

# PREPARATION OF DISASTER MANAGEMENT PLANS BY VARIOUS DEPARTMENTS OF GOVERNMENT OF HIMACHAL PRADESH

## MODEL TEMPLATE

**Government of Himachal Pradesh-UNDP  
Project on Enhancing Institutional and Community Resilience**

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**Model Template for  
Preparation of Disaster Management Plans by various Departments of  
Government of Himachal Pradesh**

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## CONTEXTS

Himachal Pradesh is one of the most multi-hazard prone States of India. The State faces various types of natural hazards like the geological hazards of earthquake and landslide; the hydrological hazards of riverine, flash floods and glacial lake outburst floods; the meteorological hazards of storms, hailstorms and cloudbursts; and the climatological hazards of droughts, forest fire, cold wave and avalanche. The frequency and intensity of most of the hydro-meteorological hazards are compounded by the climate change and its impacts on agriculture, horticulture, human settlements and human and animal health. Further the State routinely faces manmade hazards like transport related hazards, industrial hazards, stampedes and man-animal conflicts.

1.2 All these hazards have the potentials to create risks of disasters when exposed to vulnerable physical, economic, social and environmental conditions. 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, hydel power 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 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.

1.3 In order to prevent the creation of new risks, reduce the existing risks of disasters, and manage the actual and potential events of disasters the State Government of Himachal Pradesh has announced for the first time ever its State Policy on Disaster Management in 2011 in accordance with the National Policy on Disaster Management 2009. The vision of this Policy is to “build a safe and disaster resilient Himachal Pradesh by developing a holistic, proactive, technological driven, and community based strategy through a culture of prevention, mitigation, preparedness and response”.

1.4 The Government of Himachal Pradesh has further released its comprehensive State Disaster Management Plan in 2012. The Plan covers the entire cycle of disaster risk management – the pre-disaster phases of prevention, mitigation and preparedness as well as post-disaster tasks of response, recovery and reconstruction. The Plan is based on the premise that disaster management

is not the job of a single department or agency of the government, it is the joint responsibility of all the departments and agencies, what is described as ‘whole of government’ approach to disaster management. Further, disaster management is not the business of government alone, it is everybody’s business. The Plan has therefore provided a framework for participation and contribution of every stakeholder – the departments and agencies of the State Government; the specialized agencies of the Government of India; the scientific, technical and academic institutions; the business and the corporate sector; the media; the civil society; and above all the communities living in the rural and urban areas of the State.

1.5 Among all these stakeholders the primary roles and responsibilities of disaster management vest with the departments and agencies of the State Government. Therefore the State Disaster Management Plan has defined these responsibilities in detail for disaster risk reduction as well as for emergency support functions.

1.6 Every department of the State Governments is also 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. The Act stipulates that while preparing the plan, every Department shall make provisions for financing the activities specified therein<sup>1</sup>. The plan shall be reviewed and updated annually<sup>2</sup> and a report on the status of implementation of the plan has to be furnished to the State Executive Committee.<sup>3</sup>

1.7 Only four Departments of the State Government of Himachal Pradesh have prepared their Disaster Management Plans.<sup>4</sup> These are the Public Works Department, the Department of Higher Education, the Town and Country Planning Department, and the Home Guards. There are considerable scopes for improving these plans. Considering the slow pace in the development of the Departmental DM plans, the Government of Himachal Pradesh has decided that 30 Departments of the State Government shall prepare their Departmental DM plans. The State Government has further decided that a Model Template of Departmental DM plans shall be developed to provide guidance to the Departments for the preparation of their respective Plans.

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<sup>1</sup> Section 40(2)

<sup>2</sup> Section 40(1)(b)

<sup>3</sup> Section 40(3)

<sup>4</sup> Public Works Department, Department of Higher Education, Town and Country Planning Department, HP Home Guards

## DIVERSE LANDSCAPES OF DEPARTMENTS

The 30 Departments selected for preparation of their Departmental DM plans have jurisdictions over a wide range of issues that may broadly be classified in five main sectors – regulatory sector, productive sector, infrastructure sector, social sector and environment sector - while the sixth sector is the urban and rural local governance where multiple sectors converge.

	<b>Sectors</b>	<b>Departments</b>
1.	Regulatory sector	<ol style="list-style-type: none"> <li>1. Police Department</li> <li>2. Department of Civil Defence, Home Guards &amp; Fire Services</li> </ol>
2.	Productive sector	<ol style="list-style-type: none"> <li>1. Department of Industries</li> <li>2. Department of Agriculture</li> <li>3. Department of Horticulture</li> <li>4. Department of Animal Husbandry</li> </ol>
3.	Infrastructure sector	<ol style="list-style-type: none"> <li>1. Public Works Department</li> <li>2. Irrigation &amp; Public Health Department</li> <li>3. Electricity Department</li> <li>4. Department of Energy</li> <li>5. Department of Transport</li> <li>6. Himachal Road Transport Corporation</li> <li>7. HP Tourism and Civil Aviation department</li> </ol>
4.	Social sector	<ol style="list-style-type: none"> <li>1. Education Department (Higher)</li> <li>2. Education Department (Elementary)</li> <li>3. Health and Family Welfare Department</li> <li>4. Department of Women &amp; Child Development</li> <li>5. Department of SC, OBC &amp; Minority Affairs.</li> <li>6. Department of Tribal Development</li> </ol>
5.	Environment sector	<ol style="list-style-type: none"> <li>1. H.P Forest Department</li> <li>2. Environment, Science and Technology Department</li> </ol>
6	Other sectors	<ol style="list-style-type: none"> <li>1. Food, Civil Supplies &amp; Consumer Affairs.</li> <li>2. Information and Public Relation Department</li> <li>3. H.P Printing &amp; Stationary Department</li> <li>4. Department of Language, Art and Culture</li> </ol>
7.	Multi-sectoral local governance	<ol style="list-style-type: none"> <li>1. Urban Development Department</li> <li>2. Town &amp; Country Planning Department</li> <li>3. Himachal Pradesh Urban Development Authority</li> <li>4. Department of Panchayati Raj</li> <li>5. Rural Development Department</li> </ol>

2.2 The role of the regulatory sector is mostly limited to disaster preparedness and disaster response, while most of the remaining sectors have responsibilities for pre-disaster prevention, mitigation and preparedness as well as post-disaster response recovery and reconstruction.

2.3 For the productive sectors the government creates the regulatory and enabling environment, but the main drivers are the private sectors – the farmers, growers, manufacturers and the corporate. Therefore for the government the tasks of regulation is to ensure that gains of development in agriculture, horticulture and industries in both organized and non-organized sectors are protected from the risks of disasters and that the process of development does not create any new risks of disasters.

2.4 Infrastructure plays key role in the economy and therefore critical infrastructure like road, power, transport, supply chain, civil aviation etc must be developed with standards and specifications that are resilient to the shocks of natural hazards like earthquake, landslides, flood etc. Public sector traditionally remained the main investor on infrastructure, but with the liberalization of the economy innovative public-private-partnerships are taking place in many areas, which makes it imperative for the concerned departments to make sure that such investments are safe and these are not inadvertently creating new risks of disasters. Substantial investments have taken place over the years in tourism sector in both public and private sectors contributing significantly to the economy of the State. Such investments should also be protected from the risks of disasters.

2.5 Education, health, women and child development, welfare of the scheduled caste, tribes, minorities etc. are important social sectors that play key role for developing capacities of people, particularly those belonging to the vulnerable segments of society. There are empirical evidences that vulnerable sections of society bear unequal burden of disasters. Therefore integration and further mainstreaming of disaster risk reduction in the programmes, projects and activities in these sectors can reduce the vulnerabilities and further harness their capacities for building resilience of the communities.

2.6 Environment and forests are connected with disasters in a two-way process. While on the one hand these offer important eco-system services that provide natural shields against disasters, on the other hand disasters have damaging impacts on environment that take considerable time to rebuild and regenerate. The Disaster Management Plan in environment and forests sector has to factor both these processes.

2.7 The Departments like Food, Civil Supplies and Consumer Affairs, Printing and Stationary, Information and Public Relations and Language, Art and Culture may not be easily fitted in a particular sector, but each of these departments have roles to play before, during and after disasters that should be

factored in the preparation of their respective disaster management plans.

2.8 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 crucial role in implementing sectoral plans at the grassroots.

## PRINCIPLES AND APPROACHES

Each Department has its unique and specific role and responsibilities that must be the focus in their respective Disaster Management Plans. However there are common principles and approaches that should be followed by all the Departments for the preparation of their respective Departmental DM plans

### Principles

3.2 The four common principles that should be followed are as follows:

- a) The Plan must conform to the mandates of the Disaster Management Act
- b) The Plan must be anchored firmly with the State Policy on Disaster Management
- c) The Plan must follow the guidelines issued by the National Disaster Management Authority and the State Disaster Management Authority
- d) The Plan must be built on the action points prescribed for the Departments in the State Disaster Management Plan.

### Mandates of Disaster Management Act

3.3.1 Disaster Management Act 2005 has prescribed (a) the process to be followed for the preparation and implementation of the Departmental DM Plans; (b) the broad elements of such plans, (c) and the responsibilities of the departments of the State Government.

3.3.2 **Process of departmental DM Plan:** Section 40(1) of the Act stipulates that every department of the State Government shall prepare its disaster management plan which shall be in conformity with the guidelines laid down by the State Disaster Management Authority. This plan shall be reviewed and updated annually<sup>5</sup>. A copy of the plan shall be furnished to the State Disaster Management Authority<sup>6</sup> and a status report regarding the implementation of the plan shall be furnished to the State Executive Committee.<sup>7</sup>

3.3.3 **Elements of departmental DM Plan:** Section 40(1) (a) of the Act provides that the plan shall lay down the following five elements:

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<sup>5</sup> Section 40(1)(b)

<sup>6</sup> Section 40(1)(c)

<sup>7</sup> Section 40(3)



- (i) The types of disasters to which different parts of the State are vulnerable;
- (ii) Integration of strategies for the prevention of disaster or the mitigation of its effects or both with the development plans and programmes by the department;
- (iii) The roles and responsibilities of the department of the State in the event of any threatening disaster situation or disaster and emergency support function it is required to perform;
- (iv) Present status of its preparedness to perform such roles or responsibilities or emergency support function; and
- (v) The capacity-building and preparedness measures proposed to be put into effect in order to enable the Ministries or Departments of the Government of India to discharge their responsibilities under section 37.

3.3.4 Under section 37 of the Act every Ministry or Department of the Government of India is similarly mandated to prepare its disaster management plan. Linking the departmental DM plan of Government of India with that of the State Government, as provided in section 40 of the Act, means that Ministries or Departments of Government of India have to take cognizance of the capacity-building and preparedness measures proposed by the counterpart departments in the State. This is a significant provision of the Act that has generally been overlooked. The Departments of the State Government are therefore advised to take benefit of this provision of law so that it can work in tandem with the Government of India.

3.3.5 **Financing of departmental DM Plan:** In order that the departmental DM Plans does not remain a formal requirement of law, section 40(2) of the Act provides that every department of the State Government, while preparing the plan shall make provisions for financing the activities specified therein.

3.3.6 **Responsibilities of the departments of the State Government:** Section 39 of the Act has defined in detail the responsibilities of the departments of the State Government. Every department shall:

- a) take measures necessary for prevention of disasters, mitigation, preparedness and capacity-building in accordance with the guidelines laid down by the NDMA and the SDMA;
- b) integrate into its development plans and projects, the measures for prevention of disaster and mitigation;
- c) allocate funds for prevention of disaster, mitigation, capacity-building and preparedness;
- d) respond effectively and promptly to any threatening disaster situation or disaster in accordance with the State Plan, and in accordance with the guidelines or directions of the NEC and the SEC;

- e) review the enactments administered by it, its policies, rules and regulations with a view to incorporate therein the provisions necessary for prevention of disasters, mitigation or preparedness;
- f) provide assistance as required by the NEC, the SEC and District Authorities, for-
  - i) drawing up mitigation, preparedness and response plans, capacity-building, data collection and identification and training of personnel in relation to disaster management;
  - ii) Assessing the damage from any disaster;
  - iii) Carrying out rehabilitation and reconstruction;
- g) make provision for resources in consultation with the SDMA for the implementation of the District Plan by its authorities at the district level;
- h) make available its resources to the NEC or the SEC or the District Authorities for the purposes of responding promptly and effectively to any disaster in the State, including measures for
  - i) providing emergency communication with a vulnerable or affected area;
  - ii) transporting personnel and relief goods to and from the affected area;
  - iii) providing evacuation, rescue, temporary shelter or other immediate relief;
  - iv) carrying out evacuation of persons or live-stock from an area of any threatening disaster situation or disaster;
  - v) setting up temporary bridges, jetties and landing places;
  - vi) providing drinking water, essential provisions, healthcare and services in an affected area; and
- i) take such other actions as may be necessary for disaster management.

3.3.7 This comprehensive charter of responsibilities of the departments of State Government makes it imperative that these must also be incorporated into the departmental DM Plans of the State Government.

### **State Policy on Disaster Management**

3.4.1 The Government of Himachal Pradesh has released the *State Policy on Disaster Management* in 2011. Aligned with the *National Policy on Disaster Management 2009*, the State Policy has the vision to ‘build a safe and disaster resilient Himachal Pradesh by developing a holistic, proactive, technology driven, and community based strategy through a culture of prevention, mitigation, preparedness and response’.

3.4.2 Structured in 11 chapters, the State Policy provides general guidance on almost every aspect of disaster management that should be taken into consideration by the Departments for the preparation of Departmental DM plans. There are specific guidance for some of the selected Departments like

Police<sup>8</sup>, Civil Defence, Fire Services and Home Guards<sup>9</sup>, Health<sup>10</sup>, Education<sup>11</sup>, Animal Husbandry<sup>12</sup>, Information and Public Relations<sup>13</sup> etc.

3.4.3 The State Policy further outlines the specific responsibilities of the Departments and other agencies for the performance of eight different functions of disaster management, namely:

- a) Institutional arrangements,
- b) Disaster prevention and mitigation
- c) Early warning system,
- d) Disaster preparedness and response,
- e) Human resource development,
- f) GO-NGO coordination and
- g) Resource and knowledge management.

The specific action to be taken by the Departments of the State Government is provided in a matrix attached as Annexure-I with the Policy. These must be factored in the Departmental DM plans of all concerned Departments.

3.4.4 The State Policy further devotes a paragraph on 'Role of State Government Departments at State and District Level' highlighting the importance of integrating disaster risk reduction in development.

The departments will inter alia integrate into its development plans and projects, the measures for prevention of disaster and mitigation, allocate funds for prevention of disaster, mitigation, capacity-building and preparedness, respond effectively and promptly to any threatening disaster situation or disaster in accordance with the DMP and direction issued by the SEC or the DDMA, review the enactments administered by it, its policies, rules and regulations with a view to incorporate therein the provisions necessary for prevention of disasters, mitigation or preparedness, provide assistance, as required, by the National Executive Committee, the State Executive Committee and District Authorities, for drawing up mitigation, preparedness and response plans,

## **Disaster Management Guidelines**

3.5.1 The National Disaster Management Authority has issued nearly two dozen national guidelines for management of various types and aspects of

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<sup>8</sup> Para 4.14.1

<sup>9</sup> Para 4.15.1

<sup>10</sup> Para 6.8.1, 8.8.1, 8.9.1

<sup>11</sup> Para 10.6.1, 10.7.1

<sup>12</sup> Para 8.10.1

<sup>13</sup> Para 6.17.1

disasters.<sup>14</sup> Many of these guidelines, particularly those related to management of earthquakes, flood, drought, landslides and snow avalanches, medical preparedness, seismic retrofitting of buildings etc are extremely relevant in the contexts of Himachal Pradesh. The concerned departments are well advised to factor these guidelines for the preparation of their respective DM Plans.

3.5.2 The Himachal Pradesh State Disaster Management Authority has issued general *Guidelines for Various Departments under the Disaster Management Act 2005*. Issued in 2012 the Guideline covers various issues, such as Training, Departmental DM Plans, Mainstreaming Disaster Risk Reduction in Development, School and Hospital Safety, and Disaster Preparedness. The brief guidelines for the departments for the preparation of DM Plans are as under:

- a) The departments and other agencies of the State Government would draw their DM Plans on the basis of State DM Plan;
- b) The plans of the departments/agencies would depend upon the role they have in the management of Emergency Support Functions;
- c) The DM Plans would contain all aspect of disaster management as enshrined in the definition Section 2(e) of the Disaster Management Act e.g. prevention, mitigation, preparedness, capacity building, response, etc.
- d) The Guidelines issued by the NDMA for the management of various disasters and the roles assigned to various departments would be taken into consideration while preparing the plans.
- e) The Plans would be regularly improved and updated(at least once a year);
- f) Nodal officers at all levels would be appointed to activate and implement the plans;
- g) Financial provisions would be made within the normal programmes, schemes, and budgetary allocation of the department to implement the provisions of the DM Plan.

### **State Disaster Management Plan**

3.6.1 The Himachal Pradesh State Disaster Management Plan 2012 (SDMP) provides a blueprint for the implementation of the State Policy on Disaster Management. The specific actions to be taken by each Department and agency of the State Government are detailed in three specific sections of this comprehensive document. These are as follows:

- a) Nodal Department in respect of natural and manmade hazards

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<sup>14</sup> A list of the National Guidelines on Disaster Management is provided in Annexure-II. These can be accessed at NDMA website <http://ndma.gov.in/en/ndma-guidelines.html>

- b) Roles and responsibilities of Departments/Agencies for disaster response
- c) Standard Operating Procedures for responsible Departments/agencies
- d) Disaster Specific response Plans
- e) Emergency Support Functions of Departments.

**3.6.2 Hazard-wise Nodal Department:** Section 3.1 of Chapter-3 of the SDMP has identified the Nodal Departments in respect of each of 23 natural and manmade hazards of the State. The nodal departments are responsible for coordination with concerned Ministries/ Departments/ Agencies of Government of India for early warning and other support.

No.	Hazard	Nodal Department
Natural Hazards		
1.	Earthquake	Department of Environment, Science & Technology
2.	Landslides	Public Works Department
3.	Floods, Cloud Bursts	Irrigation and Public Health Department
4.	Drought	Agriculture Department
5.	Wind Storms	Revenue Department
6.	Hail Storms	Agriculture and Horticulture Department
7.	Extreme Cold	Revenue Department
8.	Snow Storms	Revenue Department
9.	Avalanche	Department of Environment, Science & Technology
10.	Forest Fire	Forest Department
Manmade Hazards		
11.	Road Accidents	District Administration
12.	Civil Aviation Accidents	General Administration Department
13.	Boat Capsizing	MPP and Power Department (HSEB)
14.	Stampede	Home Department
15.	Terrorism and Crisis events	Home Department
16.	Industrial Disasters	Department of Industry
17.	Chemical Disasters	Department of Environment, Science & Technology
18.	Biological Disasters	Health and Family Department
19.	Radiation Disasters	Department of Environment, Science & Technology
20.	Nuclear Disasters	Department of Environment, Science & Technology
21.	Dam/ Reservoir Burst	MPP and Power Department (HSEB)
22.	Fire	Fire Department
23.	Mine Collapse/ mishaps	Department of Industry (Geology Wing)

**3.6.3 Roles and responsibilities of nodal departments:** Section 6.5 of Chapter-6 on Response Plan has outlined the roles and responsibilities of the nodal departments and agencies. This table of the SDMP does not seem to have been formulated with due care. First, the nodal responsibilities mentioned in this table do not exactly match the responsibilities mentioned in the previous table. For example, the nodal department for landslides is the Public Works Department, whereas in the table below Department of Industries is shown as

the primary agency for landslides and mudslides. Further, it may be noted that the responsibilities listed are not limited to the specific response functions of the Departments but also their roles and responsibilities for disaster mitigation, capacity building and preparedness. In this regard the Departments are therefore well advised to seek clarifications from the Revenue Department which works as the Secretariat of the SEC and SDMA. It is expected that such mistakes shall be corrected in the revised SDMP that is currently under preparation.

<b>Departments</b>	<b>Nodal Responsibilities</b>
Department of Revenue and Relief	Overall coordination, implementation of the EOC activities, documentation and reporting to the SEC
Department of Public Works	Primary agency for maintenance of public infrastructure, identifies safer places, assess physical damage, identify safer routes, and provide necessary reconstruction and rehabilitation support. Ensure hazard resistant features as per all building by laws and maintain all national and state roads.
Department of Town and country planning	Primary agency responsible for evolving policy and ensuring land use, hazard wise zonation for safe construction sites and hazard resistant features are in all building by laws.
Department of Urban development	Main agency to ensure repair and maintenance in the urban areas.
Himachal Pradesh Housing and Urban Development Authority	One of the executing agency for constructions under recovery and rehabilitation plans. Responsible for ensuring the mitigation measures while construction or reconstruction of its projects in the state.
Department of Education	The department will prepare curriculum related to disaster management and conduct training programme for teachers and children. The department will coordinate with the local authority and arrange for mock drills, search and rescue drills, awareness campaigns, volunteer teams, ensure maintenance and retrofitting of school buildings/school safety.
Department of Technical Education and Vocation Training	Be the primary agency responsible to conduct certificate training programmes for construction workers, create a pool of qualified masons, and ensure safe construction practices in construction work.
Department of Home	Be the primary agency responsible for the management of urban and rural fire, nuclear disasters, serial bomb blasts and festival related disasters, and also for security, evacuation, emergency assistance, search and rescue, first aid, law and order, communication, shifting of people to relief camps, traffic management and burial work of dead bodies.
Department of Forest	Be the primary agency responsible for the management of forest Fires. During response and recovery support SEOC with resources. Identification of prone areas, mitigation activities, research and assessment.
Department of Environment, Science and Technology	The primary agency responsible for avalanches, snow storms, environmental and climate change hazards, GIS mapping for effective disaster management. Primary agency of research and

	development on climate change impact and adaptation activities for the State. Provide inputs to the State Disaster Mitigation Committee for new technologies and also for awareness programs.
Department of MPP and Power	Primary agency responsible for Dam failures / bursts and electrical disasters and fires. It will ensure power supply for public facilities such as hospital, police stations, telecommunication building and meteorological stations. Coordination with Hydro Power Projects.
Department of Information Technology	Overall responsible for the fail proof communication, maintenance of IT infrastructures and HIMSWAN, maintain communication and satellite links.
Department of Irrigation and Public Health	Primary agency responsible for Floods, Water supply and Drought, Issue flood warnings, identification of safer places, construction of embankments, arrangement of boats and pump sets, swimmers and divers and communication.
Department of Health	Be the primary agency responsible for “Biological Disasters and Epidemics”. First aid, health and medical care, ambulance arrangements, preventive steps for other diseases, establishment of health camps, providing trauma centre and all other health related support.
Department of Information and Public Relations	Communicate warnings to the public, relay announcements issued by SEC, telecast special programmes for information and actions, education and awareness messages for preparedness actions and coordinated response. Promote disaster related polices, provide emergency communication systems, enable critical communication links with disaster sites and coordinate with media.
Department of Rural Development	Primary agency to implement vulnerability reduction projects to alleviate poverty and improve people’s livelihoods. Ensure Rural development schemes implemented in the State incorporating disaster management measures. Assists in rehabilitation of the victims.
Department of Agriculture	Primary agency for hailstorms, droughts and pest attacks. To provide seeds and necessary planting material and other inputs to assist in early recovery. Early warning of disasters such as hail storms and droughts.
Department of Finance	Arrange necessary funds and ensure equitable distribution, manage accounts.
Department of Planning	Allocation of funds on priority basis for disaster mitigation and rehabilitation projects
Department of Transport	Primary agency for road accidents. Arrange for sending personnel and relief material to the disaster affected area, relocate the affected people, keep access routes operational and inform about alternate routes. Keep an inventory of resources available with Govt. & private operators.
Department of Food, Civil Supplies and Consumers Affairs	Plan for food storage locations keeping in view the necessity. Primary agency responsible for identifying the basic needs of food in the aftermath of a disaster or emergency, to obtain appropriate supplies and transporting such supplies to the

	disaster area.
Department of Social Justice and Empowerment	Primary agency for building capacities and increasing awareness of disabled persons and women, organizing special camps for the disabled, widows, children and other vulnerable groups. It will also provide necessary help and assistance for socio-economic rehabilitation.
Department of Industries	Primary agency for landslides and mudflows and mining collapses.
Department of Horticulture	The primary agency for hailstorm and pest attack for horticulture sector. Support in crop damage assessment due to disasters.
Department of Animal Husbandry	Primary agency for animal epidemics. Responsible for fodder assessments, supply and management during disasters and disposal of dead animals.
Department of Panchayati Raj	Ensure training of Panchayati Raj Institutions on disaster management and also ensure that all the development schemes of the department have the component of disaster mitigation as an integral part.

#### 3.6.4 **Standard Operating Procedures for responsible Departments:**

SDMP has outlined the Standard Operating Procedures (SOP) in respect of all responsible Departments and agencies of the State Government.<sup>15</sup> These include the primary tasks of the departments, and the functions to be performed for mitigation, preparedness, early warning, response, recovery and rehabilitation. This will provide good guidance to the Departments to prepare their respective DM Plans.

#### 3.6.5 **Disaster Specific Response Plans:**

SDMP has further outlined Disaster Specific Response Plans in respect of four major disasters of the State, namely earthquake, landslides, flash floods and snow-avalanche.<sup>16</sup> This will provide good guidance to the nodal Departments in respect of these hazards for preparation of their respective DM Plans.

#### 3.6.6 **Emergency Support Functions of Departments:**

SDMP has outlined the responsibilities of the primary and secondary agency in respect of 15 Emergency Support Functions (ESF) for disaster response. These include communication, public health, sanitation and sewage disposal, power, transport, search and rescue, public works and engineering, information and communication, relief supplies, food and supplies, drinking water, shelter, media, help lines, animal care, law and order and removal of trees and fuel wood. The Departments having primary and secondary responsibilities in respect of these ESF are well advised to incorporate these functions in their respective DM Plans.

<sup>15</sup> Chapter VI of SDMP, pages 113-141

<sup>16</sup> Chapter XII of SDMP, pages 159-175



## **Approach**

The functions of the Government are organized in various Departments and agencies to enable them to work for the well being of the people in specific sectors in a systematic manner. The Departments represent specific sectors of governance for the security, well-being and development of the people. These sectors cannot be treated as watertight compartments - these overlap on many cross-cutting issues that cover multiple sectors. Disaster risk management is emerging as one of the most critical cross-cutting issues that concern the entire system of governance. Effective disaster management requires strong coordination mechanisms within and across sectors and at all levels.

The Sendai Framework for Disaster Risk Reduction has rightly pointed out that disaster risk reduction and management requires the ‘full engagement of all State institutions’<sup>17</sup> and further an ‘all-of-society engagement and partnership’.<sup>18</sup>

Unfortunately the Departments tend to work in silos without connecting and communicating with each other often resulting in situations when the proverbial ‘left hand’ of the government does not know what the ‘right hand’ is doing. Further the Departments fail to engage with the stakeholders in their respective sectors resulting in disconnect with the people. This culture of departmentalism runs counter to effective disaster risk management.

The Departmental DM plan should therefore go beyond the departmental issues to address the larger sectoral and cross-cutting issues of disaster risk management for realizing the vision of building a disaster resilient Himachal Pradesh. The manner in which these issues shall be addressed are provided in detail in this template.

## **Methodology**

This template has been developed on the basis of a mix of methodologies. These included desk review of resource materials collected from various sources, information elicited from the concerned departments and agencies of the State government through a set of questionnaires circulated to them, discussion with key officials of the State Government of Himachal Pradesh and UNDP India, comments received on the draft template that was circulated to all concerned agencies and departments and finally consultation with the concerned departments and agencies of the State government in a State level Consultation

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<sup>17</sup> Guiding Principle (e) of the Sendai Framework for Disaster Risk Reduction 2015-2030

<sup>18</sup> Guiding Principle (d) of the Sendai Framework

Workshop organized by the State Government in Shimla on 26-27 September 2016.

The resource materials consulted include the Disaster Management Act 2005, National Policy on Disaster Management 2009, National Guidelines on Disaster Management issued by the National Disaster Management Authority, National Plan on Disaster Management 2016, State Disaster Management Plan 2012, various Manuals, Guidelines and Standard Operating Procedures issued by the State Government, District Disaster Management Plans of 12 districts of the State, Departmental Disaster Management Plans of five departments and agencies of the State Government, namely Animal Husbandry Department, Higher Education Department, Home Guards, Public Works Department, Town and Country Planning Department. The Departmental Disaster Management Plans prepared by a few State Governments were also reviewed.

The questionnaire circulated to the Secretaries and Heads of departments is annexed. The proceeding of the State Level Consultation Workshop is also annexed.

## **STRUCTURE OF DEPARTMENTAL DM PLANS**

The Disaster Management Plans of the Departments may be structured in eight main chapters as follows. This structure may be suitably adjusted by some Departments that may not have much role to play on specific aspects of disaster risk management as outlined in these chapters. The word limits of each section and chapter are indicative of a balanced plan. The Departments would be free to make necessary changes as per their requirements.

1. Introduction
2. Hazard, Risk and Vulnerability Analysis
3. Risk Prevention and Mitigation
4. Mainstreaming Disaster Risk Reduction in Development
5. Disaster Preparedness
6. Disaster Response and Relief
7. Disaster Recovery and Reconstruction
8. Financial Arrangements

### **Chapter-1: Introduction (2500 words)**

#### **7.1.1 Overview of the Department**

The overview of the Department should include its brief history, functions, achievements, organizational structure, location of its offices and assets, annual revenue and capital budget. Names and contact details of the officers need not be mentioned.

#### **7.1.2 Purpose of the Plan**

The basic purpose of departmental DM plan is to provide guidance to all the agencies within the department to manage the risks of disasters before, during, and after disasters. These include assessing the sectoral and departmental risks of disasters, mitigating the existing risks of disasters, preventing creation of new risks of disasters, presenting the status of its preparedness to perform its role and responsibilities as defined in the State DM Policy and State DM Plan, measures proposed for strengthening capacity-building and preparedness etc. The Departments may include department specific purpose of the Plan.

### 7.1.3 **Scope of the Plan**

Explicitly state the types of disasters, the entities (agencies within department), the geographic areas and the types of functions in respect of which the plan applies.

### 7.1.4 **Authorities, Codes, Policies:**

Present the framework of laws, regulations, codes, policies etc. within which the Department discharges its role and responsibilities in the Government, with particular reference to those provisions that have relevance for disaster risk management.

### 7.1.5 **Institutional arrangements for Disaster Management:**

Mention the position of the Department in the institutional mechanisms of disaster management in the State, such as State Disaster Management Authority, State Executive Committee, State Crisis Management Group etc. The roles and responsibilities of the Department in the existing State Disaster Management Plan and the institutional arrangements for disaster management within the Department, such as the nodal officers responsible for various emergency support functions, channel of communication and decision making authorities etc. may also be outlined in detail. If the Department has an internal control room or emergency operation centre, the same may also be mentioned along with details.

### 7.1.6 **Plan Management (Implementation, Monitoring and Revision):**

Mention the authorities within the Department, at various levels and at different locations, responsible for implementation, monitoring, revising, reviewing, and updating the basic plan, annexes, appendices, and supplementary documents, such as checklist, SOPs, etc. The coordination mechanism available within the Department for implementation of various aspects of the plan before, during and after disasters may also be mentioned with details.

## **Chapter-2: Hazard, Risk and Vulnerability Analysis (5000 words)**

### 7.2.1 **Risk Assessment of Himachal Pradesh**

The risks of disasters is typically presented with the help of the equation  $R = [(h \times v) \times e] \div c$  when 'R' denotes the risks of disasters; 'h' the hazards or the potentials of a physical event that may cause loss of life or property; 'v' the vulnerabilities or the factors or processes - physical, social, economic, and

environmental - which increase susceptibility of an area or a community to impact of hazards; 'e' exposures of vulnerable population and assets to hazards; and 'c' or capacities or resources available within a community, society or organization that can reduce the level of risk, or the effects of disasters.

Himachal Pradesh SDMP provides a comprehensive analysis of all types of hazards, vulnerabilities, exposures and risks of disasters in different parts of the State. It is not necessary to repeat the same in the departmental DM Plans, as has been done in a few departmental DM Plans that have been prepared.

The Government of Himachal Pradesh has recently got a fresh Hazard, Risk and Vulnerability Analysis (HRVA) conducted for the entire State through a specialized agency. Using the maps, data and information provided by the HRVA, the departments shall make their own assessments of both the sectoral and departmental risks of disasters and present the same in the DM Plans.

### **7.2.2 Assessment of Sectoral and Departmental Risks**

The sectoral risks of disasters consist of the risks for the entire sector that the department represents. For example, the Animal Husbandry may assess the potential risks to animal population of the State due to hazards like flash floods or avalanche in any specific region. Town and Country Planning Department may make assessment of risks of all the notified towns of Himachal Pradesh. Similarly every department shall make risk assessment in respect of its sector.

The departmental risks of disasters consist of the risks arising out of the exposure of vulnerable departmental assets to the natural or manmade hazards. For example, the Public Works Department may assess the risks of roads, bridges and public buildings under its maintenance due to landslides or earthquakes in different districts of the State. The Department of Education may assess the risks of unsafe school building in various hazard zones of the State. Locating these assets on the hazard map of the State would make a good visual presentation of the possible risks of departmental assets. HRVA maps developed recently shall be useful for locating departmental assets on various hazard zones of the State.

Some of the concerned Departments like agriculture, horticulture, irrigation and public health etc. may further assess the potential risks of disasters due to emerging issues like climate change. The Himachal Pradesh State Strategy and Action Plan on Climate Change provide good information on possible impacts of extreme climatic events due to climate change in the concerned sectors.

### **7.2.3 Assessment of Capacity Gaps and Needs**

The Departments shall also make critical assessment of their capacity for disaster risk management before, during and after disasters. The capacity assessment shall typically include review of current capacities, analysis of capacity gaps, requirement of capacity needs and the manner and the time frame by which these gaps shall be addressed.

#### **7.2.4 Assessment of Probable Damage and Loss**

The Departments may provide details of actual damage and loss suffered by the sector and by the department due to disasters in the past. Such information available in departmental archives should be retrieved as much as possible. This will give good ideas about the pattern and trend of such losses in the past, based on which projections can be made of future losses.

Based on the vulnerability mapping of sectoral and departmental assets Departments can develop various disaster scenarios and estimate Probable Maximum Loss (PML) and Average Annual Loss (AAL) due to disasters. PML is worked out on the basis of worst possible disaster scenarios as per HRVA analysis, while AAL is estimated on the basis of past trend of disasters. This will provide a good basis for Cost-Benefit Analysis of investments on risk prevention and mitigation.

### **Chapter-3: Risk Prevention and Mitigation (5000 words)**

#### **7.3.1 Risk Prevention**

Risk prevention is preventing creation of new risks of disasters. Such risks may be created unwittingly by the Departments directly through public investments or indirectly through facilitation of private investments that are vulnerable to the risks of disasters. Therefore every investment must 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 risk prevention measures so that the benefits of investments are fully protected from the risks of disasters. For example, hydro-electric projects in seismic zones must be designed in such a manner that these are able to withstand the shocks of maximum probable earthquakes in the region.

#### **7.3.2 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. In conventional CBA benefits arising of possible reduction of risks of disasters are not calculated. There are innovative tools for estimating the benefits to risk mitigation, which would be useful to the planning and finance departments for taking investment decisions on mitigation projects. Some of these tools are explained in para 7.4.2.

### **7.3.3 Strategies for Risk Prevention and Mitigation**

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, as explained in para 7.4.1 and 7.4.2.

### **7.3.4 Matrix of Hazard Specific Mitigation Measures**

Based on their strategies for risk prevention and mitigation, Departments shall prepare a matrix detailing hazard specific structural and non-structural measures to be implemented for disaster risk prevention and mitigation in their respective sectors. The time frame for implementation of the activities shall also be mentioned in this matrix.

## **Chapter-4: Mainstreaming Disaster Risk Reduction in Development (5000 words)**

### **7.4.1 Policy Framework on Mainstreaming**

Disaster Management Act has stipulated that DM Plans of the Departments of State Government shall integrate strategies for prevention and mitigation of the risks of disasters with the development plans and programmes of the department.<sup>19</sup> The State Policy on Disaster Management, following the National Policy, prescribed 'DRR Mainstreaming' in the following words:

The DRR issues would be mainstreamed in development plans, programmes and policies at all level by all the departments, organisations and agencies. It would be ensured that all the development programmes and projects that originate from or funded by Government

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<sup>19</sup> Section 40(1)(a)(ii)

are designated with evident consideration for potential disaster risks to resist hazard impact. 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. It would also be ensured 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.<sup>20</sup>

The Himachal Pradesh State DM Plan 2012 has one full chapter on ‘Mainstreaming DM Concerns into Development Plans/Programmes/Projects’.<sup>21</sup> The Plan has proposed strategies for integration and mainstreaming DRR into a few flagship national programmes in the sectors of rural and urban development, education, health and public works department. Some of these programmes have undergone changes in the recent years but the strategic entry points for mainstreaming DRR in development plans remain the same. Concerned Departments may therefore incorporate structural and non-structural measures for disaster risk reduction into the projects according to the contexts of local situations within the broad framework and guidelines of the programmes. For example, construction of school buildings under Sarva Siksha Abhiyaan may conform to the standards of seismic safety even if this involves higher costs. If the guidelines of the programme do not permit higher costs, the State Government may bear the additional costs involved from their own sources. Therefore mainstreaming may involve innovative adaptation of national programmes according to local contexts for disaster reduction. Many State Governments have made such innovative adaptations which the Departments may like to consider on their merits.

With the abolition of Planning Commission and devolution of higher tax revenue to the States, many central sector and centrally sponsored plan programmes are undergoing changes. The State Governments shall therefore have greater freedom to design state specific development programmes and projects. This will create new opportunities for disaster risk reduction. The Departments are therefore well advised to propose specific programmes of disaster risk reduction in their respective sectors, based on the assessment of risks in their sectors and the likely benefit of such programmes.

Every Department of the State Government implements state level development programmes that provide good entry points for mainstreaming DRR in

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<sup>20</sup> Himachal Pradesh State Policy on Disaster Management 2011, para 6.1.2, page-25

<sup>21</sup> Himachal Pradesh State Disaster Management Plan 2012, Chapter-IV



development. The Departments may therefore explore the possibilities of mainstreaming DRR in as many existing programmes and projects as possible. This will ensure that existing development projects are not creating any new risks of disasters; on the contrary the projects are designed in such a manner that these would facilitate the process of risk reduction without any significant additional investments.

#### **7.4.2 Mainstreaming DRR in Project Cycle Management**

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.

Among the various toolkits available for mainstreaming DRR in project cycle management the following may be applied with relative ease in Himachal Pradesh.

##### **a) Marginal Investment Analysis**

Existing investments can be so designed and calibrated that these do not exacerbate the latent risks or create new risks of disasters. Incorporation of elements of risk resilience in the concept, design, management and evaluation of existing and new programmes, activities and projects may necessitate additional investments. The tools of marginal investment analysis are useful to determine the effectiveness of such additional investments for disaster risk reduction. For example, school, hospitals, roads, bridges and buildings, can be so designed that with marginal additional investments these structures may become resistant to the hazards of earthquake or landslides. The marginal higher costs in earthquake resistant buildings is 2.5% for structural elements and 0.8% for non-structural elements, but the benefits are higher than the replacement costs of these structures if these collapse in earthquakes.

##### **b) Multi- purpose development projects**

The projects can be designed with dual or multi-purpose that can reduce the risks of disasters and at the same time provide direct economic benefits that

would enhance both cost-benefit ratio and internal rate of return and justify the costs of investments. One of the most common examples of such multiple purpose development projects are large hydro electric projects that generate electricity, provide irrigation and at the same time protect downstream locations from the risks of floods. Many innovative multi-purpose projects can be designed that can offset the costs of disaster risk reduction.

### **c) Check Lists for disaster risk reduction**

Government of India issued a notification in 2009 which makes it mandatory for any new project costing more than Rs. 100 crores to have a *Check List for Natural Disaster Impact Assessment* before it is approved. These check lists provide complete information on the hazards, risks and vulnerabilities of the project. These include not only the probable effects of natural disasters on the project but also the possible impacts of the project in creating new risks of disasters. The costs involved in the prevention and mitigation of both types of impacts can be built into the project costs and accordingly the economics and viability of the project can be worked out. Similar check lists for DRR can be followed in large development projects of the Departments.

## **Chapter-5: Disaster Preparedness (5000 words)**

### **7.5.1 Strategies for Disaster Preparedness**

The risks of disasters that are neither prevented nor mitigated either through direct investments or mainstreaming in existing programmes, activities and projects are the residual risks. These are also described as ‘accepted risks’. Some of these accepted risks of individuals, families, groups or companies can be pooled together and transferred through market based insurance mechanisms. In developed economies insurance covers a large share of unmitigated residual risks thereby reducing sovereign burden for disaster relief. In developing countries, with high residual risks and low risk insurance, probabilities of disasters are very high and therefore the level of disaster preparedness should also be of a very high order. Therefore disaster preparedness occupies a prominent place in our system of disaster management at national as well as state levels.

Disaster preparedness has been defined as ‘the state of readiness to deal with a threatening disaster situation or disaster and the effects thereof’.<sup>22</sup> The

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<sup>22</sup> Section 2(m), Disaster Management Act 2005

Departments may review their ‘state of readiness’ and prepare strategic action plan to deal with possible disaster situations.

### 7.5.2 Measures for Disaster Preparedness

The National Policy and Himachal State Policy on Disaster Management have prescribed the following measures for disaster preparedness:

- a) Capacity Development
- b) Forecasting and Early Warning Systems
- c) Medical Preparedness and Mass Casualty Management
- d) Communications and Information Technology Support
- e) Setting up and Strengthening of Emergency Operations Centre
- f) Training, Simulation and Mock Drills
- g) Community Based Disaster Preparedness

The Himachal Pradesh State Plan on Disaster Management has laid down in detail the specific measures to be taken by various departments and agencies of the government on each of these measures for disaster preparedness.

The Departments may review the status of their preparedness in respect of each of these measures, to the extent these are relevant for their respective areas of operation, and chalk out detailed plan of action for addressing the lacunae and gaps in the existing system.

Departments shall prepare a Check List of Disaster Preparedness which would form integral part of the Departmental Disaster Management Plan. This Check List would be useful to review that every necessary action for disaster preparedness has been taken and the Department is not caught unaware during rapid or slow onset of disasters.

## **Chapter-6: Disaster Response and Relief (5000 words)**

### 7.6.1 Response Plan

The response plan of the Department includes design of actions based on Standard Operating Procedures and tested through mock drills and exercises that would be initiated on a trigger mechanism based upon the impending or actual occurrence of an event of disaster.

An indicative list of the components of response plan is as follows. The list

needs to be suitably modified and adjusted according to the specific role and responsibilities and the Emergency Support Functions (ESF) assigned to the Department in the State Plan.

- a) Institutional arrangements within the Department for disaster response. This will include details of the persons/positions assigned with responsibilities of response and interaction with State and District Disaster Management Authorities.
- b) Emergency Operation Centre/ Control Room of the Department, if any, and its interface with State or District EOC.
- c) Incident Response Team of the Department, if any
- d) Classification of disaster type and response activities specific to disaster
- e) System of receiving and managing alerts
- f) Evacuation, search and rescue operation
- g) Requisition of services/ assistance
- h) Relief and rehabilitation
- i) Emergency restoration of critical facilities

#### **7.6.2 Emergency Support Functions**

Many Departments and agencies are required to perform Emergency Support Functions as detailed in State DM Plan.<sup>23</sup> Departmental DM Plan may provide details regarding how these functions shall be discharged by the Departments.

#### **7.6.3 Relief and Rehabilitation**

Relief and rehabilitation of the persons affected by disasters is an important function post-disaster response. Typically the tasks of relief and rehabilitation include the following:

- a) Emergency medical response
- b) Food and nutrition
- c) Water and sanitation
- d) Health including mental health
- e) Clothing and utensils
- f) Shelter
- g) Management of relief camps

Many Departments and agencies of the State Governments will be required to

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<sup>23</sup> Annexure-VIII of Himachal Pradesh State Disaster Management Plan provides details regarding the Emergency Support Functions of various Departments of the State Government

perform important functions relating to relief and rehabilitation. The response plan of the Department should provide detail the logistic, financial and administrative support necessary for discharging these functions and the manner in which these functions shall be discharged. The expenditure to be incurred for this purpose can be rightly charged under State Disaster Response Fund (SDRF) as per norms approved by the Government of India. The Departments are advised to obtain copies of these norms from Revenue (Disaster Management) Department.

#### **5.6.4 Emergency Restoration of Critical Facilities**

Infrastructure related Departments, such as Public Works, Irrigation and Public Health, Electricity etc. would be required to restore critical facilities like communication, power and water supply etc. immediately on the aftermath of disaster. The concerned Departments should have a contingency plan readily available for emergency restoration of the critical facilities, till the damaged assets are reconstructed. The expenditure to be incurred for this purpose can be similarly charged under the SDRF.

#### **5.6.5 Matrix of Hazard Specific Response and Relief Measures**

Based on their respective plans for disaster response and relief, Departments shall develop hazard specific matrix of activities to be performed for disaster response and relief. This matrix would serve as a ready recokner for emergency support functions of the Department.

### **Chapter-7: Disaster Recovery and Reconstruction (2000 words)**

#### **5.7.1 Disaster Recovery**

The process of recovery from small scale disasters is usually simple. Recovery operations get completed almost simultaneously with response, relief and rehabilitation. However in medium and large disasters involving wide spread 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. Therefore some of the Emergency Support Functions may continue for months. Departmental DM Plans should anticipate eventualities of longer duration recovery operations.

#### **5.7.2 Damage and Loss Assessment**

One important function that Departments are required to function is to assess the damage and losses in respect of the sector it represents. For example, agriculture department would assess the losses to agricultural land and crops, infrastructure departments would assess the damages to infrastructure in respective sectors, revenue department would assess the loss of human lives etc. Typically departments assess the direct costs of the damaged assets; they do not factor the indirect or opportunity costs of the damages, what is described generically as 'losses'. For example, damages to an industrial unit would be assessed in terms of the costs of its reconstruction; but this would not factor the losses suffered due to loss of production.

There are improved methodologies for damage and loss assessment that may be adopted by the Departments replacing the age old methods of damage assessment.<sup>24</sup> The State DM Plan is silent on this important aspect of disaster management. It is expected that the revised State DM plan may come up with new methodologies for damage and loss assessment and accordingly Departments may adopt similar plans and procedures in their departmental operations.

### 5.7.3 Disaster Reconstruction

Post-disaster reconstruction activities following major and catastrophic disasters may continue for a long time often extending between 3 to 5 years. Generally funding arrangements for such reconstruction are made through soft loans taken by Government of India from multi-lateral financial institutions like the World bank and the Asian Development Bank, which is passed down to the State Government as grant.

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. However the major Departments that would generally be involved in such reconstructions, such as Public Works, Power, Housing and Urban Development etc. should have the standards and specifications of 'building back better' readily available so that unnecessary times are not lost in planning, designing and estimating projects for reconstruction. The Planning and Design Wings of the major construction departments should have the necessary wherewithal for developing the blue prints of such reconstruction projects soon after the damage and loss assessment

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<sup>24</sup> These new methodologies include Economic Commission for Latin America and Caribbean (ECLAC) tool of DALA (Damage and Loss Assessment) and World Bank tool of PDNA (Post Disaster Need Assessment).

in disasters are made. This should be built into the DM Plans of the concerned departments.

## **Chapter-8: Financial Arrangements (3000 words)**

5.8.1 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.

The marginal costs involved in mainstreaming disaster risk reduction in existing programmes, activities and projects of the departments are also not very sizeable and the departments may not find it difficult to arrange such funds. However, funds for disaster prevention and mitigation may not be available so easily unless the departments are able to negotiate such projects with the planning and finance departments with proper cost-benefit analysis.

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).

Funds for long term reconstruction are always arranged separately. However the problem arises when the departments are asked to restore and reconstruct facilities following small/ medium scale disasters for which special funds are not generally available. The departments are therefore forced to divert funds from their normal development or maintenance budgets which become problematic. Financing small/ medium scale post-disaster reconstruction has remained one of the unresolved issues of disaster management in India. The more enterprising and pragmatic departments may therefore provide a cushion for such projects in their budget or alternatively make use of 'untied grants' that are made available to some of the departments.

## HAZARD SPECIFIC INCIDENT ACTION (IAP)

**Note: Types of incidents will vary from department to department**

### SoP/IAP for Specific Incident/Scenario

#### Part-A: General

1. Define scenario
2. Define precautions (Dos and Don'ts)
3. Define impact zones
4. Identify resources required for scenario under consideration and their positions

#### Part-B: Action Plan

Task	Agency Responsible	Remark
Raise alert		
Assess and Notify		
Activate EoC		
Establish command		
Prioritise actions		
Mobilise and deploy resources		
SAR/Evacuation		
Establish Relief operations		
Assess situation dynamics to readjust action plan		



**STANDARD OPERATING PROCEDURE**

(On Emergency Support Functions to be performed by the Departments)

Note: Details of Emergency Support Functions, Primary and Secondary agencies responsible for the performance of the functions and role and responsibilities of Primary and Secondary agencies are detailed in Annexure-VII of State Disaster Management Plan.

**1. Primary Agency**

Name the primary agency

**2. Secondary Agencies**

Name secondary agencies

**3. INTERDICTION**

Define followings in this section

**A. Purpose**

Describe why the ESF is written and the intended results of the ESF.

**B. Scope**

Describe the extent of this ESF and how far it goes. Describe the level of coordination.

**4. CONCEPT OF OPERATIONS**

Define following in this section

**A. General**

Describe how you intend to operate and the coordination requirements with other ESFs/ annexes.

**B. Organization**

Describe how your organization is organized to support this ESF. Describe what office is in charge. Describe the offices, districts, regions, etc., in your organization.

### **C. Procedures**

Describe the organization's procedural responsibilities, Describe where the detailed procedures are maintained. Details, like position Checklists, recall telephone lists, and other frequently changing information should go into your implementing procedures.

### **E. Prevention and Mitigation Activities:**

A detailed listing of the action to eliminate or reduce the degree of long-term risk to life, property, and the environment to be taken by the Primary and Support Agencies in support of this ESF. Many areas needing mitigation will be identified during the preparedness, response, and recovery phases of emergency management.

### **F. Preparedness Activities**

A detailed listing of the actions taken in advance of an event to develop operational capabilities and to facilitate an effective response to be taken by the Primary and Support Agencies in support of this ESF.

### **G. Response Activities**

A detailed listing of the actions taken immediately before, during, and directly after an emergency or disaster occurs to save lives, minimize property damage, and enhance the effectiveness of recovery actions to be taken by the Primary and Support Agencies in support of this ESF.

### **H. Recovery Activities**

A detailed listing of actions to be taken to return community and organizational life support systems to minimum operating standards and long-term activities to normal or improved levels by the Primary and Support Agencies in support of this ESF.

## **5. RESPONSIBILITIES**

### **A. Primary Agency**

General statements of the responsibilities of the agency or agencies with the lead for this ESF.

### **B. Support Agencies**

General statements of the responsibilities of the agencies supporting this ESF.

## **6. Resource Requirements**

Resource requirements for personnel, supplies, facilities, telecommunications, etc., can be developed as you complete the planning process and through exercise. Try to identify critical assets for the initial 12 hours and for support to field activities.

## **7. Terms and Definitions**

Terms and definitions related to this ESF.