while planning and designing the project, the DRR (Disaster Risk Reduction) integration must be taken into consideration, so that the envisaged projects does not become vulnerable at the time of any occurrence of the disaster and may withstand the impact of disaster and improves the resistant of State.

The Guidelines issued by HPSDMA during the year 2012 (Annexure-B) for mainstreaming DRR (Disaster Risk Reduction) incorporating the concerns of disaster preparedness, prevention and mitigation into development and post disaster recovery policy and practice. The guidelines shall be strictly implemented by all the Departments/Implementing Agencies (IA) and the compliance be reported on quarterly basis to HPSDMA.

In case of the hill cutting, the all type of excavation for formation of the hill roads or any other infrastructure should be as per C1.1.4.1 of the Hill Road Manual- First Revision -2023 (IRC;SP:48-2023) based on three broad categories as:-

Ordinary/Heavy Soil: with side slopes of 1:1 to ½:1(H:V)
Ordinary/Soft Rock: with side slope of $^1/_4$:1 to $^1/_8$:1 (H:V)
Hard Rock: cut may vary from 80 to 90 degree to horizontal.

10.6 Strengthening of DRR & Coordination at Local Level : The Disaster Management Cell (DMC) of HPSDMA develops a scheme focused on strengthening DRR mechanisms and improving inter-agency coordination at the local level in vulnerable regions. The Panchayat Emergency Response Centre (PERC) initiative in Himachal Pradesh is a forward-looking approach to strengthening disaster risk reduction and response at the grassroots level. Given the state's diverse topography, fragile ecosystems, and increasing vulnerability to disasters such as landslides, flash floods, cloudbursts, earthquakes, and heavy snowfall, there is a pressing need to decentralize and localize disaster management mechanisms. PERCs serve this exact purpose by embedding preparedness and response systems within the very fabric of rural communities, especially those that are remote or disaster-prone.

Himachal Pradesh's geographical setting in the western Himalayan region exposes it to multiple natural hazards. Many villages are located in far-flung mountainous terrains, often cut off during monsoons, snowstorms, or landslide events. In such situations, the response time of district or state agencies can be delayed due to disrupted road connectivity and communication lines. PERCs provide an immediate solution to this challenge by enabling local Panchayats to act as the first responders during emergencies. With local volunteers, basic rescue kits, communication tools, and designated safe spaces, these centers ensure that the first critical hours following a disaster are utilized effectively to minimize loss of life and damage to property.

Another vital reason for establishing PERCs is to decentralize disaster management processes. Traditional models of disaster response are largely top-down, often leading to delays in both decision-making and implementation. By empowering Panchayati Raj Institutions (PRIs) to operate dedicated emergency centers, the government facilitates community-led disaster planning and quicker on-ground execution. The PERC model recognizes the importance of local knowledge, leadership, and social networks in responding to disasters, especially in diverse ecological and cultural settings like Himachal Pradesh.

One of the fundamental roles of PERCs is to enhance disaster preparedness among rural populations. Each center is envisioned as a hub for continuous community engagement through awareness drives, training sessions, mock drills, and information dissemination on various hazards. These include sessions on first aid, safe evacuation, landslide risk reduction, fire safety, and water safety measures. Educated and aware communities are more likely to take preventive actions and respond rationally during crises. By institutionalizing disaster preparedness at the Panchayat level, PERCs help build a culture of safety and resilience across villages.

PERCs also function as the first line of response during emergencies. Equipped with basic tools and supplies, these centers are capable of providing first aid, temporary shelter, clean drinking water, dry food items, and psychological first aid to disaster victims. Volunteers associated with the PERCs are trained to undertake search and rescue operations, identify and assist vulnerable individuals such as the elderly, children, and persons with disabilities, and coordinate with higher authorities for the timely mobilization of resources. This immediate local response capability significantly reduces the time lag between the onset of disaster and the arrival of district-level support.

The PERCs also play a crucial role in strengthening coordination between Panchayats, Sub-Divisional Officers, and District Disaster Management Authorities (DDMAs). During a disaster, clear and timely communication is vital for the mobilization of relief, rescue, and rehabilitation measures. PERCs serve as nodal points for relaying ground-level information to the Emergency Operation Centres (EOCs) at higher administrative levels. This two-way communication channel ensures that resources are directed where they are most needed and helps prevent duplication or delays in relief efforts. Further, the PERCs act as distribution points for supplies dispatched by DDMAs and other agencies.

In terms of community empowerment, PERCs provide an opportunity for greater public participation in disaster governance. By involving community members—especially youth, women, local elected representatives, and volunteers—in emergency response planning, the initiative builds local capacity and accountability. The process also fosters leadership development at the grassroots level, making disaster management more inclusive and effective. When people feel a sense of ownership over preparedness and response efforts, they are more likely to invest in long-term risk reduction measures, including safer housing, resilient infrastructure, and environment-friendly practices.

PERCs are not just about disaster response; they also have a vital role to play in adapting to climate change. Himachal Pradesh is witnessing increasing climate variability, including unseasonal rainfall, shifting snowlines, glacial lake outbursts, and soil erosion. PERCs are well-positioned to integrate climate adaptation strategies into local planning. They can promote sustainable water management, agro-ecological farming practices, afforestation drives, and disaster-resilient infrastructure. With proper training and collaboration with technical agencies, PERCs can be transformed into rural knowledge hubs for climate-resilient development.

Capacity building is at the core of the PERC model. Regular training of volunteers, local officials, and Panchayat representatives ensures that skills are updated and readiness is maintained. These trainings are conducted in coordination with specialized institutions like the Himachal Pradesh State Disaster Management Authority (HPSDMA), Home Guard & Civil Defence, National Disaster Response Force (NDRF), and State Disaster Response Force (SDRF). Volunteers trained under schemes like Aapda Mitra and Aapda Sakhi can also be integrated with the functioning of PERCs, thereby creating a larger cadre of skilled responders at the village level.

Importantly, the establishment of PERCs also opens avenues for collaboration with NGOs, community-based organizations, and private sector partners. Many organizations working in the areas of health, livelihood, education, and gender rights can contribute to the PERC ecosystem through capacity building, IEC material development, community engagement, and emergency logistics. This multi-stakeholder approach enhances the sustainability and effectiveness of the centers while fostering synergy among various development actors.

The Government of Himachal Pradesh has taken a significant step by formulating guidelines for the establishment and operationalization of PERCs. These guidelines specify minimum infrastructure requirements, the roles and responsibilities of stakeholders, reporting formats, and funding mechanisms. While the initial set-up support is being provided through the State Disaster Response Fund (SDRF), Panchayats are encouraged to integrate PERC activities with their own development plans and seek convergence with schemes like the 15th Finance Commission grants, MGNREGS, and the Jal Shakti Mission.

In conclusion, the Panchayat Emergency Response Centre (PERC) model represents a paradigm shift in disaster risk governance by bringing resilience to the doorsteps of rural households in Himachal Pradesh. It is a practical, participatory, and sustainable approach that bridges the last-mile gap in emergency preparedness and response. As climate risks escalate and disasters grow more complex, initiatives like PERC are essential for ensuring that no community is left behind when disaster strikes. By investing in local leadership, knowledge, and systems, Himachal Pradesh is building a safer, more resilient future—one Panchayat at a time.

10.7 Strengthening Hydro-Meteorological Hazard Preparedness: HPSDMA signed a Memorandum of Understanding (MoU) with the India Meteorological Department (IMD) on 06.09.2024 for the establishment of a weather network station and real-time weather information system. This initiative aims to strengthen preparedness and mitigation measures for hydro-meteorological hazards in Himachal Pradesh.

11 State Disaster Mitigation Fund (SDMF) and HPDRRP 2024-25

The state of Himachal is prone to various hazards, both natural and manmade. In Himachal Pradesh main hazards consist of earthquakes, landslides, flash floods, snowstorms and avalanches, draughts, dam failures, fires, and accidents-road etc. The hazard which, however, poses biggest threat to the State is the earthquake hazard, fire, flood and landslide. The State has been shaken by more than 80 times by earthquakes having a magnitude of 4 and above on the Richter scale as per the recorded history of earthquakes.

During Monsoon 2024, floods and landslides have destroyed private and public property, and infrastructure in the state. As per the Memorandum of loss report of HPSDMA, there was reported1613.50 cr. (estimated loss) was reported.

11.1 Provision of the SDMF

As per the sub-section 1 (c) & (d) of the Section 48 of the Disaster Management Act, 2005, the Government of Himachal Pradesh has constituted State Disaster Mitigation Fund (SDMF) vide notification No. Rev(DMC)(C)-2-2/2019 dated 08.06.2020. The NDMA Division of MHA has notified guidelines on 6th March 2023 to administer these funds. These guidelines are issued under Section 62 of the DM Act, 2005 and shall be called 'State Disaster Mitigation Fund' (SDMF) guidelines and will continue till further orders. According to the provisions of the 15th Finance Commission, a total of ₹501.60 crore (approx.) has been allocated under the State Disaster Mitigation Fund (SDMF) for the period from FY 2021-22 to 2025-26.The

Mitigation Fund shall be used for those local level and community-based interventions, which reduce the risks and promote environment-friendly settlements and livelihood practices. Large-scale mitigation interventions such as construction of coastal walls, flood embankments, support for drought resilience etc. shall be pursued through the regular development schemes and not from the mitigation fund. Mitigation measures can be structural and non- structural:

Structural measures: Structural mitigation measures include any physical construction to reduce or avoid possible impacts of hazards, or the application of engineering techniques or technology to achieve hazard resistance and resilience in structures or systems. These measures attempt to strengthen buildings to better endure future disasters like cyclones and earthquakes.

Non-Structural measures: It does not involve physical construction but use knowledge, practices, policies, laws/Regulations, public awareness-raising, training and education etc. e.g. Building codes and Laws, location specific planning/strategies, forest management/restoration of mangroves, awareness campaigns etc.

11.2 Governance Structure

In accordance with the guidelines, the Project Appraisal Committee (PAC)and the Technical Appraisal Committee (TAC) were constituted vide notification No. REV(DMC) (C)2-2/2022-SDMF dated 10th May 2023. The HPSDMA organised three TAC meetings during the FY 2024-25. The project proposals recommended by these committees were subsequently reviewed by the State Executive Committee (SEC) in three separate meetings. After the approval of the SEC, funds have been released to the implementing/executive agencies to mitigate various hazards within the State.

Under the guidelines, there is a provision of constitute Mitigation Project Management Division (MPMD) under SDMF projects. SDMAs constitute mechanisms to coordinate project activities supported by Mitigation Funds. A key mechanism is Mitigation Project Management Division (MPMD) manned by competent technical personnel from amongst the available staff, through deputation or by hiring technical resource persons on a contractual basis. In this regard, Mitigation Project Management Division (MPMD), the initiative has already been taken by SDMA, and the proposal has already approved by the HP Finance Department to establish the Project Management Unit (PMU) at DM Cell.

11.3 Administrative Mechanism to be followed for processing of proposals under SDMF

a. Technical Appraisal Committee (TAC)

During the financial year 2024-2025, HPSDMA conducted 3 meetings (TAC 4 to 6) of the TAC in which total 263 project proposals were evaluated by the TAC members out of which **1**01 proposals recommended forSEC amounting to Rs.258.8 Cr. Under SDMF. Additionally, under the NDMF, 4 proposals amounting to ₹ 96.91 crore were recommended. The district-wise details of these proposals are as follows:

Sr. No.	District Name	Total Projects received	SDMF		NDMF	
			Recommended Projects (in No.)	Amount Recommended (₹ Crores)	Recommended Projects (in No.)	Amount Recommended (₹ Crores)
1	Bilaspur	8	3	6.43	0	0
2	Chamba	100	93	36.39	0	0
3	Hamirpur	2	1	8.50	1	16.37
4	Kangra	39	9	31.13	1	22.71
5	Kinnaur	2	1	1.88	0	0
6	Kullu	54	16	68.54	1	34.82
7	Lahaul Spiti	19	3	6.43	1	23.01
8	Mandi	21	8	31.44	0	0
9	Shimla	28	6	18.90	0	0
10	Solan	10	4	7.78	0	0
11	Una	23	1	7.09	0	0
Departments/Other Agencies: -						
12	HIMCOSTE	1	1	7.68	0	0
13	HPPWD-Horticulture Division	2	2	1.07	0	0
14	DEST & CC	1	0	0	0	0
15	HIMUDA	2	2	9.91	0	0
16.	HP JSV	1	1	12.63	0	0
	Grand Total	**313**	**151**	**255.8**	**4**	**96.91**

b. State Executive Meetings (SEC)

A total of 152 project proposals were approved by the State Executive Committee (SEC) after detailed scrutiny and recommendation by the Project Appraisal Committee (PAC) and the Technical Appraisal Committee (TAC). These proposals have been sanctioned with the objective of mitigating various natural and man-made hazards across the state, thereby strengthening disaster resilience and preparedness at multiple levels.

Further, During the financial year 2024–25, the Himachal Pradesh State Disaster Management Authority (HPSDMA) disbursed a total of ₹200.77 crore to various implementing agencies as a first and second installment for the execution of approved disaster mitigation projects

The financial assistance to the implementing agencies is being released in a phased manner, through installments, to ensure effective implementation and monitoring. The release of subsequent installments is subject to the timely submission of Utilisation Certificates (UCs) by the implementing agencies.

11.4 Funds Released Status for the FY 2024-25:

The HPSDMA had a Budget of Rs44.34 Crore as opening balance on 01.04.2024 under SDMF. Further, during the financial year 2024-25, Rs. 205.05 Crore (both Instalments of FY 2023-24and FY 2024-25, Including State Share) was received by the HPSDMA under State Disaster Mitigation Fund (SDMF). After the recommendation of the State Executive Committee the funds for various approved project proposal have been released to the Districts/Departments during the financial year 2023-24.

During FY 2024-25, HPSDMA disbursed funds amounting to ₹ 200.77 crore (as a first and second installment) to implementing agencies against the approved projects with an objective to mitigating various hazards.

11.5 Glacial Lake Outburst Flood (GLOF) Risk Mitigation under (NGRMP):

Himachal Pradesh faces a growing threat of Glacial Lake Outburst Floods (GLOFs) due to climate change and rapidly expanding glacial lakes, endangering lives, infrastructure, and ecosystems. To address this, the PMU-SDMF has submitted the project proposal to NDMA amounting to ₹ 35 Cr. The proposal was accepted by the NDMA under National GLOF Risk Mitigation Programme and allocated ₹35 crore to the state for comprehensive risk reduction. The project targets four high-risk lakes (Gephang Gath (Chenab Catchment), Parvati (Khir Ganga Catchment), Baspa (Sangla Upstream), and KashangGad) in its first phase, using GIS and remote sensing for detailed risk and vulnerability assessments. Key interventions include installing Early Warning Systems (EWS) and Automatic Weather Stations (AWS) for real-time monitoring, along with structural measures like spillways, siphons, and moraine dam reinforcement to prevent sudden breaches. Non-structural measures focus on land-use planning, hazard mapping, community evacuation plans, and awareness campaigns. Capacity building through training, mock drills, and public education is integral to strengthen disaster response. The program will be implemented over five years with coordinated efforts from multiple agencies to ensure effective planning, monitoring, and community preparedness. Designed to align with National Disaster Mitigation Fund (NDMF) guidelines and the Sendai Framework, the project aims to reduce loss of life, economic damage, and enhance resilience in vulnerable regions.

11.5.1 Geepang Gath Glacier Lake Expedition :

Glacial Lake Outburst Flood (GLOF) Field Visit

Date: 24–26 July 2024

Location: Ghepang Ghat Glacial Lake, Sub Division Lahaul

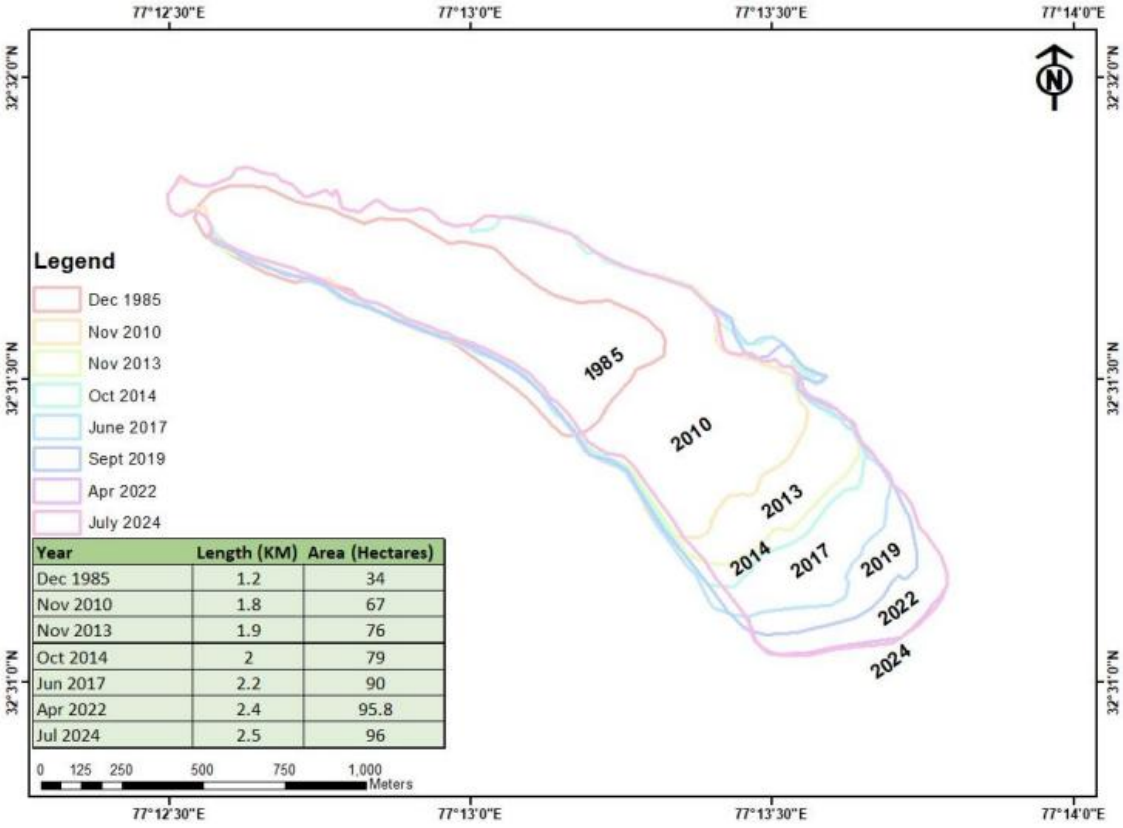
Key Observations:

- The lake expanded **178%**
- **Sissu village** lies directly in the high-risk flood path.
- Simulated models project flood velocity of **12 m/s** and depths up to **20 meters**.

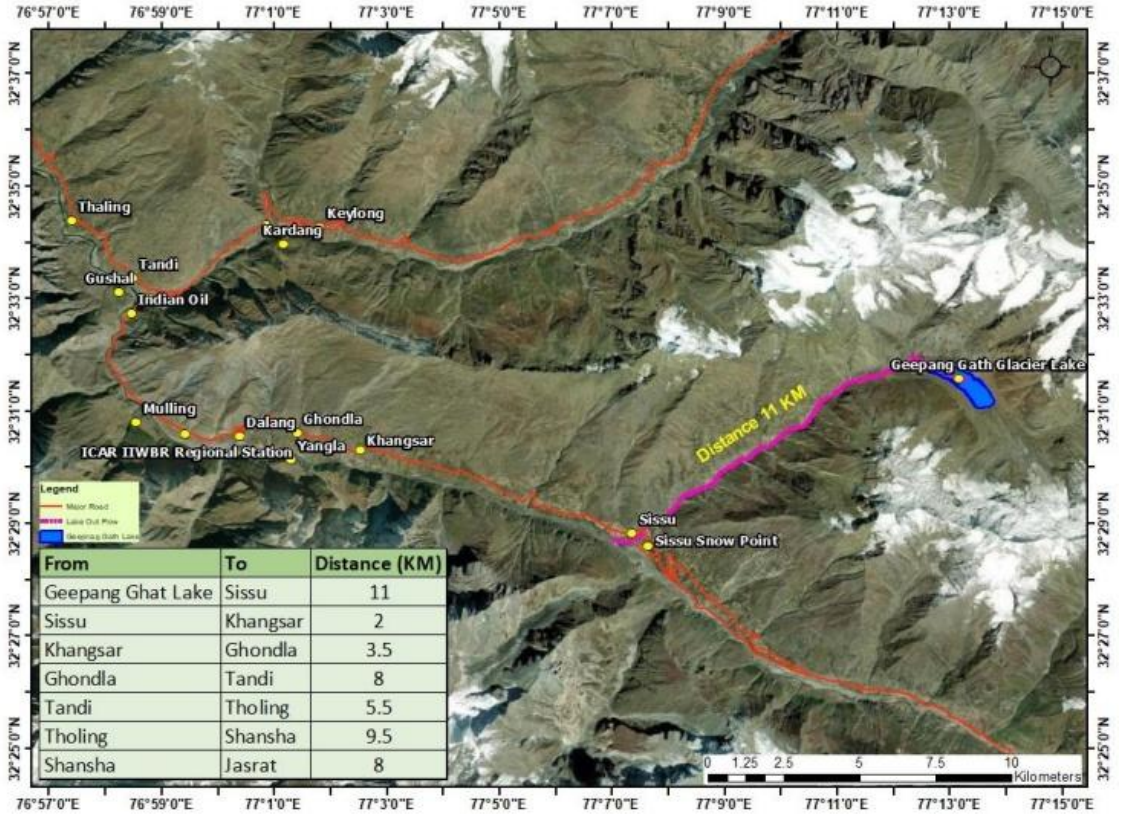
The Field Expedition

Team Members:

Sr. No.	Name	Designation	Dept/ Org
1	Sh. Rahul Kumar	Deputy Commissioner	DC Office
2	Sh.Sankalp Gautam	AC to DC- DEOC Nodal Officer	DC Office
3	Sh. Aniket Maruti Wanve	DCF	Forest
4	Er. Sanju Bodh	Assistant Engineer	JSV
5	Sh. Avtar Singh	Junior Engineer	HPPWD
6	Er. Rohit Kumar	Junior Engineer	JSV
7	Sh. Bhupender Paul	RFO	Forest
8	Dr. Mohan	Doctor	PHC Shansha
9	Sh. Tanzin	Inspector (GD)Regt.	2Bn ITBP Kullu
10	Sh. Gagan Pradeep	SMS	Agriculture
11	Sh. Mohan Lal	In-charge	ABVIMAS
12	Sh. Ravinder	Instructor	ABVIMAS
13	Sh. Ravi	Instructor	ABVIMAS
14	Sh. Ram Avtar Singh	EE CWC	CWC
15	Sh. Bhuwan Adhikari	CWC	CWC
16	Dr. Bhanu Partap	Researcher	NCPOR
17	Sh. Kamlesh Kumar,	Technical Officer-B	DGRE
18	Dr. Krishan Chand	T&CB Spl., DMC,	HPSDMA
19	Sh Inderjeet	AGISAC	AGISAC
20	Sh. Kalzang C Dunny	Documentation Coordinator	DDMA
21	Sh. Nitin Sharma	T & CB Coordinator	DDMA
22	Sh. Prakash Chand	Supervisor	DDMA
23	Sh. Arun Kumar	Supervisor	DDMA
24	Sh. Dinesh	PSO DC	Police



Year	Length (KM)	Area (Hectares)
Dec 1985	1.2	34
Nov 2010	1.8	67
Nov 2013	1.9	76
Oct 2014	2	79
Jun 2017	2.2	90
Apr 2022	2.4	95.8
Jul 2024	2.5	96



From	To	Distance (KM)
Geepang Ghat Lake	Sissu	11
Sissu	Khangsar	2
Khangsar	Ghondla	3.5
Ghondla	Tandi	8
Tandi	Tholing	5.5
Tholing	Shansha	9.5
Shansha	Jasrat	8

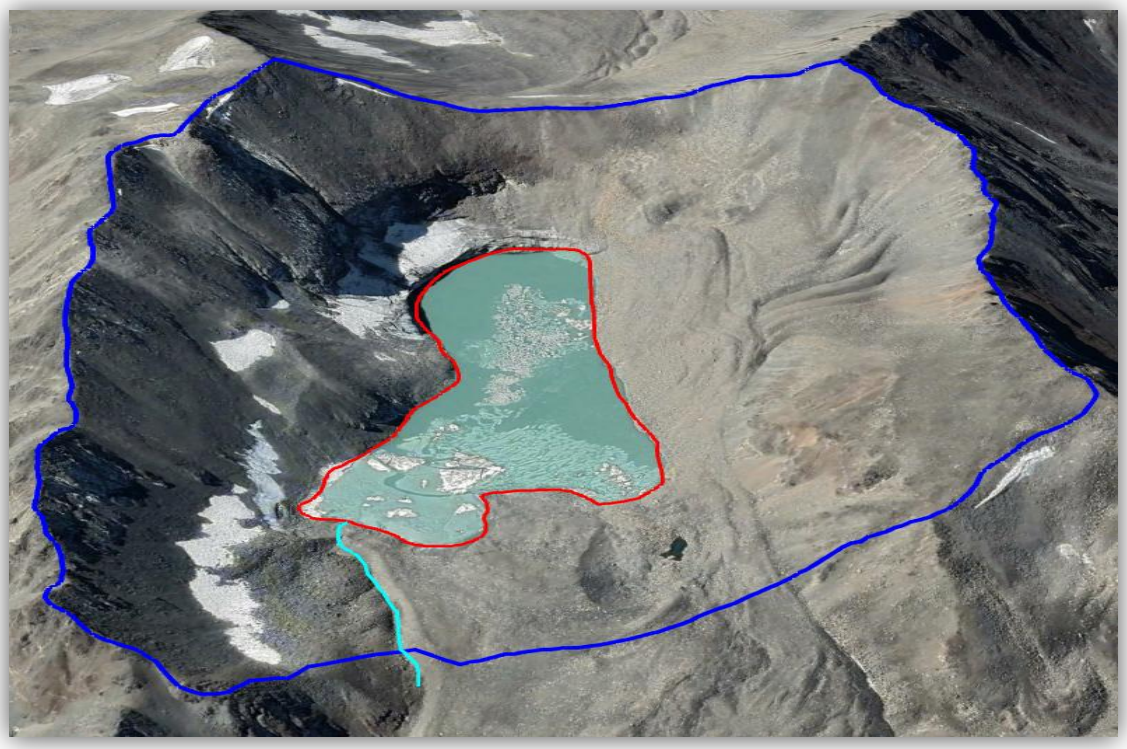
11.5.2 GLOF Expedition to Baspa Lake

Location: Upstream of Baspa River

Dates: 1st to 5th August 2024

The lake is approximately 610 meters long and 262 meters wide. It is dammed by a glacial moraine barrier with a height of 6 meters and a width of 560 meters. A small glacier (~1.5 hectares) is located on the right side, indicating partial glacial connectivity. The slope of the valley on the right bank is steep, measuring around 50 degrees. An outflow stream is visible beneath the moraine, with an estimated width of 5 feet. Lake depth has been assessed at approximately 28 meters using 30m resolution DEM.

The area is characterized by metamorphic rock formations and sandy soil above the alpine zone. GIS analysis indicates a moderate risk of landslides, avalanches, and frost-induced rockfalls, particularly on the right bank. Although the lake is situated at an elevation of 4730 meters, the probability of cloudbursts is relatively low based on historical data. The downstream slope is gentle, with significant infrastructure including one hydropower station (JSW), four bridges, and villages such as Saring (10 km) and Sangla (11.6 km) located in the potential impact zone.



11.5.3 GLOF Expedition to Vasuki Lake

Location: Upstream of Khir Ganga (Left Bank), Parvati Valley, District Kullu, Himachal Pradesh
Dates: October 9–17, 2024

Objective:
To conduct an on-site assessment of **Glacial Lake Outburst Flood (GLOF)** risks associated with **Vasuki Lake** and adjacent glacial and moraine-dammed formations. The expedition aims to:

- Evaluate the **physical condition** and **stability** of Vasuki Lake.
- Identify **early warning indicators** of potential outburst scenarios.
- Recommend **risk mitigation measures** and monitoring protocols.
- Collect **geo-referenced data**, photographic evidence, and drone imagery (where feasible).
- Enhance **inter-agency coordination** and readiness for GLOF scenarios in Parvati Valley.

Team Members :

Sr. No.	Name	Designation	Organization
1	Mr. Vishnu S	Scientist 'E'	C-DAC, Thiruvananthapuram
2	Mr. Arvind S	Senior Project Engineer	C-DAC, Thiruvananthapuram
3	Mr. Pranav MS	OS Engineer	C-DAC, Thiruvananthapuram
4	Mr. Anu Narayan	Project Engineer	C-DAC, Thiruvananthapuram
5	Mr. Nithin Prakash	Project Engineer	C-DAC, Thiruvananthapuram
6	Mr. Abu Mathew	Project Engineer	C-DAC, Thiruvananthapuram
7	Mr. Satish Pardeshi	Senior Project Engineer	C-DAC, Pune
8	Dr. Manoj Chavan	Senior Project Engineer	C-DAC, Pune
9	Mr. Shivram	Local guide and Team Leader	The Little Rebel Adventure Search and Rescue Pvt. Ltd.
10	Mr. Vijay Kumar	TO	Secretariat, Shimla, HP
11	Mr. G M Verma	Pharmacy Officer	Kullu, HP
12	Mr. Kehar Singh	IPH	Jalshakti
13	Mr. Man Singh		ITBP
14	Mr. Sunil Tekchand	Instructor	ABVIMAS
15	Mr. Shubham	Instructor	ABVIMAS
16	Mr. Sunil	Local guide	The Little Rebel Adventure Search and Rescue Pvt. Ltd.
17	Mr. Bhim Singh	Cook	ABVIMAS

Key Observations:

- **The lake is connected to an active glacier**, indicating continuous inflow from glacial melt water, which may contribute to the risk of Glacial Lake Outburst Flood (GLOF).
- **Seepage and piping have been observed**, with water visibly flowing beneath the **moraine dam**, suggesting internal erosion and potential structural instability.
- The **southern and western slopes** surrounding the lake are **steep and composed of loose rock fragments**, increasing the likelihood of landslides or slope failures into the lake.
- Based on **Sentinel-2 False Color Composite (FCC) satellite data dated 20th September 2024**, the **perimeter of the lake** is estimated to be **1,756 meters**, and the **surface area** is approximately **13.38 hectares**.
- The **Parvati Valley** is geologically vulnerable and historically prone to **landslide-induced damming**, **Landslide Lake Outburst Floods (LLOFs)**, and **flash floods**, particularly during intense rainfall or seismic activity.

11.6 Earthquake Risk Reduction (NERMP)

Himachal Pradesh is highly prone to earthquakes, with many vulnerable buildings and critical facilities at risk. To reduce this danger, the state has submitted a proposal amounting to ₹139 crore project under the National Earthquake Risk Mitigation Programme (NERMP). The plan includes assessing earthquake hazards, installing early warning systems, retrofitting schools, hospitals, and government buildings, and updating building codes to ensure safer construction. It also aims to train engineers, masons, and officials in earthquake-resistant techniques and raise public awareness through campaigns. By strengthening both infrastructure and local capacity, the project hopes to save lives, maintain essential services during disasters, and build long-term community resilience in this earthquake-prone region.

11.7 Pilot Project to improve Earthquake Resiliency of Government Buildings

The PMU-SDMF has submitted the project proposal amounting to 2.25 Cr to NDMA. The project has been approved and The National Disaster Management Authority (NDMA), Government of India, and the State Disaster Management Authority (SDMA), Government of Himachal Pradesh, have signed a Memorandum of Understanding (MoU) to implement a **"Pilot Project to Improve Earthquake Resiliency of Government Buildings."** The project aims to enhance seismic safety of selected government structures and build local capacity in earthquake-resistant construction practices.

The project will cover retrofitting work on 20 selected government buildings (primarily schools and offices across Chamba, Kullu, and Mandi districts), following national guidelines (IS codes, National Building Code, NDMA's retrofitting guidelines). Additionally, it includes training for at least 25 masons, bar benders, and carpenters to strengthen local construction skills.

The project will be executed by the Himachal Pradesh SDMA, which is responsible for quality assurance, procurement, statutory clearances, and timely reporting. Funds will be released in three installments tied to milestones, with strict utilization and reporting requirements. A Project Monitoring Committee (PMC) and Technical Advisory Committee (TAC) will oversee implementation and provide technical guidance.

11.8 Landslide Risk Mitigation: Given the high landslide vulnerability, HPSDMA submitted a PPR on Landslide Risk Mitigation in Himachal Pradesh worth Rs. 139 Cr under the National Landslide Risk Mitigation Programme (NLRMP) to NDMA on 02.04.2025. The proposal was discussed in the TAC of NDMA on 08.04.2025.

11.9 Assessment of Roadside Landslides in Shimla (Panthaghati-Crossing and Kennedy Chowk-Annadale Road Sections):In February 2024, a field-based assessment of roadside landslides was conducted for the Panthaghati-Crossing and Kennedy Chowk-Annadale Helipad Road sections in Shimla. This assessment, followed by a detailed study in June 2024, was undertaken to evaluate landslide-prone areas and recommend slope stabilization measures.The study identified multiple shallow and deep-seated landslides triggered by intense rainfall, poor drainage, and unstable soil conditions. It highlighted the importance of Nature-based Solutions (NbS) such as vegetative slope stabilization, brush layering, and gabion structures. The study also recommended structural measures like proper drainage management, retaining walls, and monitoring systems to reduce landslide risks and enhance road safety. These measures aim to protect critical infrastructure, improve slope stability, and build disaster-resilient road networks in Shimla.

Conclusion –

- The field observation study of identified landslides and slope failures revealed several important issues related to their causes along the NH Crossing to Panthaghati and Kennedy Chowk to Annadale, as well as management strategies hereafter.

- The 15 trouble sites investigated on NH-5, from the NH Crossing to Panthaghati, were classified into three categories: (1) Debris flow slides, (2) Landslides, which also include slump slides, and (3) Compound slope failures involving more than one type.

- The road from Kennedy Chowk to Annadale has not experienced major landslides; however, visual observations revealed a number of slope maintenance and management issues. These included road subsidence, shallow slope failure and subsidence, erosion, cracking, and tree bending.
- Several natural streams that cross the highways were found encroached upon, with household garbage, C&D, and other waste dumped on or near the streams. The continuous dumping of a variety of waste, including plastic, not only altered the morphology of the stream but also created instabilities on the course as well as on the side slopes.
- Though there was no hourly rainfall data available, the precipitation in Shimla on July 7–11, 2023, was unusually high at 268 mm against its normal 35 mm for that five-day period. This represented a deviation of over 600%. Additionally, from July 14–24, 2023, the area received 430.8 mm of rain, which was 254% higher than the normal (121.6 mm) for that duration. This extreme rainfall caused widespread destruction, including landslides, resulting in severe breakdown of surface mobility and increased hardship and risk for the people.
- The damage and disruption caused by landslides and slope failures during July–August 2023 were mostly observed on or along the roads, particularly where natural streams are poorly maintained and affected by several anthropogenic activities. If appropriate measures are not taken, similar disasters may recur during future rainfall events.
- To stabilize slopes, Nature-based Solutions (NbS) offer a cost-effective and sustainable alternative. However, it is important to note that not all types of landslides can be prevented solely through NbS. In such cases, hybrid solutions can be effective. Therefore, a hybrid that incorporates both NbS and engineering solutions is recommended.
- A surface runoff model was established using the available monthly rainfall data to identify erosion-prone areas and potential water accumulation. The model revealed that the slope failure along two road alignments was triggered by intense rainstorms. Among several causal factors, human activities were identified as the primary cause.

Suggestive Actions:

- The suggestive/preventive measures suggested in the report are mainly based on field observations and available historical data/maps/discussions and not on detailed integrated geological, geotechnical, and geomorphologic investigations.
- It is, therefore, suggested that the long-term measures recommended in the report be designed based on these suggested investigations during the DPR preparation.
- The scheme of measures suggested for each landslide must be implemented as a whole scheme, divided into phases: short-term, medium-term, and long-term.
- Implementing only part of the scheme while neglecting others may not achieve the desired outcomes and may prove to be counterproductive.

- Given the recent disasters and the inherently fragile terrain that experiences high-intensity rains along with the possibility of unpredicted heavy storms, it is important to prepare the inventory of the existing highway slopes, including landslides.
- This inventory will help identify both active and dormant landslides/unstable slopes by examining historical background in relation to current ground realities, x-raying the conditions, and causes of

their recurrences and correlating with ground conditions, estimating human and economic losses, etc., thereby helping to prioritize the slopes for appropriate action.

- Highways that are constructed without anticipating vulnerabilities and risk assessment tend to develop frequent problems for slope stability and, therefore, cannot be disaster resilient.
- Similarly, to maintain the highways in a sustainable manner post-construction, it is necessary to classify the highway slopes (including already identified landslides) based on their degree of propensity (susceptibility) to sliding/failure and risk from them. Moreover, resources for earthworks protection and repairs are frequently insufficient, requiring prioritization of needs. This underscores the importance of conducting a thorough risk assessment.
- Generally, there is an accepted method for the maintenance of highways but there is no such practice (or guidelines) to proactively maintain the highway slopes, except otherwise when a landslide/slope failure happens.
- It is therefore recommended that a Highway Slope Monitoring and Maintenance System (HSMM) be developed, which starts with uncovering susceptible/hazardous slopes. The system will ensure that the hazardous slopes are effectively maintained, and the concerned agencies and the common people are kept informed about impending risks, allowing for appropriate and timely action to prevent loss of life. Additionally, the HSMM would help improve the design and methods of maintenance of highway and highway slopes, ensuring safe and uninterrupted operation of these roads. The proposed HSMM, if developed, will go a long way in the safety and sustainability of the highway and highway slopes, post-construction. On the contrary, the consequences of delay in dealing with the highway slope vulnerabilities may not only add to the number and expanse of existing active and dormant landslides and further endanger highway safety but also rob us of the opportunity to effectively manage problems that have already become complex and challenging.
- It is crucial to identify specific sites for debris disposal, as debris is highly susceptible to further sliding in the valley. When selecting debris disposal sites, it is advisable to follow the IRC Guidelines for the Use of Construction and Demolition Waste in the Road Sector (IRC 121-2017) for detailed technical guidance.

11.10 LiDAR Survey of Shimla In the year 2024–25, the Himachal Pradesh State Disaster Management Authority (HPSDMA) undertook a crucial initiative by launching a LiDAR-based survey of Shimla Town aimed at assessing and mitigating landslide risks. Shimla, being a hill town with complex terrain, is highly vulnerable to landslides, especially during the monsoon season. Traditional methods of risk assessment often lack the precision required to support robust planning in such urban environments. To address this, HPSDMA deployed Light Detection and Ranging (LiDAR) technology, which uses laser pulses to generate high-resolution topographic data.

The LiDAR survey facilitates the creation of accurate Digital Elevation Models (DEMs) and slope stability analyses, enabling identification of highly vulnerable zones with unprecedented precision. These findings will be instrumental in the development of detailed hazard maps, which can guide town planning, construction regulations, and targeted mitigation efforts. The initiative supports evidence-based decision-making for infrastructure development, zoning, and emergency preparedness in Shimla.

Moreover, this effort aligns with the broader goal of building disaster-resilient cities in Himachal Pradesh by integrating science and technology into urban planning processes. The outputs from this survey are expected to assist not only urban planners and engineers but also policymakers, local authorities, and the community in adopting proactive and informed risk reduction strategies. This pioneering project sets a precedent for other urban centers in the state facing similar geo-environmental challenges and marks a significant step toward a safer and more sustainable future for the residents of Shimla Town.

11.11 Preliminary Assessment of Flash Floods and Landslides in Himachal Pradesh

During 2024-25, the Himachal Pradesh State Disaster Management Authority (HPSDMA) facilitated preliminary field assessments of major disaster events, including:

- Flash Floods at Samej (Shimla District) and Bagipul (Kullu District)
- Landslide at Sector 26, Nigulsari Village (Kinnaur District)

These events, triggered by intense rainfall, caused significant damage to local infrastructure, agriculture, and livelihoods. The assessments were conducted by technical teams to evaluate the immediate impact, possible causes, and to recommend short-term and long-term mitigation measures.

Key findings included indications of slope instability, poor drainage conditions, and riverbank erosion in the flash flood-affected areas, while the landslide at Nigulsari showed signs of deep-seated slope failure, posing ongoing risk to nearby settlements and transport infrastructure.

The assessment reports were shared with concerned departments for urgent action, including restoration works, risk mitigation planning, and long-term monitoring to enhance disaster resilience in these vulnerable regions.

11.12 Himachal Pradesh Disaster Risk Reduction Program (HPDRRP)

HPSDMA proposed a Disaster Risk Reduction (DRR) project to AFD for external funding of 100 million Euros, which was approved by the Planning Department, GoHP on 10th January 2019. The DEA's 104th Screening Committee cleared the project for AFD funding on 18th February 2020. This was followed by a series of consultations and workshops beginning with AFD's first visit to Shimla in March 2021. Key meetings included a review chaired by the Chief Secretary on 17th August 2021, and annual consultations between DEA and AFD in September 2021 and May 2023. Two major consultative workshops were held in April and June 2023 at Shimla, and MaGC (AFD's consultant) submitted its intermediate, summary, and final reports between May and September 2023. The HPDRR Handover Mission took place from 3rd to 6th September 2024. Finally, the Credit Facility Agreement between DEA and AFD was signed on 4th December 2024 in Delhi, followed by the signing of the Program Agreement between GoHP and AFD on 10th January 2025 in Shimla. The Hp Government has also convened the meeting of Program Screening Committee on 9th July 2025 where the Program Operation Manual has been approved by the Committee.

The primary goal of the Program is to strengthen disaster and climate resilience among state systems and local communities in Himachal Pradesh. The Program's overarching objective is to transition towards a comprehensive disaster and climate risk reduction framework through the implementation of resilient infrastructure and strengthened disaster risk management and governance.

The Program commenced in April 2025 and will end in March 2030. AFD will provide technical and financial support under its Program Budget Support (PBS) instrument. The PBS also includes a results-based financing (RBF) track, with up to 15 percent of the Program outlay. Furthermore, the Program incorporates a Contingency Early Response (CER) Component, with an outlay of up to 10 percent of the total Program outlay, earmarked for addressing unforeseen emergency expenditure resulting from disasters. A designated portion of the Program budget is allocated to cover Program management expenses.

To successfully implement the Program there is provision under POM on page 32 to constitute following committees:

a) The Program Steering Committee (PSC)
b) The Program Executive Committee (PEC)

The Program Steering Committee (PSC) and the Program Executive Committee (PEC) are the two key bodies responsible for the governance and implementation of the Program. The State Executive Committee of SDMA shall act as Project Steering Committee of this HPDRRP Program. The PSC, chaired by the Chief Secretary, Government of Himachal Pradesh, serves as the Apex decision-making body, providing high-level strategic direction, policy guidance, and oversight to ensure alignment with state and national disaster risk management goals. It meets at least twice a year and ensures gender representation. The PEC, chaired by the Administrative Secretary (Revenue), is responsible for the day-to-day operational management of the Program, including approval of annual plans and budgets, financial monitoring, inter-agency coordination, and compliance with fiduciary norms. The PEC meets quarterly and includes heads of implementing agencies, technical experts, and observers from AFD and NDMA as required. Both committees work together to guide the Program towards its objectives while promoting inclusivity and accountability.

PMU and PMDC:

The Program Management Unit (PMU) andProgram Management and Design Consultancy (PMDC) are being established under the HPDRRP Program, 100% financed by the Agence Française de Développement (AFD) and implemented by the Himachal Pradesh State Disaster Management Authority (HPSDMA). The PMU will serve as the dedicated coordination and management body for the effective planning, execution, monitoring, and reporting of project activities. The PMU may ensure efficient implementation and management of the HPDRRP Program through strategic planning, coordination among stakeholders, quality control, financial management, and timely reporting.

Whereas Program Management and Design Consultancy (PMDC) is a technical and management support consultancy team hired to assist the PMU and implementing agencies in planning, designing, and executing sub-projects under HPDRRP.In spite of this the PMU-HPDRRP has finalised the RFPs for the PFM , IVA and Gender based Studies.

First Drawdown under HPDRRP-AFD(N CIN 114901) for FY 2025–26 submitted to the DEA

In accordance with the Credit Facility Agreement (CFA) signed between the Department of Economic Affairs (GoI) and AFD on 4th December 2025, the PMU-HPDRRP is required to submit the first

drawdown request within six months from the date of signing of the CFA.In this context, the first drawdown request amounting to ₹1,10,93,921/- for the financial year 2025–26 was submitted by the Disaster Management Cell (DMC) to DEA on 23rd May 2025. Now, a three ,months extension has been given by AFD with the concurrence of D.E.A. Ministry of Finance, Government of India for the disbursal of first drawdown of funds. The request pertains to the Landslide Mitigation work at Dudal Ki Pukhar – Chudawali Nalinal – Kalyanghatti Road, located in Tehsil Arki, District Solan (H.P.).

12 Operations and Functions of the State Emergency Operation Centre (SEOC)

The State Emergency Operation Centre (SEOC), established in 2016, functions 24x7 as the central hub for disaster response coordination in Himachal Pradesh. It operates through the toll-free emergency helpline 1070, providing real-time communication and assistance during emergencies. The control room is manned by eight trained personnel responsible for receiving distress calls, verifying incidents through field agencies, and initiating prompt response actions as per the Emergency Support Functions (ESFs) notified by the Himachal Pradesh State Disaster Management Authority (HPSDMA).

12.1 Key Functions of the SEOC:

i. Responding promptly to disaster threats and incidents.
ii. Assessing the severity, magnitude, and potential impact of disasters.
iii. Coordinating meetings and communication with State and Central emergency authorities.
iv. Liaising with response agencies such as **Indian Air Force (IAF), NDRF, SDRF, Fire Services,** and the **Indian Army**.
v. Compiling **daily loss reports** and assisting in the preparation of **Memorandums of Loss** for submission to the **Government of India**.
vi. Identifying and coordinating with **Nodal Officers** in key stakeholder departments.
vii. Regularly updating national platforms such as **NDEM**, **NDMIS**, and **IDRN**.
viii. Preparing and updating **state and district-level directories** for emergency contacts and resources.
ix. Ensuring the functionality of all communication systems, including **ISAT**, **VSAT**, **VHF**, landlines, and the **1070/1077 helplines**.
x. Conducting routine operational checks on electronic and communication devices.
xi. Disseminating timely **advisories and alerts** received from national agencies like **IMD**, **CWC**, and others.
xii. Monitoring platforms such as **Bhuvan**, **CWC Flood Forecasting**, **IMD**, **Forest Fire**, and **Landslide Early Warning Systems** to issue location-specific advisories.
xiii. Overseeing implementation of safety initiatives such as **Dam Safety**, **School Safety**, and other state/central government applications.
xiv. Developing comprehensive **incident reports** post-disaster.
xv. Preparing **situation reports** as per the disaster classification levels (**L1, L2, L3**).

xvi. Managing overall **incident response coordination**.
xvii. Maintaining the **chain of command** and **communication hierarchy**.
xviii. Liaising with other **Emergency Operation Centres (EOCs)** in neighboring **districts, cities, and states** for resource coordination.
xix. Planning and managing communication systems to ensure **efficient resource deployment**.
xx. Developing and monitoring **Decision Support Systems (DSS)** for informed decision-making.

12.2 Technological and Institutional Support:

The SEOC is supported by personnel from SDRF, Police, and NDRF, and is equipped with communication tools such as **I-SAT phones**, VHF sets, and VSAT systems. Currently, SEOC and DEOCs are integrated with the Call Management System – Automation of Disaster Helplines (1070/1077)**,** which includes features such as:

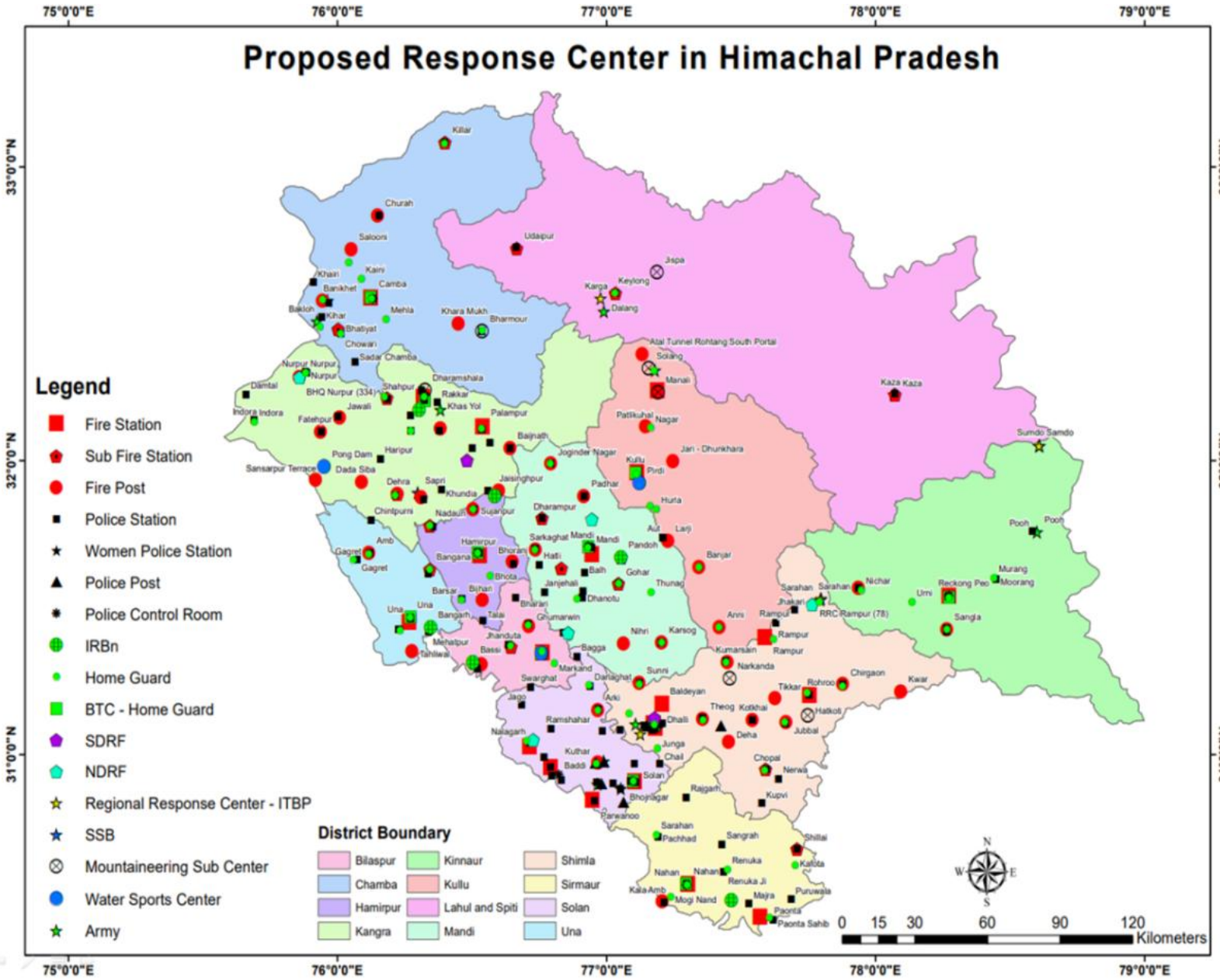
- **GIS mapping**
- **Online Disaster Reporting**
- **Call logging and forwarding via web applications**

Plans are also underway to integrate **HAM radio systems** to further strengthen **alternate communication channels** during emergencies.

12.3 Designated Response Centre

Proposed Response Centers in Himachal Pradesh

Sr. No.	Name of the Organizations	No. of Presence Points
1	Fire Station	22
2	Sub – Fire Station	15
3	Fire Post	46
4	Police Station	129
5	Police Post	6
6	Police Control Room	10
7	Indian Reserve Battalion	6
8	Home Guard	74
9	BTCs – Home Guard	12
10	SDRF	3
11	NDRF	5
12	Regional Response Center – ITBP	5
13	SSB	2
14	Mountaineering Sub – Center	7
15	Water Sports Center	3
16	Army	11
		356


Proposed Response Center in Himachal Pradesh
75°0'0"E
76°0'0"E
77°0'0"E
78°0'0"E
79°0'0"E
33°0'0"N
32°0'0"N
31°0'0"N
Legend
Fire Station
Sub Fire Station
Fire Post
Police Station
Women Police Station
Police Post
Police Control Room
IRBn
Home Guard
BTC - Home Guard
SDRF
NDRF
Regional Response Center - ITBP
SSB
Mountaineering Sub Center
Water Sports Center
Army
District Boundary
Bilaspur
Chamba
Hamirpur
Kangra
Kinnaur
Kullu
Lahul and Spiti
Mandi
Shimla
Sirmaur
Solan
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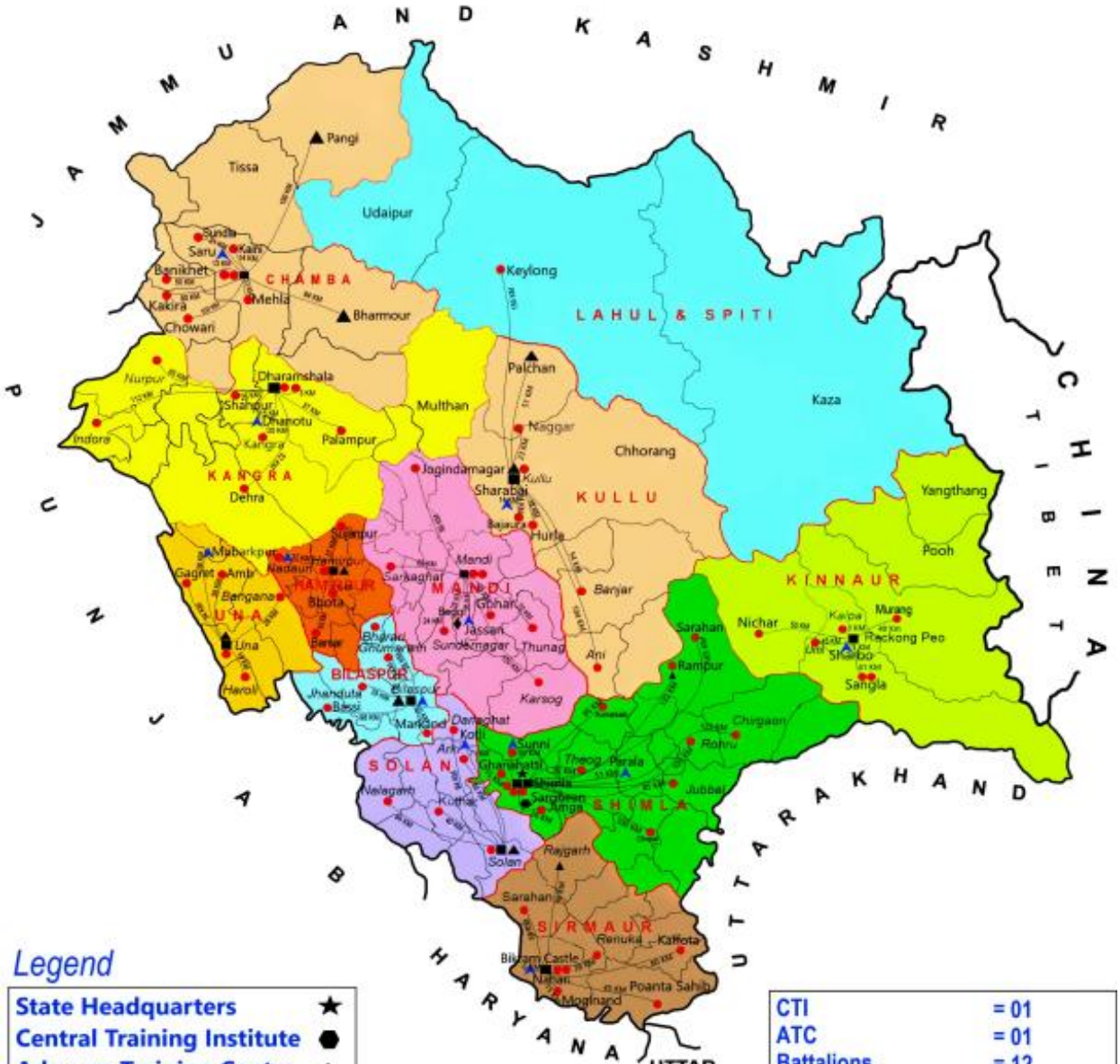
Home Guards Himachal Pradesh



Legend

State Headquarters	★
Central Training Institute	⬢
Advance Training Centre	◆
Battalion Office	■
Battalion Training Centre	▲
Company Office	●
Platoon	▲

CTI	= 01
ATC	= 01
Battalions	= 12
BTCs	= 12
Men Companies	= 73
Women Companies	= 06
Technical Platoons	= 11
Women Platoons	= 06
Independent Platoons	= 04

Date: 05.08.2020

13 Loss and Damage Report

DepartmentofRevenue-DMCell
GovernmentofHimachalPradesh
StateEmergency OperationsCentre(SEOC)-24*7Helpline1070

Cumulative Loss (Pre- Monsoon 2024 to Winter 2025)

District	Loss to Lives due to Disaster				Loss to Animal		Loss to Private Property										Loss to Public Property (In Rs Lakh)														Total (Rs. in Lakh)
	Loss to Human Lives		Injured	Ex-Gratia payment (Rs in Lacs)	Missing	Loss to Animal/Bird	Loss (Rs in Lakhs)	Loss to Houses			Shops/Factory	Labour Sheds /Huts	Cow Sheds	Gharats/ Shamshan Ghat	Monetary loss (Rs in Lakh)	Damage to Crops		PWD *	JSV**	Power ***	Health		Education		Fisheries	Rural development	Urban development	Animal Husbandry	Other Departmental Loss		
	Death							Fully Damaged		Partially Damaged							Agriculture	Horticulture					Elementary	Higher							
								Pucca House	Kaccha House	Pucca House	Kaccha House																				
	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		
Bilaspur	53		49	212	0	8	0.71	5	6	12	13	3	0	54	0	136.63														349.34
Chamba	126		138	504	0	139	27.515	5	11	13	163	11	0	81	0	475.375														1,006.89
Hamirpur	53		51	212	1	27	0	0	10	10	42	5	0	60	0	99.64														311.64
Kangra	125		0	500	0	95	402.97	4	31	31	172	7	4	204	0	265.708														1,168.68
Kinnaur	47		37	188	3	6	0.4	7	5	2	6	0	2	5	0	127.135														315.54
Kullu	89		173	356	11	180	28.01	32	91	46	22	41	6	60	27	3083.09														3,467.10
L & S	17		44	68	1	3	0.08	0	1	7	2	0	0	0	0	84.9														152.98
Mandi	126		118	504	1	51	14.32	4	69	7	98	13	0	168	0	1251.469														1,769.79
Shimla	183		181	732	18	4	0	54	38	39	33	10	8	32	0	1169.67														1,901.67
Sirmaur	131		152	524	0	95	54.92	2	15	33	34	8	0	46	0	225.919														804.84
Solan	121		498	484	0	6	1.325	3	4	5	6	3	0	15	0	68.4														553.73
Una	95		347	380	0	6529	6.83	4	3	27	25	34	26	26	0	194.328														581.16
TOTAL	1166		1788	4664	35	7143	537.08	120	284	232	616	135	46	751	27	7182.264	132.64	13995.8	78386.66	54613.54	673.79	0	0	0	86.8	0	0	3.25	0	1,60,275.86

14. Financial Report 2024-25

14.1 State Disaster Mitigation Fund

The Disaster Management Act, 2005 (hereinafter called as DM Act, 2005) defines mitigation as 'measures aimed at reducing the risk, impact or effects of a disaster or threatening disaster situation'

The State Disaster Mitigation Fund (SDMF) is constituted under the section 48 (1) (a) of the DM Act, 2005. This fund is exclusively for the purpose of mitigation projects in respect of disasters covered under the State Disaster Response Fund (SDRF)/ National Disaster Response Fund (NDRF) Guidelines and the State specific local disasters notified by the State Governments. The Mitigation Fund shall be used for those local level and community-based interventions, which reduce the risks and promote environment-friendly settlements and livelihood practices. Large-scale mitigation interventions such as construction of coastal walls, flood embankments, support for drought resilience etc. shall be pursued through the regular development schemes and not from the mitigation fund.

Mitigation measures can be structural and non- structural.

- **Structural measures:** Structural mitigation measures include any physical construction to reduce or avoid possible impacts of hazards, or the application of engineering techniques or technology to achieve hazard resistance and resilience in structures or systems. These measures attempt to strengthen buildings to better endure future disasters like cyclones and earthquakes.
- **Non-Structural measures:** It does not involve physical construction but use knowledge, practices, policies, laws/Regulations, public awareness-raising, training and education etc. e.g. Building codes and Laws, location specific planning/strategies, forest management/restoration of mangroves, awareness campaigns etc.

These guidelines are issued under Section 62 of the DM Act, 2005 and shall be called 'State Disaster Mitigation Fund' (SDMF) guidelines and will be operative from the financial year 2021-22 to 2025-26, and will continue till further orders.

15th Finance Commission has recommended a total allocation of **Rs.2,508 crore** for the State Disaster Risk Management Fund (SDRMF) to the States for the award period 2021-26. Further, the total State allocation for SDRMF has been divided into State Disaster Response Fund (SDRF) and State Disaster Mitigation Fund (SDMF), which will together address the full cycle of disaster management needs response and relief, recovery and reconstruction, preparedness and capacity-building, and mitigation. Year wise detail of funds recommended under 15th finance commission is as given below:-

Financial Year	SDMF (In Crores)			SDRF (In Crores)			Gran Total (In Crore)
	State Share	Centre Share	Total	State Share	Centre Share	Total	
2021 - 22	9.00	81.80	90.80	36.00	327.20	363.20	454.00
2022 23	9.60	85.60	95.20	38.40	342.40	380.80	476.00
2023-24	10.00	90.20	100.20	40.00	360.80	400.80	501.00
2024-25	10.40	94.60	105.00	41.60	378.40	420.00	525.00
2025-26	11.00	99.40	110.40	44.00	397.60	441.60	552.00

The SDRF would receive 80 per cent of the total SDRMF, while the SDMF would get 20 per cent of the allocation. Within the SDRF there would be three sub allocations: (i) Response and Relief (40 per cent), (ii) Recovery and Reconstruction (30 per cent) and (iii) Preparedness and Capacity-building (10 per cent). While the funding windows of SDRF and SDMF are not inter-changeable, there could be flexibility for re-allocation within the three sub-windows of SDRF.

These guidelines are for the operation and administration of SDRF for the purpose of Response & Relief activities of immediate nature in respect of disasters as notified by the Central Government as well as State specific disasters, as notified by the State Governments for SDRF only. Besides these, guidelines in respect of SDMF & NDMF; and for specific issues pertaining to recovery & reconstruction, preparedness & capacity-building windows of SDRF & NDRF are being issued separately.

15.2 State Disaster Response Fund 2024-25

During the financial year 2024-25, significant funds were allocated from the State Disaster Response Fund (SDRF) to various districts and departments, aimed at addressing a range of critical needs. Detailed allocations reveal a strategic distribution across different sectors. The allocation pattern was consistent across districts like Mandi, Kangra, Shimla, and Solan, where investments were made in areas like supply of housing, and agricultural support. Further, departments such as HPPWD, Jal Shakti, HPSEBL, Fire Services etc. received substantial allocations for the repair and restoration of infrastructure and water management initiatives. This comprehensive approach underscores the government's commitment to repair & restoration the impact of disasters and fostering sustainable development across the region, as evidenced by the grand total allocation of **Rs. 410.59 crore**(which includes the releases from the Opening Balance) to districts and departments combined and details of the funds allocation is given below-

Detail of Funds allocated from SDRF to Various Districts & Departments during the Financial Year 2024-25 (In Crore)										
S. No	**Name of Distt.**	**2245-02-101-01-S00N-NP(OC) Cash dole (Immediate relief)**	**2245-02-106-01-S00N-NP(OC) Repairs and Restoration of Damaged Roads and Bridges**	**2245-02-109-01-S00N-NP(OC) Repairs & Restoration of Damaged Water Supply, Drainage and sewerage works**	**2245-02-111-01-S00N-NP(OC) Ex-Gratia Payments to Bereaved Families**	**2245-02-111-02-S00N-NP(OC) Death Due to State Specific Disaster**	**2245-02-113-01-S00N-NP(OC) Repair/Construction of Houses Assistance**	**2245-02-193-01-S00N-NP(OC) Assistance to Local Bodies and other Non-Govt Bodies/Institutions**	**2245-80-102-05-S00N-NP(OC) Capacity Building**	**Total**
1	Bilaspur	0.31	2.17	1.79	0.88	2.88	0.19	1.43	0.17	**9.81**
2	Chamba	3.94	3.50	2.50	0.28	6.91	0.64	6.51	0.14	**24.43**
3	Hamirpur	1.07	3.43	2.55	0.60	1.83	-	4.50	0.56	**14.55**
4	Kangra	5.05	7.00	4.50	6.39	2.93	1.78	10.55	2.34	**40.54**
5	Kinnaur	2.36	2.25	1.60	0.79	1.47	-	4.65	0.19	**13.31**
6	Kullu	5.74	4.36	3.93	0.97	3.58	0.80	2.75	0.59	**22.72**
7	Lahaul &Spiti	0.79	2.25	2.25	-	0.60	-	2.55	0.06	**8.50**
8	Mandi	5.00	5.50	5.25	4.40	5.81	2.38	7.40	1.55	**37.29**
9	Shimla	-	4.50	3.75	-	9.57	1.82	8.25	1.37	**29.25**
10	Sirmour	0.16	4.75	4.75	1.40	4.20	0.31	6.00	0.19	**21.77**
11	Solan	-	8.21	2.25	0.76	3.04	1.01	3.29	0.35	**18.92**
12	Una	0.63	4.20	4.24	1.04	3.63	-	6.25	0.01	**19.99**
Total of Districts		**25.06**	**52.12**	**39.35**	**17.52**	**46.44**	**8.93**	**64.13**	**7.53**	**261.09**
Department										
1	HPPWD	-	77.08	-	-	-	-	-	-	**77.08**
2	Jal Shakti Vibhag	-	-	60.00	-	-	-	-	-	**60.00**
3	HIPA	-	-	-	-	-	-	-	0.34	**0.34**
4	BSNL	-	-	-	-	-	-	-	3.26	**3.26**
5	HPSEBL	-	-	-	-	-	-	2.50	-	**2.50**
6	ABVIMAS	-	-	-	-	-	-	-	3.16	**3.16**
7	Panchayati Raj	-	-	-	-	-	-	-	0.89	**0.89**
8	Health	-	-	-	-	-	-	-	0.10	**0.10**
9	SDRF-Police	-	-	-	-	-	-	-	0.24	**0.24**
10	Fire/HG Services	-	-	-	-	-	-	-	1.08	**1.08**
11	Technical Edu.	-	-	-	-	-	-	-	0.86	**0.86**
Total of Deptt.		**-**	**77.08**	**60.00**	**-**	**-**	**-**	**2.50**	**9.93**	**149.51**
Grand Total		**25.06**	**129.20**	**99.35**	**17.52**	**46.44**	**8.93**	**66.63**	**17.46**	**410.59**

Detail of Funds allocated from NDRF to Various Districts & Departments during the Financial Year 2024-25 (In Crore)									
S. No	**Name of Distt.**	**2245-02-101-01-C00N-NP(OC) Cash dole (Immediate relief)**	**2245-02-106-01-C00N-NP(OC) Repairs and Restoration of Damaged roads and Bridges**	**2245-02-109-01-C00N-NP(OC) Repairs & Restoration of Damaged Water Supply, Drainage and sewerage works**	**2245-02-111-01-C00N-NP(OC) Ex-Gratia Payments to Bereaved Families**	**2245-02-111-02-C00N-NP(OC) Death Due to State Specific Disaster**	**2245-02-113-01-C00N-NP(OC) Repair/Construction of Houses Assistance**	**2245-02-193-01-C00N-NP(OC) Assistance to Local Bodies and other Non-Govt Bodies/Institutions**	**Total**
1	Bilaspur	-	0.30	0.25	-	0.26	0.42	-	**1.23**
2	Chamba	-	0.40	0.35	-	0.50	0.60	-	**1.85**
3	Hamirpur	-	0.27	0.35	-	0.43	0.06	-	**1.11**
4	Kangra	-	0.50	0.40	0.88	0.48	1.30	-	**3.55**
5	Kinnaur	-	0.30	0.25	-	0.20	0.42	-	**1.17**
6	Kullu	0.99	0.40	0.30	1.97	0.42	0.99	-	**5.07**
7	Lahaul &Spiti	-	0.30	0.24	0.12	-	0.02	-	**0.68**
8	Mandi	5.90	0.50	0.40	1.99	-	1.78	-	**10.57**
9	Shimla	3.79	0.50	0.40	1.74	-	1.04	0.40	**7.86**
10	Sirmour	0.44	0.40	0.25	0.92	-	0.60	0.30	**2.91**
11	Solan	0.48	0.38	0.25	0.59	-	0.84	0.30	**2.84**
12	Una	1.96	0.30	0.26	0.60	-	0.44	0.27	**3.83**
(A) Total of Districts		**13.56**	**4.55**	**3.69**	**8.81**	**2.28**	**8.51**	**1.27**	**42.68**
Department									
1	HPPWD	-	40.00	-	-	-	-	-	**40.00**
2	Jal Shakti Vibhag	-	-	20.10	-	-	-	-	**20.10**
(B) Total of Departments.		**-**	**40.00**	**20.10**	**-**	**-**	**-**	**-**	**60.10**
Grand Total		**13.56**	**44.55**	**23.79**	**8.81**	**2.28**	**8.51**	**1.27**	**102.78**

15.3 National Disaster Response Fund 2024-25

In the financial year 2024-25, after recommendation of the high level committee from the Ministry of Home Affairs, GoI, a total of **Rs. 60.10 crore** have been received from the National Disaster Response Fund (NDRF), against the various memorandum of losses, submitted to Ministry of Home Affairs, Government of India. In addition to this, an amount of **Rs. 56.22 crore** was also lying as opening balance at the beginning of the financial year. Accordingly, the same was disbursed across various districts and departments to address critical needs stemming from disasters. The allocation breakdown reflects a strategic approach to tackle diverse challenges faced by different regions. Allocations to departments such as HPPWD and Jal Shakti indicate a focus on repair & restoration of the road infrastructure and water supply schemes, affected due to natural calamity. Furthermore, targeted assistance to sectors like agriculture, horticulture, and urban development underscores efforts to support livelihoods and enhance resilience in disaster-prone areas. This comprehensive allocation strategy highlights the government's commitment to effective disaster management and sustainable recovery efforts across the region and details of the fund under NDRF are given below: -

Detail of Funds allocated from SDRF to Various Districts & Departments during the Financial Year 2024-25 (In Crore)										
S. No	**Name of Distt.**	**2245-02-101-01-S00N-NP(OC) Cash dole (Immediate relief)**	**2245-02-106-01-S00N-NP(OC) Repairs and Restoration of Damaged Roads and Bridges**	**2245-02-109-01-S00N-NP(OC) Repairs & Restoration of Damaged Water Supply, Drainage and sewerage works**	**2245-02-111-01-S00N-NP(OC) Ex-Gratia Payments to Bereaved Families**	**2245-02-111-02-S00N-NP(OC) Death Due to State Specific Disaster**	**2245-02-113-01-S00N-NP(OC) Repair/Construction of Houses Assistance**	**2245-02-193-01-S00N-NP(OC) Assistance to Local Bodies and other Non-Govt Bodies/Institutions**	**2245-80-102-05-S00N-NP(OC) Capacity Building**	**Total**
1	Bilaspur	0.31	2.17	1.79	0.88	2.88	0.19	1.43	0.17	**9.81**
2	Chamba	3.94	3.50	2.50	0.28	6.91	0.64	6.51	0.14	**24.43**
3	Hamirpur	1.07	3.43	2.55	0.60	1.83	-	4.50	0.56	**14.55**
4	Kangra	5.05	7.00	4.50	6.39	2.93	1.78	10.55	2.34	**40.54**
5	Kinnaur	2.36	2.25	1.60	0.79	1.47	-	4.65	0.19	**13.31**
6	Kullu	5.74	4.36	3.93	0.97	3.58	0.80	2.75	0.59	**22.72**
7	Lahaul &Spiti	0.79	2.25	2.25	-	0.60	-	2.55	0.06	**8.50**
8	Mandi	5.00	5.50	5.25	4.40	5.81	2.38	7.40	1.55	**37.29**
9	Shimla	-	4.50	3.75	-	9.57	1.82	8.25	1.37	**29.25**
10	Sirmour	0.16	4.75	4.75	1.40	4.20	0.31	6.00	0.19	**21.77**
11	Solan	-	8.21	2.25	0.76	3.04	1.01	3.29	0.35	**18.92**
12	Una	0.63	4.20	4.24	1.04	3.63	-	6.25	0.01	**19.99**
Total of Districts		**25.06**	**52.12**	**39.35**	**17.52**	**46.44**	**8.93**	**64.13**	**7.53**	**261.09**
Department										
1	HPPWD	-	77.08	-	-	-	-	-	-	**77.08**
2	Jal Shakti Vibhag	-	-	60.00	-	-	-	-	-	**60.00**
3	HIPA	-	-	-	-	-	-	-	0.34	**0.34**
4	BSNL	-	-	-	-	-	-	-	3.26	**3.26**
5	HPSEBL	-	-	-	-	-	-	2.50	-	**2.50**
6	ABVIMAS	-	-	-	-	-	-	-	3.16	**3.16**
7	Panchayati Raj	-	-	-	-	-	-	-	0.89	**0.89**
8	Health	-	-	-	-	-	-	-	0.10	**0.10**
9	SDRF-Police	-	-	-	-	-	-	-	0.24	**0.24**
10	Fire/HG Services	-	-	-	-	-	-	-	1.08	**1.08**
11	Technical Edu.	-	-	-	-	-	-	-	0.86	**0.86**
Total of Deptt.		**-**	**77.08**	**60.00**	**-**	**-**	**-**	**2.50**	**9.93**	**149.51**
Grand Total		**25.06**	**129.20**	**99.35**	**17.52**	**46.44**	**8.93**	**66.63**	**17.46**	**410.59**

Detail of Funds allocated from NDRF to Various Districts & Departments during the Financial Year 2024-25 (In Crore)									
S. No	**Name of Distt.**	**2245-02-101-01-C00N-NP(OC) Cash dole (Immediate relief)**	**2245-02-106-01-C00N-NP(OC) Repairs and Restoration of Damaged roads and Bridges**	**2245-02-109-01-C00N-NP(OC) Repairs & Restoration of Damaged Water Supply, Drainage and sewerage works**	**2245-02-111-01-C00N-NP(OC) Ex-Gratia Payments to Bereaved Families**	**2245-02-111-02-C00N-NP(OC) Death Due to State Specific Disaster**	**2245-02-113-01-C00N-NP(OC) Repair/Construction of Houses Assistance**	**2245-02-193-01-C00N-NP(OC) Assistance to Local Bodies and other Non-Govt Bodies/Institutions**	**Total**
1	Bilaspur	-	0.30	0.25	-	0.26	0.42	-	**1.23**
2	Chamba	-	0.40	0.35	-	0.50	0.60	-	**1.85**
3	Hamirpur	-	0.27	0.35	-	0.43	0.06	-	**1.11**
4	Kangra	-	0.50	0.40	0.88	0.48	1.30	-	**3.55**
5	Kinnaur	-	0.30	0.25	-	0.20	0.42	-	**1.17**
6	Kullu	0.99	0.40	0.30	1.97	0.42	0.99	-	**5.07**
7	Lahaul &Spiti	-	0.30	0.24	0.12	-	0.02	-	**0.68**
8	Mandi	5.90	0.50	0.40	1.99	-	1.78	-	**10.57**
9	Shimla	3.79	0.50	0.40	1.74	-	1.04	0.40	**7.86**
10	Sirmour	0.44	0.40	0.25	0.92	-	0.60	0.30	**2.91**
11	Solan	0.48	0.38	0.25	0.59	-	0.84	0.30	**2.84**
12	Una	1.96	0.30	0.26	0.60	-	0.44	0.27	**3.83**
(A) Total of Districts		**13.56**	**4.55**	**3.69**	**8.81**	**2.28**	**8.51**	**1.27**	**42.68**
Department									
1	HPPWD	-	40.00	-	-	-	-	-	**40.00**
2	Jal Shakti Vibhag	-	-	20.10	-	-	-	-	**20.10**
(B) Total of Departments.		**-**	**40.00**	**20.10**	**-**	**-**	**-**	**-**	**60.10**
Grand Total		**13.56**	**44.55**	**23.79**	**8.81**	**2.28**	**8.51**	**1.27**	**102.78**

आपदाओं से रक्षा हेतु मानो एक सुझाव,
बेहतर पूर्व तैयारी से ही होता है बचाव।

Government of Himachal Pradesh
Department of Revenue
(Disaster Management Cell)
H.P. Secretariat Shimla- 2