



DISASTER MANAGEMENT PLAN

PANCHAYATI RAJ DEPARTMENT
Government of Himachal Pradesh

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1. ABOUT THE DEPARTMENT

Himachal Pradesh Panchayati Raj Act, 1952 enacted formulation of Panchayati Raj system in the state. A statutory form of the Panchayati Raj under the provisions of the same act was established in the year 1954. Prior to the enactment of the act, only 280 Gram Panchayats existed. However, after the enactment of the said Act, 466 Gram Panchayats were established in the year 1954 and the number of Gram Panchayats was increased to 638 during the year 1962. Amalgamation of the hilly areas of Punjab on 1st November 1966 raised the number of Gram Panchayats to 1695. In the merged area, a three-tier Panchayati Raj system was in existence under the provisions of Punjab Panchayat Samiti and Zila Parishad Act, whereas two-tier system was prevalent in this State. On 15th November 1970, a revised version of the act namely, Himachal Pradesh Panchayati Raj Act, 1968 was enacted to bring uniformity in the Panchayati Raj system of the old and the newly merged areas and the two-tier Panchayati Raj system was established throughout the State. After the abolishment of Nayaya Panchayats in the year 1977, the judicial functions were transferred to the Gram Panchayats. Subsequent to the enactment of Himachal Pradesh Panchayati Raj Act, 1968, the existing Gram Sabhas were reorganised/bifurcated from time to time and new Gram Sabhas/Gram Panchayats were established.

The department of Panchayati Raj envisages strengthening the three-tier system in the state with elected bodies at the Village, Block and District levels. It ensures greater participation of people and more effective implementation of rural development programmes. There will be a Gram Panchayat at the village level, a Panchayat Samiti at the block level and the Zila Panchayat at the district level.

1.1 ORGANIZATIONAL STRUCTURE

The department is functioning under the overall control of Minister-in-Charge at the Government level assisted by Secretary (RD & PR), Director-cum-Special Secretary, Joint Directors and Deputy Directors.

District Level

At the district level, District Panchayat Officer is responsible for implementation of Panchayati Raj Act and Rules, Audit and Inspection of Panchayati Raj Institutions (PRIs), Elections of PRIs and Training & Capacity Building of elected representatives of PRIs.

Block Level

At the Block level, Block Development Officer is the main catalyst who is supported by Superintendent, Junior Engineer, Lady Social Education Organizer, Social Education and Block Planning Officer, Senior Assistant, Computer Operator, Panchayat Secretaries, Gram Rozgar Sewaks and Lady Village Development Co-coordinator.

Panchayati Raj (PR) Setup

The setup of the Panchayati Raj in the state is given in table 1.

Table 1: Panchayati Raj Setup

| Sr. No | Name of the PRIs | Total Number | Total No. of Elected Representatives (ERs) | Average population |
|--------|-------------------|--------------|--|--------------------|
| 1. | Zila Parishads | 12 | 250 | 500000 |
| 2. | Panchayat Samitis | 78 | 1673 | 80000 |
| 3. | Gram Panchayats | 3226 | 26800 | 1900 |

Statistical Profile

Panchayati Raj Department has a vast network of institutions up to Gram Panchayat level as per details are given below:

Table 2: Statistical Profile of the Department

| Sr. No. | Name of district/ Zila Parishad | Number of Blocks/ Panchayat Samitis | Number of Gram Panchayats |
|--------------|---------------------------------|-------------------------------------|---------------------------|
| 1. | Bilaspur | 4 | 151 |
| 2. | Chamba | 7 | 283 |
| 3. | Hamirpur | 6 | 229 |
| 4. | Kangra | 15 | 748 |
| 5. | Kinnaur | 3 | 65 |
| 6. | Kullu | 5 | 204 |
| 7. | Lahaul-Spiti | 2 | 41 |
| 8. | Mandi | 10 | 469 |
| 9. | Shimla | 10 | 363 |
| 10. | Sirmour | 6 | 228 |
| 11. | Solan | 5 | 211 |
| 12. | Una | 5 | 234 |
| TOTAL | | 78 | 3226 |

Locations of important offices of the department are given in table 3.

Table 3: Locations of Offices

| Sr. No. | Office | Location |
|---------|--|--|
| 1. | Gramin Development and Panchayati Raj Department | Block No.27, SDA Complex, Kasumpti, Shimla, Himachal |
| 2. | Three Panchayati Raj Training Institutes | 1. Shimla 2. Thunag 3. Baijnath |
| 3. | District Panchayat Officer | District Headquarters |
| 4. | Block Development Officer | Block Headquarters |
| 5. | Executive Engineer (Development) | Shimla, Mandi and Dharamshala |
| 6. | Panchayat Secretary | Each Gram Panchayat |

Infrastructure Available

The infrastructure available with the department at various levels is given in table 4.

Table 4: Infrastructure Available with the Department at Various Levels

| | | |
|----|----------------------|---|
| 1. | State Headquarter | One Office Building and office equipment, furniture |
| 2. | District level | 24 office buildings and office equipment |
| 3. | Block level | 78 office buildings and office equipment |
| 4. | Gram Panchayat level | 3226 Gram Panchayat office buildings and office equipment |
| 5. | Divisional level | 3 PRI buildings and Hostel/ Guest Houses |
| 6. | Gram Panchayat | As developmental schemes are being executed by the Gram Panchayats, the tools like shovel, spear and grubbing mattock etc. are available at Gram Panchayat level. |

1.2 PURPOSE OF THE PLAN

Every department of the State Governments is legally mandated under Section 40 of Disaster Management Act 2005 to prepare its disaster management plan in accordance with the guidelines laid down by the State Disaster Management Authority. Disaster management is a cyclic strategy consists of prevention, mitigation, preparedness, response and recovery to confront the adverse impacts of disasters. Integration of emergency plans at all levels is prerequisite for efficient disaster management. The main objective of the Disaster Management Plan (DMP) is to reduce the risk level through preparedness at various levels.

1. DMP helps to bring together the information related to equipment, skilled manpower and critical supplies.
2. It helps to know the standard operating procedures of the department at the time of disaster.
3. Formation of DM Cell and manning the same with senior personnel drawn from key sections of the department.
4. To fix the role and responsibility of each and every officer for disaster preparedness.
5. It helps the Department to assess its own capacity in terms of available resources and get ready to mitigate any unexpected disaster effectively and to prevent the loss of human lives and property through preparedness, prevention & mitigation of disasters.
6. To assist the district administration, block administration and communities in developing compatible skills for disaster preparedness and management.
7. To disseminate factual information in a timely, accurate and tactful manner while maintaining necessary confidentiality.
8. To develop immediate and long-term support plans.
9. To have response system in place to face any eventuality.
10. Articulation of community needs for developing preparedness plan through community involvement and Panchayat ownership.

1.3 SCOPE OF THE PLAN

The DM Act 2005, categorized municipalities, Panchayati Raj institutions, town planning authority and Zila Parishad as "local authority". The functions of the local authority as prescribed under Section 41 of the DM Act, 2005 are as follows:

- Ensure that its officers and employees are trained for disaster management;
- 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;
- 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;
- Carry out relief, rehabilitation and reconstruction activities in the affected area in accordance with the State Plan and the District Plan.
- The local authority may take such other measures as may be necessary for the disaster management.

The scope of Disaster Management Plan for the Panchayati Raj Department is as follows:

- Identify the vulnerability of different parts of the State to different forms of disasters in context of the department;
- The measures to be adopted for prevention and mitigation of disasters;
- The manner in which the mitigation measures shall be integrated with the development plan and projects;
- The capacity-building and preparedness measures to be taken;
- The roles and responsibilities of different departments of the Government of the State in responding to any threatening disaster situation or disaster.

1.4 AUTHORITIES, CODES, POLICIES

Following are the specific acts and rules for the Department:

- H.P. Panchayati Raj Act, 1994
- PESA Act, 1996
- Constitution Provisions for Panchayats
- Devolution of Powers, Functions and Responsibilities to PRI's
- H.P. Panchayati Raj (General) Rules, 1997
- H.P. Panchayati Raj (General) Rules, 1997
- H.P. Panchayati Raj (Finance, Budget, Audit, works, Taxation and allowances) Rules, 2002
- H.P. Panchayati Raj (Election) Rules, 1994
- H.P. Panchayati Raj (Extension to Scheduled Areas) Rules, 2011
- H.P. Panchayati Raj (Service Guarantee) Rules, 2011

For the functions related to Disaster management following guidelines are to be followed:

- Disaster Management Act, 2005
- National Disaster Management Plan, 2016
- Himachal Pradesh Disaster Management Plan, 2012

- National Action Plan on Climate Change
- National Guidelines issued by the NDMA
- Guidelines and provision for State Disaster Response Fund (SDRF)
- Guidelines for administration of the National Disaster Response Fund (NDRF)

1.5 INSTITUTIONAL ARRANGEMENTS FOR DISASTER MANAGEMENT

The State Government has adopted the Disaster Management Act 2005 as enacted by the Govt. of India for providing an effective mechanism for Disaster Management in the State of Himachal Pradesh.

1.5.1 State Disaster Management Authority

As per clause b of sub-section (2) of Section 14 of the Disaster Management Act 2005, the Himachal Pradesh Disaster Management Authority under the chairperson of the Honourable Chief Minister was constituted on 1st June 2007 with the following persons as a member of the Himachal Pradesh Disaster Management Authority (HPSDMA):

Table 5: Members of State Disaster Management Authority

| S. No. | Member | Designation in HPSDMA |
|---------------|--|------------------------------|
| 1. | Hon'ble Chief Minister | Chairman |
| 2. | Hon'ble Revenue Minister | Co-Chairman |
| 3. | Chief Secretary | Member |
| 4. | Principal Secy. (Rev) | Member |
| 5. | Principal Secy. (Home) | Member |
| 6. | Principal Secy. (PWD) | Member |
| 7. | Principal Secy. (Health) | Member |
| 8. | Director General of Police | Member |
| 9. | Secretary/Additional Secretary (Revenue) | Member Secretary |

1.5.2 State Executive Committee (SEC)

As per sub-section (1) of section 20 of the Disaster Management Act 2005, the State Executive Committee under the chairmanship of Chief Secretary was constituted by the Government of Himachal Pradesh. SEC coordinates and monitors the implementation of the National Policy, the National Plan and the State Plan in addition to management of disasters in the state. It monitors the implementation of disaster management plans prepared by the departments of the Government of the State and District Authorities.

1.5.3 Advisory Committee of SDMA

As per Sub Section (1) of section 17 of the Disaster Management Act 2005, the chairperson of Himachal Pradesh State Disaster Management Authority nominates members of the Advisory Committee to assist the Authority and to make recommendations of different aspects of Disaster Management.

1.5.4 District Disaster Management Authority

As per Section 25 of the DM Act 2005, District Disaster Management Authority has also been constituted in every district of Himachal Pradesh which is chaired by the Deputy Commissioner of the district.

1.5.5 Disaster Management Setup in the Department

Joint Director of Department of Panchayati Raj is the nodal officer for the disaster management activities. In addition, the department is having 82 numbers of master trainers of disaster management. Master trainers provide training to the Elected Representatives and other officials of PRIs. Specialized training is given to the officials of the department by State Disaster Management Authority, District Disaster Reduction Cell and Himachal Pradesh Institute of Public Administration.

In case of an emergency, the department can be contacted on 0177-2623805/2623814.

1.6 PLAN MANAGEMENT (MONITORING, REVIEW AND REVISION)

The head of the department, officers at various levels and the nodal officer appointed for the disaster management by the department shall be responsible for all plans and implementation of plans and decisions taken from time to time for the same.

Implementation

For the process of implementation, the most important component of testing the DM Plan is to conduct quarterly mock drill or simulation exercise to identify the positive elements as well as gaps. Mock drill exercise is required to verify the level of preparedness and improve the coordination during emergencies. This must be based on past experiences and lessons learnt. Mock-drills help in evaluating response and improving coordination within the administration, with various departments, non-government agencies, other stakeholders and communities. They help in identifying the extent to which the plans are effective and also aid in revising these.

Monitoring

The Nodal officer of the department will be responsible for the proper monitoring and evaluation of the DM Plan. These drills enhance the ability to respond faster, better and in an organized manner during the response and recovery phase. The Department must ensure the following:

- i. Implementation of Plan within the department, its updation and quarterly mock drill
- ii. Implementation of all policies and plans of state government
- iii. Implementation of all NDMA guidelines
- iv. Implementation of all instructions of Revenue & Disaster Management Department
- v. Department should ensure that all schemes based on the parameters of mitigation, relief and rehabilitation to be identified and implemented
- vi. Implementation of all guidelines/instructions related to disasters from GoI and state govt.
- vii. All officers to be trained in Disaster Management

- viii. Implementation of National bylaws
- ix. Implementation of Fire-safety bylaws
- x. Implementation of all on-site plans of the respective industries
- xi. Establishment and functionality of Emergency Operation Center (EOC)

Purpose of monitoring and evaluation of Safety Plan is to determine

- i. adequacy of resources
- ii. co-ordination between various departments/ agencies
- iii. community participation
- iv. partnership with NGOs
- v. partnership with insurance companies

Roles & Responsibilities of Department in Monitoring and Evaluation of Plan:

1. Identify and ensure implementation of DRR into all developmental projects and schemes.
2. Monitor the functioning and adequacy of the resources present in the Department every six months.
3. Ensure that all the departmental plans are operational and checked by the respective nodal officers.
4. Monitor that all prevention, mitigation, preparedness and response measures are properly implemented.

The monitoring and evaluation could be done through various audits such as:

1. Electrical Safety Audits of critical infrastructure.
2. Fire-Safety Audits of critical infrastructure.
3. Enforcement of National Building Code in the construction of lifeline buildings.

Review and Update

This needs constant review and updation based on the following requirements:

1. Major changes in the operational activities and location
2. Valuable inputs from actual disasters
3. Lessons learnt from training
4. Inputs from mock drills/ simulation exercises
5. Lessons learnt from near-miss incidents
6. Changes in disaster profile
7. Technological developments/ innovations in identifying potential hazards
8. Changes in regulatory requirements
9. Updation of databases using GIS
10. Change in demography of surrounding population
11. Changes in geopolitical environment
12. Inventory of equipment in the Disarmament,
13. Updated Human Resources, their addresses and contact numbers.

2. HAZARD RISK AND VULNERABILITY ANALYSIS

2.1 RISK ASSESSMENT OF HIMACHAL PRADESH

The state of Himachal Pradesh is exposed to a range of natural, environmental and man-made hazards. Main hazards consist of earthquakes, landslides, flash floods, snowstorms, avalanches, GLOF, droughts, dam failures, fires, forest fire, lightning etc. Enormous economic losses caused due to natural disasters such as earthquakes, floods, landslide, avalanche, etc., erode the development gain and bring back economy a few years ago. Most of the fatalities and economic losses occur due to the poor construction practices, lack of earthquake-resistant features of the buildings and low awareness about disasters among people. In order to estimate and quantify risk, it is necessary to carry out the vulnerability assessment of the existing building stocks and lifeline infrastructure.

The physical vulnerabilities of Himachal Pradesh include the unsafe stocks of houses, schools, hospitals and other public buildings and infrastructure that may not withstand the shocks of powerful earthquakes. The economic vulnerabilities are mainly the productive assets like industries, hydropower stations, reservoirs, tourism facilities etc. located in hazard zones. Any disruption of these facilities due to disasters may badly affect the economy of the State. The socially vulnerable groups in the State, like most of the States, are the rural and urban poor, the vulnerable women, children, disabled, aged etc. who suffer an unequal burden of disasters. The delicate ecology and environment of the State further make it highly susceptible to the hazards of landslides, forest fires and flash floods. Most of these risks of disasters have accumulated over the years while new risks of disasters are created unwittingly with the process of development.

2.2 ASSESSMENT OF SECTORAL AND DEPARTMENTAL RISKS

Panchayat is the most important of all the local bodies. The 73rd and 74th constitutional amendments recognize Panchayati Raj institutions as institutions of self – government. They were put in place to decentralize and devolve financial and administrative powers through a tiered structure from the district downwards right up to the Gram Sabha level. In the case of urban self-government, the devolution is to be up to the ward level. These local bodies can be effective instruments in tackling disasters through hazard, vulnerability and capacity assessments, disaster management planning, early warning system, relief distribution, providing shelter to the victims, medical assistance, etc.

As such, the Department of Panchayati Raj is a key department positioned to play significant roles in the implementation of programme and activities from pre-disaster to the post-disaster phase.

Considering the proneness of the state towards different kinds of natural hazards, a broad district wise vulnerability of state is given in table 6.

Table 6: Hazard Wise Vulnerability of the Districts

| Sr. No. | Districts | Earthquake | Landslide | Floods | Avalanche | Forest Fire | Drought | Cloud Burst |
|---------|-----------|------------|-----------|--------|-----------|-------------|---------|-------------|
| 1 | Kangra | VH | L | M | M | H | H | M |
| 2 | Chamba | VH | VH | H | M | H | M | H |
| 3 | Hamirpur | H | L | L | - | VH | M | L |

| | | | | | | | | |
|----|--------------|----|----|---|----|----|---|----|
| 4 | Mandi | VH | H | H | - | VH | M | H |
| 5 | Kullu | VH | VH | H | H | H | M | VH |
| 6 | Bilaspur | H | M | L | - | VH | M | L |
| 7 | Una | H | L | H | - | M | M | L |
| 8 | Sirmour | H | L | L | - | VH | M | M |
| 9 | Solan | H | M | L | - | M | M | L |
| 10 | Kinnaur | H | H | H | VH | M | M | VH |
| 11 | Lahaul-Spiti | M | M | M | VH | M | M | H |
| 12 | Shimla | VH | H | H | M | H | M | H |

Earthquakes

Himachal Pradesh is highly seismic sensitive state as over the years a large number of the damaging earthquake has struck the state and its adjoining areas. Large earthquakes have occurred in all parts of Himachal Pradesh, the biggest being the Kangra earthquake of 1905. The Himalayan Frontal Thrust, the Main Boundary Thrust, the Krol, the Giri, Jutogh and Nahan thrusts are some of the tectonic features that are responsible for shaping the present geophysical deposition of the state. Chamba, Kullu, Kangra, Una, Hamirpur, Mandi and Bilaspur Districts lie in Zone V i.e. very high damage risk zone and the area falling in this zone may expect earthquake intensity maximum of MSK IX or more. The remaining districts of Lahaul and Spiti, Kinnaur, Shimla, Solan and Sirmour lie in Zone IV i.e. the areas in this zone are in high damage risk with expected intensity of MSK VIII or more.

Landslides

Landslides are one of the key hazards in the mountain regions particularly in the state of HP which cause damage to infrastructure i.e. roads, railways, bridges, dams, bio-engineering structures, and houses but also lead to loss of life, livelihood and environment. According to the analysis carried by TARU in 2015, 6824 villages of the state falls under high landslide risk zone whereas 11061 villages are in the medium risk zone. 824 villages are in the low-risk zone of landslides.

The state has a large mesh of highways and village roads comprising of 2178.988 km of a total stretch. Out of the total stretch of the State highway major portion falls in the High vulnerable zone that is 1111.552 km. The remaining stretch of 873.24 km falls in the moderate vulnerable zone.

Avalanches

According to the analysis carried by TARU in 2015, almost 1.2% area of Himachal Pradesh falls under the category of high avalanche probability zone, whereas 14.5% area has moderate probability. Rests of the region (i.e. 84.3%) have low to nil snow avalanche probability. However, 99% of avalanches do not have an adverse effect and work as a process of maintaining glacier mass balance and as a low-magnitude high-frequency mass movement process.

Floods/GLOFs

In Himachal Pradesh, flash flood due to cloudburst is common phenomena. The state experiences riverine flooding of varied magnitude almost every year and Sutlej and Beas are most vulnerable rivers. All the villages and property inside the floodplain and near close vicinity are in the vulnerable zone. According to TARU report (2015), about 59 villages in Beas basin and 280 villages in Sutlej basin are potentially at risk due to inundation caused by river flooding.

TARU investigated 11 existing lakes in the state. According to their analysis, out of 11 (eleven) glacier lakes, few glacier lakes in each basin are more vulnerable. According to modelling output and inundation maps of Chenab Basin, area falling under the vulnerable zone of Lake 8 and lake 7 are at utmost risk. In Ravi basin area falling under the vulnerable zone of Lake 5 and lake 6 are at maximum threat. Volume and area wise Glacier lakes in Sutlej basin are not so vulnerable when compared to glacier lakes of Chenab and Ravi basins. But numbers of villages falling within the inundated vulnerable zones are quite high in Sutlej basin.

Forest Fires

Forest fires are an annual and widespread phenomenon in the state. Most fires are witnessed during summers when the forests become littered with dry senescent leaves and twinges thereby increasing the probability of starting and spreading of fire. According to TARU report (2015), 11720 sq. Km area of the state comes under very high vulnerability for forest fires. 9891 sq. Km of falls under the high-risk zone of a forest fire.

Development of the rural areas is the key function of the Department of the Panchayati Raj. According to the report "Disaster Analysis & Management" 2016, published by the Department of Economics and Statistics, Himachal Pradesh, 17326 villages were affected by various disasters from 2007-2015 (Figure 1). The maximum numbers of 3496 villages were

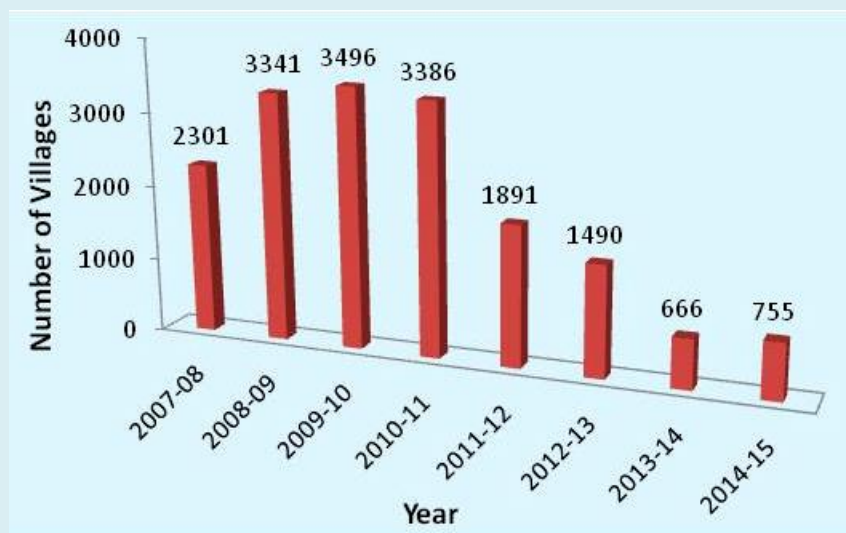


Figure 1: Number of Villages Affected by Various Disasters (2007-15)

affected during the year 2009-10, whereas only 666 villages were affected in the year 2013-14. For the same time period, 60816 numbers of the Kacha houses and 7513 numbers of the Pucca houses in the rural areas have been damaged by various disasters in the state (Figure

2). An amount of Rs. 909 Lakh and Rs. 282 Lakh were provided for repair/restoration partially damaged Pucca/Kacha houses and damaged/destroyed huts respectively (Figure 3). 2823 number of villages were disconnected from transportation facility during 2007-15. The maximum numbers of villages disconnected with transportation facility were 836 villages during the year 2013-14 out of which 67 percentage villages were reported from district Mandi. For a total number of 228 days in 2014-15, some village remained disconnected with transportation facility due to disasters (Figure 4).

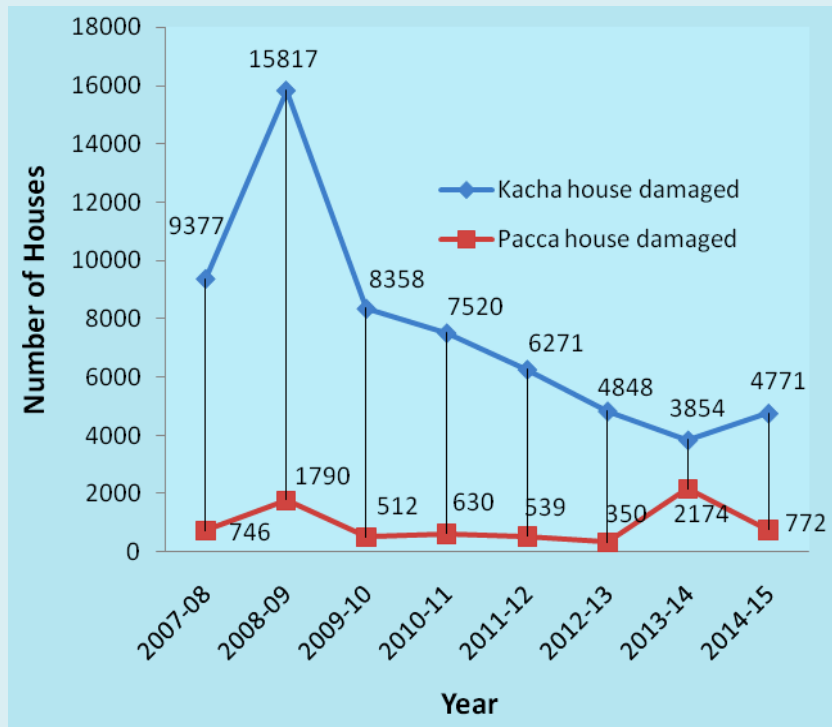


Figure 2: Number of Rural Houses Damaged by Various Disasters (2007-15)

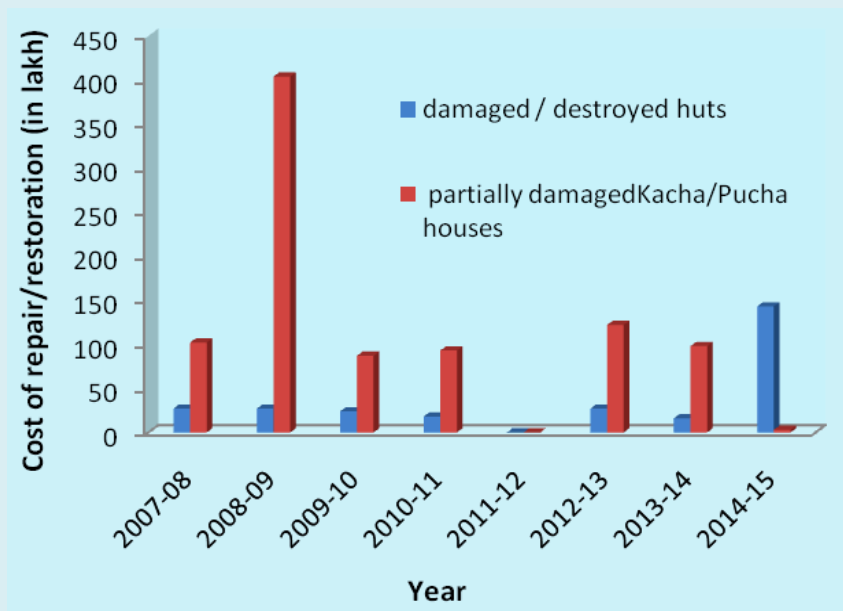


Figure 3: Cost of Repair/Restoration of Partially Damaged/Damaged Houses (2007-15)

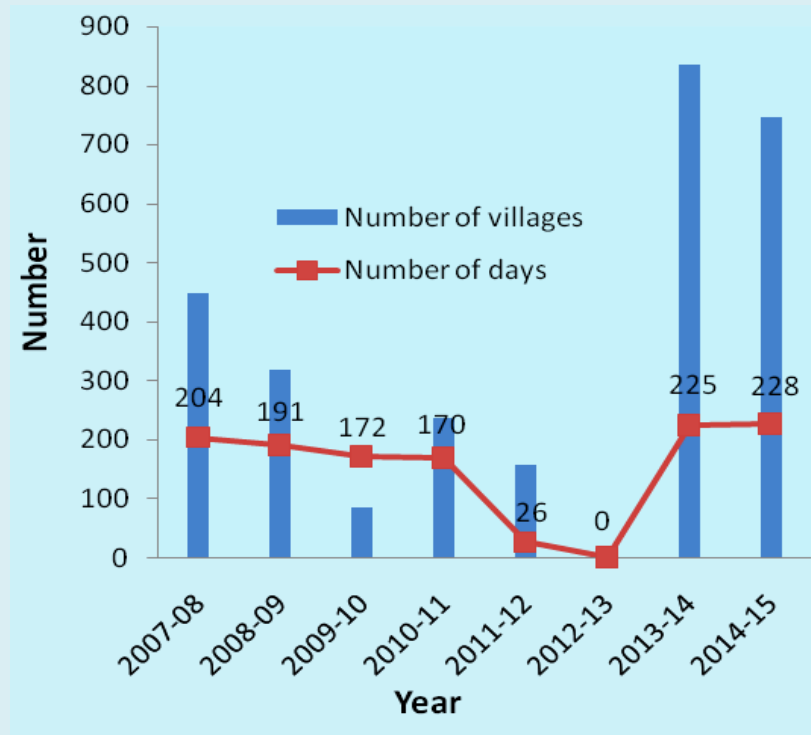


Figure 4: Disconnected Transportation Facility in Rural Areas

2.3 CAPACITY ANALYSIS OF DEPARTMENT

Various sectoral issues converge in urban and rural authorities – the municipalities and the Panchayati Raj institutions – that the people elect for their local self-governance. These authorities are closest to the communities and therefore provide a crucial role in implementing sectoral plans at the grassroots.

Therefore, Panchayati Raj department has a large pool of human resource comprising officials as well as elected representatives of PRIs. Rural Development & Panchayati Raj Department is one of the departments which have the communication network up to Gram Panchayat level through well-structured institutions.

2.4 GAPS IN EXISTING CAPACITY

Human resources of the department need training on management and mitigation of different type of disasters including relief, rescue and rehabilitation. Department also needs to establish a monitoring mechanism at the district level to check the Disaster management plans from Gram Panchayat level to the district level. For this, a pool of resource persons is needed in each district to help in preparation of safety plans. It will also be helpful in the auditing of these plans at grass root level to ensure the implementation of the concerns of risk reduction. Adequate financial powers need to be vested with the district, Block and Gram Panchayat level to manage the crisis and setting up of adequate safety measures in the premises, such as Disaster Preparedness Kit, Fire Extinguishers etc.

3. RISK PREVENTION AND MITIGATION PLAN

3.1 RISK PREVENTION

The whole landmass of the Himachal Pradesh is in Seismic Zone IV or in Zone V. An earthquake of magnitude 8 or above will lead to a large number of injuries, loss of life, and damage to educational infrastructure. If no action is taken right now, the problem will worsen due to population growth, construction of unplanned buildings and poor knowledge of construction agencies regarding geotechnical considerations in making risk free constructions.

Risk prevention is preventing the creation of new risks of disasters. Such risks may be created unwillingly by the Departments directly through public investments or indirectly through the facilitation of private investments that are vulnerable to the risks of disasters. Therefore, every investment should go through HRVA to check if new programmes, activities or projects have the potential to create new risks of disasters. If such investments cannot be avoided these must be protected by safeguards through adequate structural and non-structural prevention measures so that the benefits of investments are fully protected from risks of disasters. For example, assets of the department like offices, equipment's and others should be located at places which have lesser chances of getting affected by a hazardous event. Prevention can be understood as an activity to provide an outright avoidance of the adverse impact of hazards and related environmental, technological and biological disasters. Depending on social and technical feasibility and cost/ benefit considerations, investing in preventive measures is justified in areas frequently affected by the disaster. In the context of public awareness raising and education, prevention refers to attitude and behaviour leading towards a culture of prevention.

Disaster impact can be prevented for by strict adherence to the safety norms and practices given below:

1. Construction of earthquake resistance structure. The Bureau of Indian Standards (BIS) has been publishing seismic hazard maps of India since 1962.
2. Fire Safety Norms
3. Electrical Safety Norms
4. Conduct hazard hunt and secure hazards (structural and non-structural)
5. Preparation of Emergency Preparedness plans.
6. Basic disaster awareness and sensitization
7. Conduct of Mock drills to test the plans and organized response.
8. General awareness among people about the nature and intensity of the impact and resultant damages, losses and hardship caused by different types of disasters.

HP State Disaster Management Authority has made suggestions for mainstreaming actions for safety (Guidelines for Departments under Disaster Management Act, 2005) which are as under:

1. Establish clear and measurable objectives for seismic safety that can be implemented and supported by the community with the timeline.
2. Define the level of earthquake hazard and establish norms for buildings in each zone.
3. Establish programmes as long-term undertakings with a strong commitment to sustained effort rather than one-time action.

4. Adopt a multi-hazard approach to safety with earthquake mitigation strategies that complement and enhance disaster countermeasures for other hazards.
5. Employ advisory committees as needed to assure that policy and technical decisions are consistent, and to provide long-term independent support and evaluation to the State for the seismic safety effort. Besides this Sector, specific illustrations for DRR integration into development planning are given. Guidelines for the education department have been reproduced in the text box (National Disaster Management Authority Guidelines for departments under Disaster Management Act, 2005 and adopted by HP State Disaster Management Authority, 2012).

In the light of above-mentioned guidelines Prevention, Mitigation and Preparedness Plans are prepared to reduce the impact of disasters. The following will be undertaken to minimize the collateral damage usually caused by any disaster.

3.2 RISK MITIGATION

Risk mitigation is reducing the risks of disasters that are already there due to exposure of vulnerabilities to the hazards. Mitigation projects reduce the level of exposures or the depth of vulnerabilities or both through a combination of various structural and non-structural measures. Mitigation projects are always costly and therefore these have to be planned with proper Cost Benefit Analysis (CBA) to ensure that the benefits of the projects outweigh the costs. On the basis of its developmental responsibility, the department can liaise with other line departments and agencies for a coordinated mitigation approach.

Both structural and non-structural measures shall be taken as part of the mitigation plan. Structural mitigation refers to any physical construction to reduce or avoid possible impacts of hazards, which include engineering measures and construction of hazard-resistant and protective structures and infrastructure. Non-structural mitigation refers to policies, awareness, knowledge development, public commitment, information sharing which can reduce risk.

3.3 MATRIX OF HAZARD SPECIFIC MITIGATION MEASURES

| HAZARD | MITIGATION MEASURES | |
|-------------------|---|--|
| | STRUCTURAL | NON-STRUCTURAL |
| Earthquake | <ul style="list-style-type: none"> • Revision and adoption of model building bye-laws for the construction of departmental assets and houses/buildings under the department area. • Undertaking mandatory technical audits of structural designs of infrastructure under department by the competent authorities. • Skills for retrofitting and reinforcement of old and weak structures. • Repair deep plaster cracks in ceilings and foundations. Get advice from experts if there are signs of structural defects. | <ul style="list-style-type: none"> • Seismic hazard risk mapping pertaining to departmental assets. • Developing appropriate risk transfer instruments by collaborating with insurance companies and financial institutions. • Training to the local masons for construction of earthquake resistant structure. • Launching public awareness campaigns on seismic safety risk reduction and by sensitizing all stakeholders to earthquake mitigation measures. • Carrying out the vulnerability |

| | | |
|--------------------------------------|--|---|
| | | assessment of earthquake-prone areas and creating an inventory of resources for effective response. |
| Floods, Flash Floods and GLOF | <ul style="list-style-type: none"> • The department should demarcate the flood-prone area and no construction should be done there. • Open space for emergency construction of sheds etc. shall be left to the extent possible | <ul style="list-style-type: none"> • Flood mapping pertaining to departmental assets. • Mitigation plan should be in place to safeguard the departmental infrastructure/ inhabitants from the flash flood. |
| Landslides/Avalanches | <ul style="list-style-type: none"> • Risk audit of the department infrastructure at all levels. • Selecting alignments for construction of structures in rural areas which are less prone to landslides. • Activities to mitigate the landslide such as plantation, afforestation, check dams, contour trenches, contour bunds and gabion structures should be taken up in large scale under various rural development schemes specifically under IWMP and MGNERGA. | <ul style="list-style-type: none"> • Landslide hazard risk mapping. • Developing an inventory of the existing built environment in areas around existing landslides and in high hazard zones as per the LHZ maps and along strategic roads. |
| Fire/Forest fire | <ul style="list-style-type: none"> • Open space for emergency exit in the case of fire. Each building of the department is having emergency exits. • Fire extinguishers should be installed in all the office buildings and other Gram Panchayat buildings. Each office of the department is equipped with fire extinguishers. • Replacement of Electrical wires. | <ul style="list-style-type: none"> • In order to tackle the local/ forest fire, the Gram Panchayats will be sensitized and involved • Fire safety mock drill. |

3.4 FORECASTING AND EARLY WARNING

Forecasting and early warning help in mitigating the effects of disasters. The loss of life and property can be considerably reduced with an accurate and timely warning. Climate meteorological disaster such as flash floods/cloudburst/snow gauges would be strengthened so that Early Warning System can be effectively communicated to the vulnerable areas.

- i. A network of rain/snow gauges would be strengthened in the information.
- ii. Tie up with weather reports, Indian Meteorological Department would be strengthened so that Early Warning System can be effectively communicated to the vulnerable areas.
- iii. Networking would be done to communicate the Early Warning System to the vulnerable sections of the village.
- iv. Modern media would be utilized to communicate the Early Warning System.
- v. Information & Communication Technology tools need to be used for data receptions, forecasting and timely dissemination.

3.5 CAPACITY BUILDING PROGRAMME

The training module as well as training material on disaster management has been prepared by the department in consultation with the State Disaster Management Authority. The

training on disaster management to the technical staff posted in blocks has already been imparted and training to the elected representatives of Panchayati Raj Institutions is being imparted. It is proposed to impart training to all the officials posted in Gram Panchayats and all the Panchayati Raj Institutions representatives. Reading-material on disaster management should also be distributed.

3.6 LOGISTIC ARRANGEMENT

In case of any disaster, logistics play a vital role in the delivery of services. The provision of following items is pre-requisite for safety measures in institutions.

1. Necessary Items: Items in this head include Stretcher, ropes, torches, alternative communication system, Siren, Public addressable system and tents, etc.
2. Fixing Non- Structural Elements: It includes fixing of almirah and other material that can mitigate harm during an earthquake.
3. IEC material: Pamphlets, brochures or booklets that can be developed to distribute in the Catchment area of the institutions.

3.7 STRATEGIES FOR RISK PREVENTION AND MITIGATION

The strategies for risk prevention and mitigation for Panchayati Raj department are as following:

- Formation of DM Cell and manning the same with senior personnel drawn from key sections of the department.
- Advising elected representatives Zila Parishad, Panchayat Samiti, Gram Panchayat level to provide support in the implementation of Disaster Management related programme and activities
- Getting them oriented in supervision and monitoring of programme implementation.
- Advising them to make use of Gram Sabha to spread awareness about hazard and the need to get prepared and remain alert
- Orientation of the elected representatives in galvanizing larger community participation in disaster management
- As provided in the Panchayati Raj Act getting Disaster Management related Statutory Committee formed and activated.
- Identifying the resource gaps both physical and manpower and replenish the same through capacity building.

The Departments that do not usually have adequate budgetary allocations on risk mitigation may have to develop strategies for risk prevention and mitigation for short, medium and long-term basis. The National and State policies, Guidelines and Plans on disaster management shall provide strong justifications and support for such investments. The Departments should make use of these instruments for justifying their proposals for risk prevention and mitigation projects. Otherwise, the Departments have always the opportunities for mainstreaming disaster risk reduction in the existing programmes, activities and projects.

4. MAINSTREAMING DISASTER RISK REDUCTION IN DEVELOPMENT

Mainstreaming disaster management into the development planning process essentially means looking critically at each activity that is being planned, not only from the perspective of reducing the disaster vulnerability of that activity but also from the perspective of minimizing that activity's potential contribution to the hazard.

Every development plan in the state would require incorporating elements of impact assessment, risk reduction, and adoption the 'do no harm' approach. The measures such as urban planning and zoning, upgradation of building codes their enforcement, adoption of disaster-resilient housing designs and flood proofing, response preparedness planning, insurance and establishment of early warning systems generating community awareness, To make the future environment free from construction risk, To utilize the funds of the govt. to mitigate the vulnerability to any disaster, thus progressing towards physical, socio-economic and environmental vulnerability free era. To make sure that all the govt. plans should be integrated with disaster risk reduction programmes by integrating such elements in these plans so that disaster risk-free environment can be created.

Disaster Risk Reduction Initiatives:

- Mapping hazard-prone areas at block level in respect of earthquake, floods, landslides, avalanches, drought, flash flood and all other man-made & environmental hazards.
- Assigning appropriate land uses with low intensity of development.
- Devising appropriate zoning regulation.
- Implementation and enforcement of zoning regulations and building bye-laws.
- Vulnerability Assessment of buildings.
- Categorization of Buildings having high/ very high risk.
- Feasibility study for retrofitting of residential and lifeline buildings.
- Preparing a Framework for Re-Development.
- Adoption of villages and communities by private project proponents for disaster preparedness and capacity building.

4.1 MAINSTREAMING DRR INTO DEVELOPMENT

The best way to ensure that DRR is mainstreamed into the development projects is to integrate this into the Project Cycle Management (PCM). PCM is the process of planning, organizing, coordinating, and controlling of a project effectively and efficiently throughout its phases, from planning through execution, completion and review to achieve the pre-defined objectives at the right time, cost and quality. There are six phases in PCM - programming, identification, appraisal, financing, implementation and evaluation. The first three phases are the initial planning phases of the project which provide key entry points for mainstreaming.

Mainstreaming DRR into development activities has three purposes:

- To make certain that all the development programmes and projects that originate from or funded by Government are designated with evident consideration for potential disaster risks to resist hazard impact.

- To make certain that all the development programmes and projects that originate from or are funded by Government do not inadvertently increase vulnerability to disaster in all sectors: social, physical, economic and environment.
- To make certain that all the disaster relief and rehabilitation programmes and projects that originate or are funded by Government are designed to contribute to development aims and to reduce future disaster risk.

4.2 MAINSTREAMING DRR INTO DEVELOPMENT SECTORS

DRR refers to the measures used to reduce direct, indirect and intangible disaster losses. The measures may be technical, economic or social. DRR encompasses the two aspects of a disaster reduction strategy: ‘mitigation’ and ‘preparedness’. Mitigation refers to measures aimed at reducing the risk, impact or effects of a disaster or threatening disaster situation, whereas, preparedness refers to the measures undertaken to ensure the readiness and ability of a society to forecast and take precautionary measures in advance of imminent threat, and respond and cope with the effects of a disaster by organising and delivering timely and effective rescue, relief and other post-disaster assistance. ‘Mainstreaming DRR’ describes a process to fully incorporate the concerns of disaster preparedness, prevention and mitigation into development and post-disaster recovery policy and practice. It means completely institutionalizing DRR within the development and recovery agenda. Accordingly, the following broad objectives of mainstreaming DRR into Development will be encouraged:

- Ongoing schemes and projects of the Ministries and Departments of GoI and State Governments, as well as of all Government agencies and Institutions, including Public Sector Undertakings, will be selectively audited by designated government agencies for ensuring that they have addressed the disaster risk and vulnerability profiles of the local areas where such schemes and activities are being undertaken.
- At conceptualization or funding stage itself, the development schemes will be designed with consideration of any potential hazardous impact associated with it and incorporate measures for mitigation of the same.
- All the development schemes will be pragmatic, incorporating the awareness of local disaster risk and vulnerability, and ensuring that the schemes have addressed these concerns and included specific provisions -for mitigating such disaster concerns; and
- DDMA will ensure that all the disaster relief and recovery programmes and projects that originate from or are funded by any agency satisfy developmental aims and reduce future disaster risks.

The approach to mainstreaming disaster risk reduction (DRR) into development matrix is given in table 7.

Table 7: Mainstreaming Disaster Risk Reduction (DRR) into Development Matrix

| Activities of the Department | Mainstreaming DRR Actions |
|---|---|
| To strengthen the Panchayat Raj Institutions as units of self-governance, capable of planning and implementing developmental schemes, promoting community life, generating employment opportunities and providing justice. | <ol style="list-style-type: none"> 1. Earthquake and flood resistant technology in the construction of houses. 2. The Panchayati Raj department must take all the DRR measures before drawing the Resettlement policy framework, where the land is acquired for the welfare of panchayat. |

4.3 APPROACHES FOR MAINSTREAMING

There are three suggested approaches of mainstreaming disaster management into the development process and disaster management plans-

1. Structural Measures
2. Non- Structural Measures
3. Disaster Mitigation Projects

Based on the suggested approaches the specific action would involve:

- Adopting a Sectoral approach and identification of Key sectors for mainstreaming.
- Within each sector, key programmes/projects would have to be identified.
- This has to be followed by identifying the entry points within the programmes/projects for integration.
- It would also involve work at the policy and planning level be it national, state and district level.
- It would also need a close coordination with State Planning Commission and Finance Department for promoting DRR into all development programmes and involve working with different departments to mainstream DRR into the Departmental Plans and policies.
- Advocacy would have to be done for allocation of dedicated budget for DRR within the departmental plans.
- Further appropriate guidelines for different sectors would have to be developed and for it to be effective and sustainable, it has DRR would have to be ultimately integrated to the development plans of various departments at the district and sub-district levels.

4.4 Illustrations of Mainstreaming DRR into ongoing Flagship Programmes

Some of the following flagship programmes for Government of India could be used as an entry point for mainstreaming the DRR in development plans.

| S. No. | Name of Scheme | Strategies for DRR Integration into the Flagship Programmes |
|--------|----------------|---|
| | MGNREGS | <ul style="list-style-type: none">• Utilization of MGNREGS funds to reduce the vulnerability of Panchayat vis a vis natural hazards such as landslide, drought, forest fire, cloudburst, flash floods, earthquake etc.• Giving priority to those works which reduce the vulnerability of area over the works which enhances the vulnerability of the area to natural hazards.• Identified works are available which take into account the hazard profile and offer continuous employment opportunities in the event of disasters to ensure livelihood security in the event of disasters.• Works which reduce disaster risk are given priority in plans-such as local mitigation works etc.• Any other implementable suggestion within the ambit of the scheme. |

| | | |
|--|--------------------------------------|--|
| | Pradhan Mantri Awas Yojana | <ul style="list-style-type: none"> • The inclusion of such measures like the application of Hazard resistant design in the construction of houses. • Development of model design for houses which could be easily referred to by DRDAs at the district level and used for community awareness depending on the geographical location. • Capacity Building of Rural masons on safe construction. • Capacity Building of PRIs. • Community Awareness. • Capacity Building Programmes for DRDA officials on Disaster Risk Reduction issues. |
| | Soil and Water Conservation | <ul style="list-style-type: none"> • Incorporating DRR in this scheme can involve risk assessment of places which are more prone to landslides. |
| | Rajiv Gandhi Micro-Irrigation Scheme | <ul style="list-style-type: none"> • Drought management training • Hazard Resistant design for irrigation infrastructure |
| | Swachh Bharat Mission | <ul style="list-style-type: none"> • Disaster resilience construction of Rural sanitation related works, such as individual household latrines, school toilet units, Anganwadi toilets |

5. DISASTER PREPAREDNESS

5.1 PREPAREDNESS PLAN

Preparedness is usually regarded as comprising measures which enable governments, organizations, communities and individuals to respond rapidly and effectively to disaster situations. The preparedness measures are:

1. Develop a disaster management plan for the department and update it annually.
2. Analyse the training needs of the department's personnel, which include its officials and elected representatives of Gram Panchayat, Panchayat Samitis and Zila Panchayat and organise training with the help of HIPA.
3. Conduct gram Panchayat level mock drills as part of preparedness.
4. Assist in establishing village disaster management teams.
5. Prepare mechanism for proper solid waste management, disposal of waste and removal of debris in shelter and relief camps, feeding centres and affected rural areas.
6. Prepare for sanitation operations in view of post-flood situations.
7. Ensure availability of tractor trolleys and other required equipment for the same.
8. Plan to provide building/guest house/dharamshalas/chaupals at different locations to establish control room, first aid and medical post or shelters during an emergency.
9. Prepare a database of private providers of tents, tarpaulin sheets, poles, kanats, cooking utensils, polythene bags, shrouds and other essential items that could be used for a community kitchen and cremation and burial. The formulation & maintenance of valid, up to date counter disaster plans. Action Plan for mitigation of the risk of each hazard will be prepared and maintained.
10. The provision of warning systems. Each office building and other Gram Panchayat buildings will indicate the safe exit and evacuation plan on each floor.
11. Emergency communications. Important emergency telephone numbers like a fire station, health institution, police/ home guards etc. should be displayed in each building.
12. Public education and awareness.
13. Training programs, including exercises and tests.

5.2 ESTABLISHMENT OF CONTROL ROOM

The control room at State, district and block level will be notified which will work under the control of designated Nodal Officers. The proposed composition of control rooms and designation of nodal officers is as under:

1. State level

The designated nodal officers will be assisted by the Engineering wing of the department.

2. District Level

The Deputy Director-cum-Project Officer, District Panchayat Officer will be the nodal officers who will be assisted by Assistant Engineer, Zila Parishad.

3. Block Level

The Block Development Officer will be the nodal officer who will assist by Junior Engineer, Social Education & Block Planning Officer and Panchayat Inspector.

Roles and responsibilities of the nodal officers:

Roles and responsibilities of the nodal offices are as under:

1. Act as the focal point for disaster management activities of the department. The department may ensure that he/ she has the mandate to work immediately without waiting for directions from the higher authorities. This will save time.
2. Provide his/ her contact and alternate contact details to State Disaster Management Authority / District Disaster Management Authority and Revenue Department, State and District Emergency Operation Centre, all line departments and agencies.
3. Accountable to any communication/ actions related to disaster management of the department.
4. Take lead to prepare the department disaster management plan, Emergency Support Function (ESF) plan and Standard Operating Procedure.
5. Constitute the Quick Response Team (QRT) in the department as per the need and organize training for members.
6. Help the department to procure the equipment necessary for search and rescue, first aid kits and disburse the same to Incidence Response Teams and for the department if required.
7. Provide regular information on disaster or task assigned to him to State Emergency Operation Center/ Revenue Department during and after disasters in consultation with the department head.
8. Attend Disaster management meeting, training, workshops or any related programme on behalf of the Department.
9. Identify an alternate nodal officer and build his/her capacity.
10. As per the need of the department, set up a control room and assign another official (s) for control room duty.
11. Identification and staffs for deployment on-site operation centres (on-site control room during a disaster)
12. In consultation with the department, make an arrangement of an alternative communication system for the department.
13. Mobilize resource for disaster response activities as per the resource inventory put in the department Disaster Management plan if it is needed by the department or other line departments.
14. Organize regular awareness programmes in the department.
15. Organize the periodic mock drills at least twice a year as per the suitability of the department and update the plans at all levels and ensure participation of the department in mock drills or other agencies and other departments.
16. To have liaison with other departments and functionaries working in the field of Disaster Management

6. RESPONSE PLAN

Providing public safety, minimizing damages to property and protecting public lives are the primary goals of disaster response plan. The Disaster Management Act, 2005 requires that the State Disaster Response Plan (SDRP) incorporates the results of vulnerability and risk assessment of the state. The response plan includes 'plans, procedures and identification of support functions and the agencies that will be responsible for the support functions. The response plan also provides a framework for the standard operating procedures to be further developed by the state government departments. At the time of situations arising out of disasters and hazards, villages, GPs and Blocks are worst affected; the first line of defence and response mechanism at this level will be developed. If the response required exceeds available resources at the local levels, support will be sought in the order: Villages/GPs/Blocks with the district and districts with the state. Quick response teams (QRTs) will be constituted at State and district level and Institutional level to deal with any disaster.

6.1 ROLE AND RESPONSIBILITY OF THE STATE INCIDENT RESPONSE TEAM

1. To coordinate with State Disaster Management Authority, National Disaster Management Authority and other concerned Government departments.
2. Visit the spot and assist the District Response Team for pre-disaster planning
3. To prepare a status report regarding the disaster.
4. To facilitate execution of orders for declaring the disaster.
5. Assess the staff and another logistic requirement for field operation and monitor effectiveness.
6. To attend training and refresher courses for how to respond after receiving any information related to the disaster.
7. QRT should be familiarized with the Standard Operating Procedure/Emergency Support Functions /Disaster Management plan for the department as well as State Disaster Management Plan and their roles and responsibilities.
8. Quick Response Team should prepare and update the Disaster Management Plan periodically by incorporating the views of stakeholders for the effectiveness of the plan.
9. To ensure availability of funds at District level to meet contingency expenses.
10. To develop the media messages so as to update the status of disaster mitigation and response work.
11. To monitor and guide the District Response Teams.
12. To maintain an inventory of all related guidelines, procedures, action plans, district maps and contact numbers.
13. The department needs to plan to depute officials for the purpose or to plan new recruitment needed.

6.2 ROLE AND RESPONSIBILITY OF THE DISTRICT QUICK RESPONSE TEAM

1. To coordinate with Department of Rural Development and Panchayati Raj and District Disaster Management Authority.
2. To activate Disaster Management Plan.
3. To procure required resources as per incident specific action plan.
4. To manage the overall response activities in the field.
5. To deploy adequate staff for the response and monitor its effectiveness.

6. To attend training and refresher courses to know how to respond after receiving any information related to the disaster.
7. Quick Response Team should be familiarized with the Standard Operating Procedure/Emergency Support Function/Disaster Management plan at District and State level of the department as well as State Disaster Management plan and their roles and responsibilities.
8. Quick Response Team should prepare and update the district Disaster Management Plan periodically by incorporating the views of stakeholders for the effectiveness of the plan. To develop the media messages to update the status of disaster mitigation and response work.
9. To collect and store disaster-related information for post-incident analysis.
10. To visit the affected areas to assess the extent of the damage.
11. A proposal may be sent to the State Headquarter for deputation of officials or for new recruitment.

6.3 ROLE AND RESPONSIBILITY OF THE INSTITUTIONAL INCIDENT RESPONSE TEAM

1. Preparation of the disaster management plan.
2. Evaluation of the Disaster Management Plan.
3. Carrying out the mock drill twice a year.
4. Updating of the plans at regular intervals (at least once a year and after any significant disaster) to ensure that the plan is workable.
5. Look into the structural safety requirements of the institution for various hazards (earthquake, fire, floods, cyclone, etc.)
6. During a disaster, the Quick Response Team shall coordinate with District Control Room/Emergency Operating Centers.
7. To help and monitor the working of different teams engaged in relief operation during an emergency in the Institution.
8. Media management to be carried out by the Quick Response Team.
9. Mobilizing relief and external support in case necessary Identify separate shelter places for the victims in case necessary.
10. Formation of Institutional safety teams.

6.4 DELEGATION OF AUTHORITY

At the district level, quick response in case of any disaster is hampered due to want of earmarked funds and power to spend. Therefore, adequate financial powers need to be delegated to Deputy Directors' and DAOs to facilitate rescue and relief measures in case of any disaster. The expenses should be made from district fund and can be reimbursed later on after sanctioning of funds from Relief Commissioner.

6.5 ROLE OF NON- GOVERNMENTAL ORGANIZATIONS, VOLUNTEERS AND COORDINATION THEREOF

There is a wide network of community-based organizations and voluntary agencies in State. Regular meetings will be held at more frequent intervals to face any untoward incident. Such coordination meetings can be held at district level under the Chairmanship of the Deputy Commissioners.

The role of the voluntary agencies and the Community Based Organizations which operate at the grass root level is crucial. Such organizations can be helpful in motivating and mobilizing community participation for ensuring uninterrupted functioning during disasters as they have close linkages with the local population and flexibility in the procedural matter. Some Non-Governmental Organizations equipped with disaster management experts are already active and conducting mock drills and fixing non-structural elements.

6.6 SYSTEM OF ASSESSING THE DAMAGE

The Block Development Officers will keep all the record of the damage of their institutions. The amount of loss and damage will be submitted to the heads at the district level for onward compilation and transmission to District Collector in the prescribed format.

6.7 ROLES, RESPONSIBILITIES AND COORDINATION

The role of Response Team is crucial and need to be performed sincerely and within the shortest possible time of occurrence of a disaster.

| Item | Response System | | | |
|------------------------------|---|--|---|---------------------------------|
| | Preparedness | Pre- Disaster | During Disaster | Post Disaster |
| District Control Room | <ul style="list-style-type: none"> • Setting up control room and ensure round the clock functioning • Assigning responsibilities to district Incidence Response Team members • Vehicle arrangement • Coordination with Non-Governmental Organizations • Ensure functioning of warning and communication systems • Ensure Mock Drill | <ul style="list-style-type: none"> • Ensure Mock Drill Monitor functioning of District Control Room • Coordination with officials of Block Control Room and District Administration • Assigning duties to Non-Governmental Organizations • Holding District Disaster Management Committee meetings | <ul style="list-style-type: none"> • Dissemination of information regarding status of the disaster and submission of report to Deputy Commissioner | Report to State Control Room |
| Block Control Room | <ul style="list-style-type: none"> • Setting up control room and ensure round the clock functioning • Assigning responsibilities to block Response | <ul style="list-style-type: none"> • Ensure Mock Drill Monitor functioning of Block Control Room • Coordination with officials of | <ul style="list-style-type: none"> • Dissemination of information regarding status of the disaster and submission of report to District Control Room | Report to District Control Room |

| | | | | |
|-------------|---|---|---|------------------------------|
| | <ul style="list-style-type: none"> team members • Vehicle arrangement • Coordination with Non-Governmental Organizations | <ul style="list-style-type: none"> District Control Room and Panchayati Raj Institutions • Assigning duties to Non-Governmental Organizations • Holding Block Disaster Management Committee meetings | | |
| DDMC | <ul style="list-style-type: none"> • Assigning responsibilities to all concerned officials at Block/ Panchayat level | <ul style="list-style-type: none"> • Arrangement of all important telephone numbers | <ul style="list-style-type: none"> • Coordinate with district Administration on regular interval | Report to State Control Room |

7. DISASTER RECOVERY AND RECONSTRUCTION

7.1 DISASTER RECOVERY

The process of recovery from small-scale disasters is usually simple. Recovery operations get completed almost simultaneously with the response, relief and rehabilitation. However, in medium and large disasters involving widespread damages to lives, livelihoods, houses and infrastructure, the process of recovery may take considerable time as the relief camps continue till houses are reconstructed. Often intermediary shelters have to be arranged before the permanent settlements are developed.

7.2 DISASTER RECONSTRUCTION

Post-disaster construction provides an opportunity for 'Building Back Better' so that the reconstructed assets are able to withstand similar or worse disasters in future. It is difficult to anticipate such reconstructions as these would depend on the types and location of the disasters and the nature reconstructions to be made, which would be known only after the disasters.

Reconstruction is time and funds absorbing phase of disaster management. The construction department will be persuaded to include disaster resilient features in new constructions. Reconstruction programmes will be within the confines and the specification as laid down by the by the government known as National Building Codes.

7.3 NORMS OF RELIEF

Norms to be followed during emergency situations are described as following:

- 1. Health:** After evacuating the patients and officials, First Aid treatment will be given to the affected and seriously injured will be given to the affected and seriously injured will be referred for medical treatment. In the post-disaster scenario, in community shelters, overcrowding, inadequate quantity and quality of water, poor environmental and sanitary conditions, inadequate shelter and food supply leads to increased risk of spreading diseases and epidemics. Under such circumstances, the medical response has to be quick and arrangement of medical resources warrant special attention. The Pradhan's of the concerned Gram Panchayats will contact the health officials/volunteers for assistance.
- 2. Water:** Supply of water is invariably affected by natural disasters. Availability of safe drinking water becomes doubtful, particularly in hydro-meteorological disasters. A severe earthquake also damages existing pipeline water supply. To meet out the scarcity of water in emergencies, natural sources of water near these institutions need to be frequently cleaned and made ready as a backup plan for the sources of water. Besides this, Irrigation & Public Health Department will be contacted to supply an adequate amount of water for drinking, cooking and personal hygiene.
- 3. Shelter:** Public building and homes of the people may get damaged or destroyed in a severe natural calamity. Community shelters or tents have to be arranged for the stay of affected people till the normalcy. Priority should be given to acquiring tents

donated by the community. District headquarter may be contacted for the supply of tents from district stores.

7.4 MINIMUM STANDARDS OF RELIEF

In case of a severe earthquake or another natural calamity, the homes of people may be destroyed along with public buildings at the mass level in the State. After completing search and rescue operation, an attempt will be made for the arrangement of medical treatment of the injured, food and water. For this mobilization of food items, medicines, teaching aids, tents and clothes from the departmental store will be arranged by the district headquarter as per their requirement. The relief material to the remote part of the State will need air dropping. It can be done with the help of air force helicopters or airport authorities. Department will depend upon District Disaster Management Authority. for the lifting of relief material to such places. Gram Panchayats need to ensure that routine deliverables should start at the earliest. This can only be done when staff at Gram Panchayats is self-sufficient and relying on their own resources to ensure a safer environment.

Time matrix: For Disaster management practitioners first 72 hours are most critical for mounting search and rescue efforts, saving lives of trapped victims, providing medical support to the injured. Attention thereafter shifts towards specific relief and recovery efforts such as providing temporary shelter, food and medicine also continue to be given in first 72 hours. The relief activities can be categorized into three groups:

1. **Short-term activities:** All the initiatives taken within 72 hours of the onset of disasters.
2. **Medium-term activities:** Steps taken within 3 days to 3 months are of medium activities.
3. **Long-term activities:** Initiatives were taken for more than 3 months time after the onset of disasters.

7.5 REHABILITATION PLAN

A very important task before the Gram Panchayat is to create a safe learning environment at the earliest. This plan will provide all the human and material resources till the rehabilitation of displaced people. A close relationship between government and community actions will be established till the restoration of basic and alternative means of livelihood of their families. Works for improving disaster preparedness or restoration of roads or restoration of other essential public infrastructure including flood control and protection works are permissible under Mahatma Gandhi National Rural Employment Guarantee Act. Therefore, these works will be taken up by the Gram Panchayats for rehabilitation. Besides this, infrastructure such as roads, water supply, sewerage, school, health centres will be rehabilitated on priority.

8 FINANCIAL ARRANGEMENT

Section 40(2) of the Disaster Management Act stipulates that every department of the State Department while preparing the DM Plan, shall make provisions for financing the activities proposed therein. Normally the funds required for risk assessment and disaster preparedness must be provided in the budgets of every concerned department. Such funds are not very sizeable and departments should be able to allocate such funds within their normal budgetary allocations. This budget can be used to work upon the already suggested mitigation and preparedness measures, as response and relief are already being taken care of by the SDRF and NDRF.

Funds for disaster response, relief and rehabilitation are provided in State Disaster Response Fund (SDRF) which the departments can access without any problem. In case such funds are not adequate the additional demands can be projected by the State Government which can be met from the National Disaster Response Fund (NDRF).

The marginal costs involved in mainstreaming disaster risk reduction in existing programmes, activities and projects of the departments are also not very sizable and the departments may not find it difficult to arrange such funds. The department plans will ensure in the existing schemes and future activities to make its buildings safer and disaster resilient.

There is a need of funds to strengthen the existing facilities both at State level as well as District level under the caption “Disaster preparedness” which is not available with the department. As per the guidelines issued by the Ministry of Finance, Government of India vide Memo No.55(5)/PF-II/2011 dated 06/01/2014 for 10% flexi-funds within the Centrally Sponsored Schemes (CSS) to be utilized, inter-alia, for disaster mitigation, restoration and innovation activities in the event of natural disasters.

I. Standard Operating Procedure (SOP)

The department will organize proper training of officers and staff so that they can help in rescue, evacuation and relief work at a different stage of the disaster. The disaster management committees at different levels will be kept ready so that they can move to disaster site/affected the area on short notice. The Standard operating procedure shall be followed during normal times, warning stage, disaster stage and post-disaster stage. Standard Operating. Procedures for the Panchayati Raj Department are listed below:

Action before Disaster:

- Formation of DM Cell and manning the same with senior personnel drawn from key sections of the department.
- Advising elected representatives Zila Parishad, Panchayat Samiti, Gram Panchayat level to provide support in the implementation of Disaster Management related programme and activities
- Getting them oriented in supervision and monitoring of programme implementation.
- Advising them to make use of Gram Sabha to spread awareness about the hazard and the need to get prepared and remain alert:
- Orientation of the elected representatives in galvanizing larger community participation in disaster management
- As provided in the Panchayati Raj Act getting Disaster Management related Statutory Committee formed and activated.

Action during Disaster:

- Advise Panchayat Representatives to provide support to search & rescue team, persuade people to evacuate and help in identification of victims & relief distribution.

Action after Disaster

- Advise Panchayat Representatives to provide support in the resettlement of the people in a planned manner.

II. Mock Drill Reporting Format

| <u>Emergency Mock Drill Reporting Format</u> | | |
|---|--|---|
| Person Completing the Format/ Designation | | Date |
| | | |
| Time Alarm Sounded: | Time Drill Concluded: | Time to Evacuate |
| | | |
| Type of Drill | Notification / Alert Method | Weather Conditions |
| <input type="checkbox"/> Fire / Evacuation <input type="checkbox"/> Bomb Blast <input type="checkbox"/> Shelter-in-Place <input type="checkbox"/> Earthquake <input type="checkbox"/> Medical Emergency <input type="checkbox"/> Other: | <input type="checkbox"/> Bell or Buzzer <input type="checkbox"/> Enhanced Alert System <input type="checkbox"/> Phone <input type="checkbox"/> Voice Notification <input type="checkbox"/> Siren | <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain and wind <input type="checkbox"/> Hot/Cold |
| Participants | | Situation at Start of Drill: |
| <input type="checkbox"/> Authorities <input type="checkbox"/> Safety Personnel <input type="checkbox"/> Employees/Staff <input type="checkbox"/> HOD <input type="checkbox"/> Fire Department <input type="checkbox"/> Emergency Medical Services <input type="checkbox"/> Police <input type="checkbox"/> Red Cross <input type="checkbox"/> Other | | <input type="checkbox"/> Before Lunch Hours <input type="checkbox"/> During Lunch Hours <input type="checkbox"/> After Lunch Hours <input type="checkbox"/> Peak working Hours |
| Participants have previously trained on emergency procedures. | | Employees previously trained on emergency procedures this year? |
| <input type="checkbox"/> Yes <input type="checkbox"/> No | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Incident Command System as per IRS used? | | Incident Commander/Designation |
| <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| Problems Encountered | | |

| | |
|---|---|
| <ul style="list-style-type: none"> <input type="checkbox"/> Congestion in hallways <input type="checkbox"/> Alarm not heard <input type="checkbox"/> Employees unsure of what to does/don't <input type="checkbox"/> Staff unsure of responsibilities / response <input type="checkbox"/> Unable to lock doors <input type="checkbox"/> Windows left open <input type="checkbox"/> Doors left open <input type="checkbox"/> Lights left on <input type="checkbox"/> Personnel not accounted <input type="checkbox"/> Personnel run towards lifts <input type="checkbox"/> Lifts are shut down. <input type="checkbox"/> Difficulties with evacuation of disabled personnel. | <ul style="list-style-type: none"> <input type="checkbox"/> Communication problems <input type="checkbox"/> Phone problems <input type="checkbox"/> Chaos <input type="checkbox"/> Long time to evacuate building <input type="checkbox"/> Personnel not serious about drill <input type="checkbox"/> Improper or unavailable supplies <input type="checkbox"/> Confusion <input type="checkbox"/> Doors or Exits blocked <input type="checkbox"/> Delay in Medical response <input type="checkbox"/> Delay in Fire service response <input type="checkbox"/> Delay in Security response <input type="checkbox"/> Interagency miscommunications <input type="checkbox"/> Command, Control & Coordination problems <input type="checkbox"/> Other: |
| Mitigation / Plans for Improvement | |
| <ul style="list-style-type: none"> <input type="checkbox"/> Additional training for emergency response teams members. <input type="checkbox"/> Additional staff training <input type="checkbox"/> Address need for additional equipment/resources <input type="checkbox"/> Improved emergency supplies | <ul style="list-style-type: none"> <input type="checkbox"/> Cooperative planning with responders <input type="checkbox"/> Revised emergency response procedures <input type="checkbox"/> Other: |

III. Contact Details

| Contact details of the Officers of Panchayati Raj Department | | | |
|--|-------------------|----------------|---------------|
| Designation | Tel. Phone | Fax. No | Mobile |
| Principal Secretary | 0177-2880723 | 0177-2624899 | 94182-30009 |
| Director-cum- Ex-Officio Secretary | 0177-2623820 | 0177-2624792 | 98166-98162 |
| Joint Director-cum-Deputy Secretary | 0177-2623814 | 0177-2629106 | |
| Joint Director | 0177-2623805 | 0177-2629106 | 94186-26511 |
| Deputy Director | 0177-2623805 | 0177-2629106 | 94180-31773 |
| Supdt. Grade-I | 0177-2623805 | 0177-2629106 | 94184-25251 |
| Supdt-II | 0177-2623805 | 0177-2629106 | |
| Law Officer | 0177-2623805 | 0177-2629106 | 94181-57864 |
| Core Faculty HIPA | - | - | 8987641180 |
| Contact detail of Chairman of Zila Parishads | | | |
| Chairman, ZP , Bilaspur | 01978-224070 | 01978-223871 | 9418332184 |
| Chairman, ZP, Solan | 01792-221851 | 01792-223756 | 7831000009 |
| Chairman, ZP, Shimla | 0177-2658919 | 0177-2657028 | 94180-41705 |
| Chairman, ZP, Hamirpur | 01972-224681 | 01972-224681 | 94180-55000 |
| Chairman,ZP,Chamba | 01899-222111 | 01899-222204 | 98057-11577 |
| Chairman,ZP, Kullu | 01902-224193 | 01902-222306 | 98059-68666 |
| Chairman,ZP, Kinnaur | 01786-222530 | 01786-222530 | 98059-74271 |
| Chairman,ZP, Una | 01975-225737 | 01975-226007 | 94183-91760 |
| Chairman,ZP, Sirmour | 01702-224911 | 01702-223378 | 98167-08007 |
| Chairman, ZP, Kangra | 01892-222289 | 01892-223209 | 94186-34621 |
| Chairman , ZP, Mandi | 01905-225633 | 01905-223025 | 94182-03877 |
| Chairman,ZP, Lahul-Spiti | 01900-222457 | 01900-222457 | 94182-84099 |
| Contact detail of District Panchayat Officers and Principal PRTIs | | | |
| District Panchayat Officer, Bilaspur | 01978-223871 | 01978-223871 | 94180-84980 |
| District Panchayat Officer, Solan | 01792-223756 | 01792-223756 | 98164-96252 |
| District Panchayat Officer, Sirmour | 01702-222272 | 01702-222378 | 94180-12862 |
| District Panchayat Officer,Shimla | 0177-2657028 | 0177-2657028 | 94180-92805 |
| District Panchayat Officer, Hamirpur | 01972-222407 | 01972-222407 | 98053-82235 |
| District Panchayat Officer, Kullu | 01902-222306 | 01902-222306 | 89888-55600 |
| District Panchayat Officer, Chamba | 01899-222204 | 01899-222204 | -NA- |
| District Panchayat Officer, Kinnaur | 01786-222290 | 01786-222530 | 94180-46686 |
| District Panchayat Officer, Una | 01975-226007 | 01975-226007 | 94184-75736 |
| District Panchayat Officer, Kangra | 01892-223209 | 01892-223209 | 94184-58740 |
| District Panchayat Officer, Mandi | 01905-235543 | 01905-223025 | 94180-50054 |
| District Panchayat Officer, Lahul-Spiti | 01900-222457 | 01900-222457 | 94180-66485 |
| Principal, PRTI Bajjnath | 01894-263041 | 01894-263041 | 94180-89799 |
| Principal, PRTI Thunag | 01907-257588 | 01907-257588 | 94186-38529 |
| Principal, PRTI Mashobra | 0177-2740227 | 0177-2740227 | 94180-20909 |