

Preparedness Measures

The goal of disaster preparedness is to know what to do in a disaster aftermath, how to do it, being equipped with right tools to do it effectively. Preparedness helps to minimize the impact of hazard through pre identified measures that ensure a timely, appropriate, effective organization and delivery of response and relief actions. Section 30 (2) (xii) of DM Act 2005, states that the “District Authority shall review the preparedness measures & give directions to the concerned departments at the district level or other concerned authorities where necessary for bringing the preparedness measures to the levels required for responding effectively to any disaster or threatening disaster situation”.

5.1 Identification of Stakeholders involved in Disaster response

Preparation for the disasters is a joint venture of various departments and agencies within the district. The major stakeholders for the pre and post disaster management are as below:

Table: List of Stakeholders and their responsibilities

SN	Stakeholders	Task and responsibilities
1.	DDMA	<ul style="list-style-type: none"> • Prepare, Coordinate and monitor overall district response • Review the state of capabilities for responding to any disaster or threatening disastrous situation • Advise, assist and coordinate the activities of the other Departments • Establish stockpiles of relief and rescue materials • Ensure communication systems are in order • Mock drills are carried out periodically; • Ensuring of preparing response plans by Departments of the Government
2.	DEOC	<ul style="list-style-type: none"> • Proper functioning of the DEOC including hunting line 1077 • Availability of resource inventory for disastrous situation (IDRN) • Functioning of Satellite phones • Stock piling of multi-hazard emergency equipment and maintenance
3.	HPSDMA	<ul style="list-style-type: none"> • Facilitating resources on demands raised by District administration
4.	Police Department	<ul style="list-style-type: none"> • Assess preparedness level and maintaining law and order;

	(Law and order)	<ul style="list-style-type: none"> • To take measure against looting and rioting; • To ensure the safety and security of relief workers and material; • To take specific measure for the protection of weaker and vulnerable sections of the Society. • To provide safety and security at relief camps and temporary shelters
5.	Health and Medical Services (CMO, Kangra)	<ul style="list-style-type: none"> • Prepare and implement hospital preparedness plan. • Mobilization of health service providers for emergency response for medical care, evaluation and treatment. • To coordinate, direct and Integrate State level response; • Direct activation of medical personnel, supplies and equipment; • Coordinate the evacuation of patients; • Provide human services under the Dept. of health; • Prepare, Keep and check ready Mobile Hospitals and stock; • To network with private health service providers; • To provide for mass decontamination; • Check stocks of equipment and drugs.
6.	Fire and Emergency Services and Home Guards (Search and Rescue)	<ul style="list-style-type: none"> • Establish, maintain and manage district search and rescue response system; • Coordinate search and rescue logistics during field operations; • Provide status reports of SAR updates throughout the affected areas • Discharge all ambulatory patients for the first aid which has the least danger to health and others transported to safer areas. • To make arrangements for the transportation and Post mortem of the dead
7.	SDRF, Armed and Para military forces	<ul style="list-style-type: none"> • Armed and Para military forces to provide assistance to civil authorities on demand • Coordinate with administration in response as well as capacity building. • Facilitate administration with the key resources in disaster.
8.	Public Works Department/ Municipal corporation/ National Highways, Shahpur	<ul style="list-style-type: none"> • Establish a priority list of roads which will be opened first; • Constructing major temporary shelters; • Connecting locations of transit/relief camps; • Adequate road signs should be installed to guide and assist the relief work; • Clearing the roads connecting helipads and airports and restoring the helipads and making them functional;

		<ul style="list-style-type: none"> • Rope in the services of private service providers and secondary services if the department is unable to bear the load of work. • Depending on the nature of disaster, essential equipment such as Towing vehicles, Earth moving equipment's, Cranes etc. to be provided to work team carrying emergency • Construct temporary roads; Keep national and other main highways clear from disaster effects such as debris etc.; • Networking with private services providers for supply of earth moving equipment's etc.
9.	Irrigation and Public Health department and Municipal Corporation (Water / Sanitation / Sewerage Disposal)	<ul style="list-style-type: none"> • Preparedness and implementation of preparedness plan of the department • Make arrangement for proper disposal of waste in their respective areas; • Arrange adequate material and manpower to maintain cleanliness and hygiene • For making available mobile toilets; • To dispose of the carcass. • Providing support to local Administration; • Water purification installation with halogen tablets. • Procurement of clean drinking water; • Transportation of water with minimum wastage; • Special care for women with infants and pregnant women; • Ensure that sewer pipes and drainage are kept separate from drinking water facilities
10.	Electricity Department (Power)	<ul style="list-style-type: none"> • Making arrangement for and to provide the alternative sources of power supply for emergency purposes to the affected populations and relief camps. • Identify requirements of external equipment required such as DG sets etc. • Prepare emergency repair teams equipped with tools, tents and food; • Listing of hired labour for the clearing of damaged poles etc.
11.	Transport Department	<ul style="list-style-type: none"> • Pre coordination of required transport and its implementation during emergency related response and recovery functions, search and rescue and damage assessment • Arrangement for Coordinating Vehicles for transportation of relief supplies from helipads/airports to the designated places • Preparedness regarding availability of fleet for the purpose of SAR, transportation of supplies, victims etc; • Provide arrangement for stocking of fuel for emergency operations

12.	Department of Food and Civil Supplies	<ul style="list-style-type: none"> • Designating temporary shelters for Emergency mass feeding; • Arrangement for providing logistical and resource support to local entities • Designate team to coordinate damage assessment and post disaster needs assessment • Making arrangements for emergency food and clothing supplies available for population • Control the quality and quantity of food, clothing and basic medicines; • Ensure the timely distribution of food and clothing to the people
13.	Forest Department	<ul style="list-style-type: none"> • Making Arrangements for timely removal of trees obstructing the movement of traffic and which have become dangerous; • Make arrangement for fuel wood for the relief camps and for general public; • Providing fuel wood for mass cremation etc.
14.	Animal Husbandry Department	<ul style="list-style-type: none"> • Making arrangement for timely care and Treatment of animals in distress; • Provision of vaccination; • Provision for disposal of dead animals
15.	Communication/ Information Department	<ul style="list-style-type: none"> • Coordination of telecommunication with other networks and available police wireless network, satellite phones, Ham Radio units of armed forces in the area affected • For rendering necessary assistance in terms of resources, expertise to the primary agency in performing the assigned task. • Operate a Disaster Welfare Information (DWI) System to collect, receive, and Report the status of victims and assist family reunification; • Apply GIS to speed other facilities of relief and search and rescue; • Enable local authorities to establish contact with the state authorities; • Coordinate planning procedures between district, the state and the centre; • Provide ready formats for all reporting procedures as a standby.
16.	Panchayati Raj Institution and	<ul style="list-style-type: none"> • Preparing the Community as first responder and local authorities as per Village Disaster Management Plan.

	<p align="center">Urban Development</p>	<ul style="list-style-type: none"> • Identification of public buildings as possible shelters; • Department of Panchayati Raj through local Panchayats would assist the primary agency in establishing shelters of smaller dimensions. • Locate adequate relief camps based on survey of damaged houses; • Develop alternative arrangements for population living in structures that might be affected even after the disaster. • Quick assessment and identifying the area for the establishment of the relief camp • Solid/ liquid waste treatment and management s;
<p align="center">17.</p>	<p align="center">Department of Public Relations</p>	<ul style="list-style-type: none"> • Preparedness for providing and collecting reliable information on the status of the disaster and disaster victims for effective coordination of relief work at state level • Procedure for coordinating with all TV and radio networks to send news flashes for specific needs of Donation; • Using of place geographical Information to guide people towards relief operation; • Use appropriate means of disseminating information to victims of affected area; • Curb the spread of rumours; Disseminate instructions to all Stakeholders.

Hence, at a glance following preparedness measures would help in preparing for the disasters within the district:-

- i. Preparation of Disaster Management Plans at village/ community level.
- ii. Implementing of above Disaster Management Plans
- iii. Holding regular meetings at District and Sub-Division level to review the readiness of the functionaries to deal with disasters.
- iv. Constitution of Relief Committees at all levels.
- v. Regular training programs of Government functionaries, PRIs, ULBs and other stakeholders in various facets of disaster management.
- vi. Public awareness and education in disaster management at community level.
- vii. Implementation of preventive and mitigation measures for the identified hazards.
- viii. Integration of Disaster Risk Reduction (DRR) into on-going development programmes of all departments.
- ix. Installing/ maintaining effective early warning system for Landslide and Flood for the vulnerable areas and communities.

5.2 Preparedness Measures to be undertaken in the District

5.2.1 Early Warning

- **Early Warning Mechanism including last mile connectivity**

With regards to Community based preparedness for early warning following needs to be developed:

- To develop traditional EWS like metallic bell, drums and 'Dholak' etc. to inform the community of likelihood of occurrence of the disaster, warning signal should be disaster specific
- Familiarity of the community with the early warning signs to be developed prior to the disaster through awareness and during the mock drills
- Early warning signals to be disseminated to community only through responsible person
- Develop radio based EWS
- Use of SMS system to inform DM team members.

Nodal Agencies for Early Warning have been identified by the District for the multi- hazard preparedness as follows:

SN	Hazards	Warning Agency	Contact Details
1	Earthquake	N- (IMD) Indian Meteorological Department Shimla S- SDMA/SEOC D- DDMA/ DEOC	011-24641697 Delhi. 0177-2626211/ 0177-2629724/ 0177-2624976; 9816127668 mm_sandhu@yahoo.co.in 1077, 01892-229050 to 53
2	Landslide	N- (GSI) Geological Survey of India /DDMA/ D- DEOC	0172-2622529 Fax; 0172-2621945; Mob: 094173-71954. Joginder.singh@gsi.gov.in gsichd@sancharnet.in 1077, 01892-229050 to 53
3	Heavy Rain/ Snowfall	N- (IMD) Indian Meteorological Department / S- SEOC D- DEOC	0177-2626211 1070 1077, 01892-229050 to 53

4	Flood/ Flash Flood	N- (CWC) Central Water Commission S -(CWC) Central Water Commission D -Irrigation and Public Health Dept./ DEOC	0183-236105 Amritsar 0177-2624036, 0177-2624224 , dirmashimlaewc@nic.in
5	Domestic/ Forest Fire	D- Department of Fire Services D- Department of Forest	101, 01892-224992 01892-224887
6	Epidemics	D- Health and Family Welfare Department D- Horticulture D- Veterinary	01892-224874 01892-223183 01892-222012
7	Human Induced Hazards	D- Himachal Pradesh Police	01892-224883
8.	Road Accidents	D- EMRI-GVK D- Police	108 100,01892-224883
9.	Stampede	D- District Administration/DEOC D- Police	100, 1077, 01892222103
10	Dam/ Reservoir Burst	D- Hydel Power Project, I&PH, District Administration	01883-236113 (Talwara) 01905-282088 (Pandoh, Mandi)

N= National, S = State, D = District

- **DEOC/ Control Room-**

DEOC Kangra at Dharamshala is equipped with all the basic and advanced communication and IT infrastructure like EPBAX, Computers, LED sets, Telephone sets, Generator, maps & reference materials etc. The toll free number for Disaster management (1077) is operational round the clock in DEOC with operators.

- **Training of Personnel of EOC's**

For the smooth functioning of EOC (24x7) eight operators have been deployed who will be provided trainings for receiving early warnings on various hazards, interpretation of warnings and dissemination of the warnings. In addition normal operations they will be trained in Documentation and assist affected people in all types of emergencies through telephone. At the time of disaster they will execute the directions issued by DDMA.

Gaps-

Operators need to be trained in disaster management.

- **Drills**

For the efficiency and coordination of the various departments there is a need for the mock exercises on various hazard. This will provide the stakeholder of the departments to check their preparedness level and identify their gaps for further improvement.

Gaps-

Functioning of Satellite Phones and development of Ham Radio network in the district needs to be encouraged for emergency communication.

5.2.2 Evacuation

The Prime Nodal Agency for Evacuation within District Kangra is DDMA with supporting agency consisting of Revenue and Police department

Evacuation is a risk management strategy which involves the timely movement of people to a safer location. However, to be effective, it must be correctly planned and practiced for the return of the community. The following factors need consideration for evacuation preparedness:

- Identification of appropriate shelter areas based on safety, availability of facilities, capacity for victims
- Route to the shelter location shall be safe, short & free from traffic blockages and structures likely to get impacted.
- Provision of basic facilities like drinking water, food, clothing, toilets, communication, medical & electricity etc.
- Security.

Evacuation Warning must be standardize to provide timely and effective information. The warning should be clear and target group specific. The warning statement issued to the community should be conveyed in a simple language and the statement should mention about:

- The issuing authority, date and time of issue
- An accurate description of impacting hazard(s)
- Possible impact on population, area to be inundated or affected due to hazard
- Safe places to reach in evacuation
- Do's and Don'ts to ensure appropriate response

- Advise to the people about further warnings to be issued, if any

Gaps-

- There is a need to earmark each and every evacuation routes and safe locations/ shelters within district for quick and efficient evacuation process.
- Awareness among the public about the evacuation procedure and safe locations need to be generated.

5.2.3 Search & Rescue

The Prime Nodal Agency for Search and Rescue within District is Police along with Home Guards. In case the incident is beyond the capacity of the district and state NDRF, Bathinda and its supporting unit at Nurpur sub Division, Kangra will be reckoned for.

In the event of any disaster the two departments form teams to locate injured and dead along with rescuing the ones in need. The secondary departments supporting SAR work, are PWD, Health department, Fire department and also the people that voluntarily form teams to help the ones in need. Proper training for search and rescue process needs to be undertaken so as to minimize the time taken in rescuing someone. The Task team for Search & Rescue is formed as and when required. The members & equipment's depend on the nature of the disaster and intensity and their availability.

- Police Officers
- Fire Brigade
- Medical team
- Home guards
- Swimmers (In case of flood)
- Officials from PWD, I&PH, Electricity
- Driver (For vehicles like ambulances, fire brigade, JCB, Excavator etc.)
- Persons from Paramilitary forces (ITBP, SSB, of NDRF/ SDRF as the case may be)
- Army personnel (depending on the scale of the incidence)
- A Class IV Officer (Health Dept.)
- Worker from Municipal Council
- Volunteers trained in search and rescue

Equipment available with the various departments that can be used for S&R in District for various hazards like earthquake, landslide, flood and fire are: Safety Helmet- Ambulances, Extension ladder, Crane, JCB, Shovel, Spade, Tractor, Generator, Search Lights, Helmet, pick axe, baskets, Blankets, VHF Sets, Tents

Human Resource trained for S&R include- Home Guards, Police, ITBP, SSB, Trained Officials include - Government Officials, PTI's, Teachers, NCC, NYKS, Pradhans, MC officials, NGO's,

Gaps- There is a need to provide training to the relevant departments concerned for S&R within the district as identified above. The other major gap in preparedness is non- availability of the essential number of items as per the IDRN List of equipment besides the mentioned above.

5.2.4 Damage & Loss Assessment

The Nodal Officer for assessment of the damages and loss will be with the Revenue department with key departments

Damage assessment is carried out with regards to building stock, standing crops, agricultural area, livestock lost, forest cover decimated, vital installations etc. for better rescue and relief. Damage assessment is conducted in 2 phases:

- Rapid Damage Assessment, and
- Detailed Damage Assessment

The field staff and agencies of various departments would communicate the damage/ loss to the DEOC at the earliest. Initially first information report would be sent which would be followed by the detailed damage assessment reports.

Indicative departments of Damage assessment are revenue, PWD, I&PH, Electricity Board, Health Department, Agriculture and Horticulture Department, Animal Husbandry, and others suitable departments.

Gaps-

Training of the officers/ officials of the key departments. Equipment required for the assessment of Damage and loss.

5.2.5 Medical First Aid

The Nodal Officer is CMO and MS of the district with support of Red Cross and other suitable agencies

Equipmental and Human Resource preparedness within District comprises of local non-professionals as well as trained man power from the teams formed on the ground. First Aid Kits

Gap-

Training of Home Guards/Police/Nurses, ASHA ANM/Volunteers. Facilitation of First Aid Kits to the stakeholders for medical services till village/ community levels.

5.2.6 Mass Casualty Management

Nodal Officer is CMO and MS of the district with support 108/ Red Cross/ Police/ Home Guards and other suitable agencies

The identified regional hospitals of the district along with the other private hospitals and CHC, PHC's will get operational.

Human Resource preparedness within District comprises of General Surgeons, Medical Specialist, Gynaecologist, Radiologist, Orthopaedic Surgeon, Nurses, ASHA ANM, Senior students of medical institutions, Veterinary Surgeon & Gynaecologist, ENT, Bed Strength. Regional Hospitals are supported by the Blood Banks and list of donors.

Equipment available with the medical departments or other agencies consists of stretchers, ambulances, and various other emergency machinery like X-Ray machines, Ultra Sound and other machines.

Gap-

Training of medical staff in management of mass causality along with strengthening of necessary equipment. Another identified gap is not having sufficient medicinal stock for the same.

5.2.7 Relief (food & Water)

Nodal Officer is the District Food and Civil Supply Department with support of Revenue/ I&PH and Health.

Various types of relief material could be arranged but pre identification of requirements under relief will be of great value in post disaster.

Gap-

Non- Availability of Warehouses/ storage areas along with Fair Price Shops, availability of Cylinders, wood, utensils, clothing's at the community / village level.

5.2.8 Shelter/ Medical/ Relief Camp

Nodal Officer for the Shelter /Medical/ Relief Camp is DDMA with the Key stakeholders such as Revenue, DRDA, Education departments

The possible sites for the establishment of the above Camps are the schools, community shelters, parking areas, temple areas and open grounds within the district.

Gap-

Non availability of resources as well as lack of coordination for functioning of camps.

5.2.9 Psychosocial Care

Prime department concerned with psychosocial care is the medical department with secondary support from the Red Cross Society

The Hospitals and health centers in District do not have trained manpower for psychosocial care of the victims of the disaster. Nor there are sufficient centers to deal with patients requiring such care.

Gap-

Untrained staff of the hospitals and community with regards to psycho- socio care and formation of trauma centers at all major hospitals.

5.3 Activation of Incident Response System in the District

Command

This function under IRS establishes the framework within which a single leader or committee can manage the overall disaster response effort. The Incident Commander is responsible for the successful management of the response during operational period in an area. If the incident grows in size and extends beyond jurisdictions, multiple incident commanders can be useful with an area command authority established to coordinate among the incidents. Incident Commander requires the following Command Staff to support him, as follows:

- Information & media officer – the single media point of contact

- Safety Officer – Responsible for assuring personal safety and to assess hazardous and unsafe situations, he has the authority to directly stop an operation if personal are in imminent life threatening danger.
- Liaison Officer – assigned for assisting or cooperating assignments or those involved in a unified command.

Operations:

This section is responsible for managing all tactical operations at an incident as in the Incident Action Plan (IAP) for coordinating and managing the activities taken by responding agencies and officials. This section is dictated by the number of tactical resources involved and span of control considerations. Operation section consists of components of Staging area, Response Branch, with Ground or surface based tactical resources and Transportation, Branch for road and air resources.

Planning:

This section is responsible for managing all information relevant to an incident. It supports the disaster management effort by collecting, evaluating, disseminating information about the development of the emergency and status of all available resources. Dissemination is based on the form of Incident Action Plan (IAP), formal briefings, maps and status board displays that will guide emergency operations/ response by personals. Followings are the six primary activities performed by the planning section:

- Maintaining status keeping of current location and status of all resources
- Prepare future projections of the incident growth, maps and intelligence information
- Maintaining of accurate, up-to-date incident files and stored for legal, analytical, and historical
- Conducting long-range and contingency planning
- Developing plans for demobilization

Logistics:

This section of response is responsible for facilities, transportation, Communication, Supplies, Equipment maintenance and fueling, food services, medical services, ordering resources and finance and administration. This section is responsible for determining the need to activate or deactivate a unit

5.4 Protocol for seeking help from other agencies

Assistance by Armed Forces should be requisitioned when the situation cannot be handled by the civil administration from within its resources. However, this does not imply that the response must be graduated. If the scale of disaster so dictates, all available resources must be requisitioned simultaneously.

The Armed Forces may be called upon to provide the following types of assistance:

- Infrastructure for command and control for providing relief. This would entail provision of communication sand technical man power.

- Search rescue and relief operations at disaster sites.
- Provision of medical care at the incident site and evacuation of casualties.
- Logistics support for transportation of relief materials
- Setting up and running of relief camps
- Construction and repair of roads and bridges to enable relief teams/material to reach affected areas.
 - Repair, maintenance and running of essential services especially in the initial stages of disaster relief.
- Assist in evacuation of people to safer places before and after the disaster
- Coordinate provisioning of escorts for men, material and security of installations,
- Stage management and handling of International relief, if requested by the civil ministraton.

The format for the Requisition for Army Aid by Civil Authorities is in **annexure.....**

5.5 Checking and Certification of logistics, equipment's and stores

1. Officials from (relief) revenue department will be responsible for monitoring logistics and equipment required for disasters on a periodically and shall be certified by the concerned officer and the report of the same be deposited with the disaster management cell.
2. Departments like PWD, I&PH, Electricity, MC, Forest, etc. to also monitor their logistics, equipment's and stores annually and send a certificate of the list to DDMA for updation the same on the website.

5.6 Operational check-up of Warning System

In the wake of natural disasters, a Control Room is set up in the district for day-to-day monitoring of the rescue and relief operations on a continuing basis, operationalizing the contingency plan and keep close liaison with the State Headquarters, NGOs and other agencies dealing with disaster management and relief. Checking periodically the equipment for EWS, Satellite phone, Hot Line, Telephone lines available with the authorities etc.

5.7 Seasonal Inspection of Facilities and critical infrastructure

The various departments/ organizations to carry out inspection of the resources and equipment annually and especially before the onset of the seasons of major incidents like rainfall and snowfall. The lifeline infrastructures need to be monitored and repaired, if required, before monsoon. Also all departments to maintain register for seasonal inspection of facilities and critical infrastructure for purpose of

audit of disasters.

5.8 Quick Response Team

The Disaster management Committees functioning at all levels in the district shall identify the suitable skilled person to form Quick Response Teams for various tasks predefined in the Disaster Management Plans. Members of QRT shall be trained in assigned tasks and details of the activities must be documented and submitted to DDMA.

5.9 Community preparedness

Community awareness, education

Community based disaster preparedness (CBDP) is a process to capacitate communities to prevent, mitigate and cope with disasters effectively. As part of CBDP there is community participation from District to Village level awareness programme must be conducted with the help of Print Media, Electronic media, folk media authority can create awareness among community.

Table: Awareness activity and responsible department

Task	Activity	Responsibility
Information, education communication	Advertisement, hording, booklets, leaflets, banners, shake-table, demonstration, folk dancing and music, jokes, street play, exhibition, TV Spot, radio spot, audio-visual and documentary, school campaign, Rally, - Planning and Design -Execution and Dissemination	<ul style="list-style-type: none">• Information Deptt• Education Deptt• All line deptt• Deputy Commissioner• Chief officer• Other Dist. Authorities

5.10 Standard Operating Procedure (SOP's) in Annexure

Protocol and arrangements for VIP visits

The visit of the VIP's to the disaster site is likely to adversely affect the rescue operations, particularly if casualties are still trapped. It should be ensured that their visits do not interrupt rescue and lifesaving work and the police, as co-ordinator of the disaster response,

should explain the ground situation to them and try to avoid their visit, if possible. However, in case the visit becomes impossible to avoid, it needs to fix up the timings of their visits. The additional need of their security also causes a problem. The police and the local services are trained to handle VIP visits and many of the usual considerations will apply to their visit to a disaster site. It is desirable to restrict media coverage of such visits, in such case the police should liaise with the government press officer to keep their number to minimum. It is also necessary for the police to brief the VVIP/VIP beforehand about the details of casualties, damage and the nature of the disaster. It should, therefore, prepare a brief note for such briefings.

5.11 Knowledge Management, networking and sharing

With the need to create a network of knowledge institutions in the field of DM, to share their experiences and knowledge the DDMA would forge ties with knowledge institutions such as NITs, IITs, CBRI, SASE, ICIMOD, GSI, CWC, IMD, Wadia Institute of Himalayan Geology Dehradun, etc., and UN Agencies and other national and international agencies dealing with emergency response will be done to utilise their experience and knowledge for DM in the district.

In acknowledgment of the need for a knowledge sharing platform on DM, and to facilitate interaction and dialogue with related areas of expertise, the DDMA website within the district website would be created. It will connect all Government Departments, statutory agencies, research organisations/ institutions and humanitarian organisations to share collectively and individually their knowledge and technical expertise. ICT would be utilized to disseminate knowledge to the stakeholder so that they can benefit from it.

Uploading of information on resources on India Disaster Resource Network (IDRN)

IDRN, a web based nationwide information system for district level resource, is a platform for managing the inventory of equipment, skilled human resources and critical supplies for emergency response. This database will enable decision makers to assess the level of preparedness for specific vulnerabilities. IDRN is an inventory of all specialist equipment required for emergency/disaster response which will give at the touch of a button the location of specific equipment/specialist resources as well as the controlling authority for that resource so that it can be mobilized for response in the shortest possible time. (Annexure)

Documentation of Lessons Learnt and Best Practices

The responsible department for documentation part is revenue department for the district and all concerned departments. The indigenous technical knowledge would be documented and promoted. And in the immediate aftermath of any disaster or incident, field studies will be carried out, with the help of experts wherever needed, as an institutional measure. These studies will concentrate on identifying gaps in the existing prevention and mitigation measures and also evaluate the status of preparedness and response. Similarly, the lessons of past disasters will also be compiled and documented. The recovery and reconstruction process will also be analysed for further refining the DM

processes and training needs.

5.12 Media management / information dissemination

Media plays a critical role in the information and knowledge dissemination in all phases of Disaster Management including IRS structure. The versatile potential of both electronic and print media needs to be fully utilised. Effective partnership with the media will be worked out in the field of community awareness, early warning and dissemination, and education regarding various disasters. The use of vernacular media would be harnessed for community education, awareness and preparedness at the local level and the DPRO in consultation with DDMA would take appropriate steps in this direction. Both print and electronic media are regularly briefed at predetermined time intervals about the events that occur and the prevailing situation on ground.

With regards to media training and capacity building the District Administration and DPRO need to monitor and facilitate trainings of the personals of media for Disaster Management and presentation keeping the sensitivity of the issue during an incident, especially of the Official Spokesperson. The Spokesperson should be the one appointed by Chairman of DDMA / RO/ IC in IRT under the Information and Media unit to disseminate the information of the incident.

5.13 Medical Preparedness and Mass Casualty Management

In order to avoid confusion, improve efficiency in cost and time medical unit must clearly define disaster response procedures. Orientation and training for disaster response plan and procedures, accompanied by simulated exercises, will keep the department prepared for such eventualities. Some of the require preparedness as per SOP s of Health Department are as follows:

1. Special skills required during disaster situations need to be imparted to the officials and the staff.
2. Surgical packs should be purchased, assembled and sterilized to last four to five days.
3. All valuable instruments, such as surgical tools, ophthalmic scopes, portable sterilizers, CGS, dental equipment, etc. should be stocked in protective coverings
4. Protection of all immovable equipment, such as x-ray machines, by covering them with tarpaulins or polythene.
5. If surgery is to be performed following the disaster, arrangement for emergency supplies of anaesthetic gases required.
6. Organise in-house emergency medical teams to ensure adequate staff availability to handle emergency casualties by setting up teams of doctors, nurses and dressers for visiting disaster sites.
7. Plan for emergency accommodations for auxiliary staff from outside the area.
8. Information formats and monitoring checklists should be used for Programme monitoring and development and for reporting to Emergency Operations Center.

514 Community Based Preparedness Efforts

The strategy for awareness may include the following:

1. Meetings with key persons and their training programs
2. Rallies, Street Plays
3. Competitions in Schools/ colleges
4. Distribution of IEC material
5. Wall paintings related to slogans and Do's and Don'ts for various Hazards
6. Training and workshops for PwD and vulnerable groups of the society
7. Use of radio for dissemination of information related to Disasters preparedness and situations during an incidence.

Table : Measures of Preparedness by Stake holding Departments for Disasters

ESF Name	Responsible Officer	Function Lead and Department	Scope/ Emergency Preparedness
Search & Rescue	Commandant home guard	Home guard, S.P., Fire Officer, Note: Home Guards will lead SAR. Fire Services will be primary in case of Fire Hazard.	<ul style="list-style-type: none"> • Ensure proper functioning of all firefighting equipment, appliances and respiratory equipment. • Ensure important buildings should have sketched maps and marked evacuation routes. • Ensure regular evacuation drills as per DM plans in all important buildings, hospitals, etc. • Make a database of existing firefighting services and facilities provided with private agencies. • Ensure, at disposal, the list of adverse effects of chemicals and antidotes/ methods to deal with emergency involving each chemical • Review the adequacy of existing fire prevention arrangements in each MAH and other hazardous units before and after the installations. Share the report with Department of Industrial Safety and Health. • Identify roads and routes of access and escape to and from MAH and other potential hazardous units.
Law and Order	superintendent of police	Police Dept. Home Guards Commandant Para-military (CRPF, SSB), Armed Forces	<ul style="list-style-type: none"> • Ensure proper functioning of all equipment. • Ensure proper mechanism in place for early warning of different hazards through police stations and police posts. • Arrange for public address system and siren. • Prepare for temporary installation of wireless systems between district and subdivisions in case of any damage to existing wireless system with the department. • Ensuring a dedicated disaster management channel in the existing wireless system of the police • Train communication wing of police in setting up control room at short notice at a required site. • Prepare Contingency Plan for response to bomb blast, riots, terrorist attack and other law and order emergencies. • Prepare deployment plan of home guards and other volunteers for protection of property

			<p>of affected community.</p> <ul style="list-style-type: none"> • Prepare for proper arrangement for custody of recovered belongings and property from dead bodies and affected sites. • Police personal and staff of PCR vans should keep basic first aid box and ensure proper functioning of equipment. • Train police personnel & staff of PCR vans in first aid and basic life saving techniques.
Health and Sanitation	Chief Medical Officers,	Health Department	<ul style="list-style-type: none"> • Prepare trained team of paramedics. • Develop dos and don'ts and IEC materials regarding health and hygiene. • Organise awareness camps with help of CHC/ PHCs and Development and Panchayat Department for hygiene promotion and public health issues. • Ensure availability of trained mobile medical teams at disposal. • Prepare psychosocial care teams with existing staff nurses and medical support staff • Ensure availability of generator sets and buffer stock of fuel at disposal. • Ensure availability of adequate supply of life saving equipments and stock of medicines, portable supplies including portable oxygen cylinders, portable X-ray machine, portable ultrasound machines, triage tags, etc. • Ensure availability of adequate space with suitable facilities for storage of medicines. • Prepare a database of private hospitals and nursing homes with services & facilities available. • Prepare a database of doctors registered with Indian Medical Association (IMA). • Prepare a database of available ambulance services from government, private agencies and District Red Cross Society, if any. • Ensure, at disposal, list of MAH units and hazardous chemicals stored in them. • Ensure, at disposal, the list of antidotes for various hazardous chemicals. This list is prepared by Department of Industrial safety and Health. • Ensure availability of adequate supply of blood units. • Prepare database of blood donors in the district and update the same in DDMRI. • Prepare a database of providers of refrigerated vehicles for transportation of vaccines, blood, blood products, etc. • Train drivers and attendants of ambulance and mobile medical units in first aid and basic life saving techniques. • Prepare a decontamination ward in view of any possible chemical or industrial hazard. • Prepare for prompt establishment of temporary hospital, mobile surgical unit, etc at short notice, near the affected area. • Ensure proper and safe mechanism for medical waste disposal. • Prepare for proper disease surveillance system.

			<ul style="list-style-type: none"> • Make proper arrangement and mechanism for mass casualty management.
Public Works	Nodal officer/ Executive Engineer,	Executive Engineer, Rural Works Dept Executive Officer, Municipal Council	<ul style="list-style-type: none"> • Ensure availability and functioning of all equipment like cranes, JCB, etc. with proper resource mapping of these equipment • Prepare a data base of availability of heavy equipment like cranes, JCB with private agencies also. • Ensure, at disposal, the list of MAH units and other vulnerable buildings. • Prepare for prompt clearance of debris. • Prepare the demolishing squad for prompt demolition of unsafe buildings. • Prepare for prompt clearing and repairing of damaged roads, culverts, bridges and flyovers. • Prepare for construction of new temporary roads at short notice for diverting traffic from the affected area. • Prepare for construction of temporary facilities like that of medical post, temporary shelters, etc at short notice with basic amenities and proper sanitation • Prepare or prompt establishment of helipad near the affected site for VVIP visits • Prepare for restoration of government buildings damaged during disaster..
Food & Supplies	District food & civil supplies	Food & Supplies Department	<ul style="list-style-type: none"> • Prepare a database of godowns and cold storage facilities in the district. • Prepare a database of catering services providers. • Prepare for safety of stored food grains in godowns against inundation and water logging, fire and other possible hazards. • Prepare for out-movement of food grains to a pre-decided safer location, if required. • Ensure availability of adequate food grains storage in godowns in view of the scarcity or emergency period. • Prepare a database of kerosene depots, petrol pumps, gas agencies, etc and update the same in DDMRI. • Ensure availability of adequate stock of gas cylinders, kerosene, etc. • Prepare database of private retailers and wholesalers of edible food items. • Prepare a database of providers of refrigerated vehicles for transportation of perishable food items. • Prepare for large scale movement of food grains, their transportation, expeditious unloading, proper storage and prompt distribution through fair price shops, if required. • 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 community kitchen and cremation and burial.
Agriculture	Dy. Director	Agriculture Department	<ul style="list-style-type: none"> • Prepare Agriculture Contingency Plan. • Constitute a Crop Weather Watch Group at district level (as per 'A Model Manual for

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| | | <p>Drought Management', GOI) with representatives from Meteorological Department and concerned officers dealing with agricultural inputs, credit extension, etc to keep a close watch on the monsoon situation, extreme temperature, hail and wind storm.</p> <ul style="list-style-type: none">• Identify vulnerable areas prone to pest infestation, drought, flood and other hazards.• Ensure awareness generation in farmers regarding various plant diseases, alternate cropping practices in disaster-prone areas, crop insurance, provision of credit facilities, proper storage of seeds, etc.• Provide training to farmers in alternate cropping techniques, mixed cropping and other agricultural practices which minimize crop losses during future disasters.• Ensure surveillance for pest infestation and crop diseases.• Ensure availability of stock for immediate replacement of broken/non-functioning gadgets/ equipment.• Ensure availability of adequate stock of seeds and other agro inputs particularly for areas vulnerable to hazards.• Prepare trained and equipped team for assessment of damage to soil, crop, plantation, drainage, embankment, other water bodies and storage facilities that might impact agricultural activities.• Prepare for establishment of public information booths, with appropriate and modern means of communication, to assist farmers in providing information regarding insurance, compensation, repair of agro equipment and restoring of agricultural activities at the earliest.`• Identify sources of feed and fodder. |
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Livestock Shelter and Fodder	Dy. Director Animal Husbandry	Dept. of Animal Husbandry	<ul style="list-style-type: none"> • Ensure isolation/ separation of sick and healthy animals and prepare for arrangements for keeping, feeding and watering of animals suffering from contagious diseases. • Sensitize farmers/ owners for above problems. • Ensure separate transportation of animals suffering from contagious diseases. • Ensure proper disinfection of space, vehicle and manpower involved in transportation of sick/ infected and dead animal from contagious diseases. • Ensure fully functional mobile veterinary unit at disposal. • Prepare a database of veterinary hospitals/ clinics and agencies working for animal care. • Ensure availability of stocks of mineral and feed supplements, lifesaving drugs, electrolytes, vaccines, etc. • Ensure sensitization of farmers about protection of their feed and fodder prior to the onset of monsoon. • Ensure filling feed banks before the scarcity period. • Prepare for the feed of the poultry birds for drought situation. • Locate feed and fodder banks in view of submergence situation during the monsoon. • Identify source for procurement of fodder. • Identify safe locations for fodder depot and cattle camps within the district. • Ensure assured source of water or canals for drinking and growing fodder along with the above locations. • Prepare for necessary arrangements of tatties, gunny bags and tarpaulin sheets to cover the sheds during heat and cold waves. • Ensure availability of sprinklers/ foggers in shed/camp during heat waves period.
Drinking Water and Supplies	Nodal officer/ Executive Engineer,	Irrigation and Public Health Department	<ul style="list-style-type: none"> • Ensure availability and well-functioning of all equipment and vehicles. • Prepare for distribution of water purifying tablets, bleaching powder and chlorination of public water resources, if required. • Prepare for arrangement of safe drinking water supply for surviving community in the affected areas and also in relief camps and shelters. Also prepare for provisioning of water for other purposes. • Prepare a database of suppliers and distributors of packaged drinking water. • Prepare for prompt repair of pipelines supplying potable water. • Prepare for prompt repair of sewerage systems and water works. • Make standby arrangements of generators for running the water pumps. • Ensure availability of adequate number of water tankers, drums, jerry cans or identify their private suppliers to prepare for supply of water, in scarcity period and in emergency. • Ensure availability of water supply/ filling points for fire tenders, water cannons, hospitals and

			<p>other necessary lifesaving infrastructure.</p> <ul style="list-style-type: none"> • Prepare for prompt provision of temporary toilets in the affected area and relief camps. • Ensuring filling of water ponds/ lakes in the district with canal water/ tube wells prior to summer or whenever required in coordination of Irrigation Department.
Power	Nodal officer/ Executive Engineer,	Electricity Department	<ul style="list-style-type: none"> • Ensure transmission map at disposal. • Prepare a database of critical and lifesaving infrastructure in the district and prepare for providing uninterrupted power supply to them. • Prepare for providing continuous power supply to the affected area. • Prepare to provide electrical connections and system at short notice in affected areas for purpose of pumping flood water and illumination of the area. • Prepare for prompt replacement of affected power supply system. • Ensure availability of adequate stock of important equipment like transformers, poles, conductors, cables, insulators, etc. for prompt action whenever required. • Ensure trained construction and maintenance staff at disposal. • Backup support till the supply is restored to normalcy
Transport	DTO/ Regional Manager	Transport/Hi machal Roadways	<ul style="list-style-type: none"> • Ensure proper functioning of filling station, vehicles and equipment including fire extinguishers, first aid kits, etc. • Prepare for prompt deployment of vehicles at short notice for various purposes like mass evacuation, transportation of response teams, relief items, victims, etc. • Prepare mechanical team for prompt repair of equipment and vehicles. • Train drivers and conductors in first aid and basic life saving techniques. • Identify the vehicle for rescue operations. • Be well familiar with routes of potential hazardous installations and follow incident traffic plan.
Removal and Clearances	Nodal officer/ Executive Engineer,	Executive Engineer, Rural Works Dept / Executive Officer, Municipal Council	<ul style="list-style-type: none"> • Keeping equipment like gas cutters, cranes etc. in order. • Enlisting truck owners. • Enlisting workers in municipalities and grooming them to work as a team • To keep regular interaction with them to get response at the time of emergencies
Communicati on	communicati on in charge general	police wireless BSNL ,Other	<ul style="list-style-type: none"> • Procure recovery plans from private communication service providers for their recovery time objectives.

	manager	Wireless networks	Prepare for alternate communication System
Forest	DFO	Forest Department	<ul style="list-style-type: none"> • Ensure proper functioning of all equipment and vehicles. • Prepare a database of Ara machine holders, carpenters. • Prepare team for catching wild animals to prevent infiltration in habituated areas, relief camps, etc. • Prepare for supply of wood for cremation.
Information Dissemination and Helpline	DPRO,	Information and Public Relations Dept.	<ul style="list-style-type: none"> • Prepare for proper public address system ensuring rumour control. • Prepare for media management. • Ensure database of dos and don'ts of all possible hazards in the district. • Ensure distribution of IEC material to community for awareness generation about the same. • Publicise the information in the interest of public awareness through booklets, pamphlets, radio, television, film shows, newspapers, documentary films, door to door campaign, meetings, etc.
Revenue and Disaster Management Department	ADM (In-charge of Disaster Management)	Revenue and Disaster Management Department	<ul style="list-style-type: none"> • Ensure regular monitoring of rain gauge and regular updation of database for distribution and variation in rainfall. • Ensure proper mechanism in place for early warning of different hazards to village level through tehsildars, Patwaris, DDPO. • Ensure proper functioning of district Flood Control Room during monsoon period and otherwise, if required. • Identify villages vulnerable to flood and drought. • Prepare a database of critical and lifesaving infrastructure in the district • Prepare a database of safe locations for evacuation. • Identify possible safe sites for temporary shelters, relief camps and staging area. • Ensure availability of fully functional boats, life jackets and oars in view of flood condition of the district. • Prepare a database of voluntary organizations and service they offer. Ensure the authenticity of the same. • Identify competent persons/ experts from various required fields for carrying out damage and need assessment post disaster. • Prepare proper mechanism for disbursement of compensation to victims or families of deceased. • Prepare a database of safe locations for relief distribution site for mass care and housing. • Identify site(s) for temporary burial.

