

**Important Action Points**  
**pertaining to**  
**National Disaster Management Plan, 2019**  
**&**  
**National Disaster Management Guidelines**

<b>Table of Contents</b>		
<b>S. No.</b>	<b>Particulars</b>	<b>Page No.</b>
<b>A</b>	<b>National Disaster Management Plan, 2019</b>	<b>2</b>
<b>B</b>	<b>National Disaster Management Guidelines on:-</b>	
1.	Preparation of State Disaster Management Plans	3
2.	Management of Urban Flooding	3
3.	Management of Drought	3
4.	Museums	4
5.	Cultural Heritage Sites and Precincts	4
6.	Preparation of Action Plan – Prevention and Management of Thunderstorm & Lightning / Squall/ Dust/ Hailstorm and Strong Wind	5
7.	Temporary Shelters for Disaster - Affected Families	5
8.	Disability Inclusive Disaster Risk Reduction	6
9.	Preparation of Action Plan – Prevention and Management of Heat Wave (Revised Guidelines).	6
10.	Management of Earthquakes	7
11.	Management of Chemical (Industrial) Disasters	7
12.	Management of Medical Preparedness and Mass Casualty Management	8
13.	Management of Floods	8
14.	Management of Biological Disasters	9
15.	Management of Nuclear and Radiological Emergencies	10
16.	Management of Landslides and Snow Avalanches	10
17.	Management of Chemical (Terrorism) Disaster	11
18.	Psycho-social support and mental health services in disasters	12
19.	Management of Tsunamis	12
20.	Management of the Dead in the aftermath of Disasters	13
21.	National Disaster Management Information and Communication System	13
22.	Seismic Retrofitting of Deficient Buildings and Structures	14
23.	Boat Safety	15
24.	Landslide Risk Management Strategy	15
25.	Incident Response System	16
26.	School Safety Policy	16
27.	Management of Cyclones	17
28.	Hospital Safety	18

### **Important Action Points of National Disaster Management Plan (NDMP), 2019**

1. Revision of State Disaster Management Plan (SDMP) and District Disaster Management Plan (DDMP) following National Disaster Management Plan 2019 incorporating all cycles of disaster management and integrating overarching concepts like social inclusion into the sub-national plans.
2. Ensure the revision of the Plan also focuses on the Ten Point Agenda outlined by Hon'ble Prime Minister during Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR) 2016, held in New Delhi during November 2016.
3. Mainstream DRR into other development programs/ projects at the state and district level.
4. Conducting a comprehensive survey on multi-hazard disaster risks by also taking into consideration future climate change scenarios. Effective use of science, technology, and traditional knowledge to reduce disaster risk.
5. Prepare a roadmap for various DRR Activities with clearly demarcated short, medium, and long term activities.

**Important Action Points of National Disaster Management Guidelines prepared by NDMA**

<p><b>1.</b></p>	<p><b>Preparation of State Disaster Management Plans</b></p> <ol style="list-style-type: none"> <li>1. States to develop their Disaster Management Plan on the lines of NDMP 2019. Roles and responsibilities for various disasters, indicated in DRR matrix and other sections in NDMP 2019 and the various guidelines issued by NDMA, should be included in the SDMP with specific timelines and agencies responsible. Districts should align their DDMPs with SDMP.</li> <li>2. States to identify disasters which they are prone to, including State specific disasters, and conduct HRVA for the State.</li> <li>3. Based on the HRVA, Hazard wise prevention, mitigation, preparedness, response, recovery and rehabilitation measures should be included in the Plan.</li> <li>4. SDMPs should clearly lay down horizontal and vertical coordination mechanism. An SOP should also be prepared in addition to the Plan.</li> <li>5. The Plan should aim to mainstream DM Concerns into Developmental Plans / Programmes / Projects through various departments.</li> </ol>
<p><b>2.</b></p>	<p><b>Management of Urban Flooding</b></p> <ol style="list-style-type: none"> <li>1. Establishment of the Urban Flooding Cell in State Nodal Departments and ULBs</li> <li>2. Establishment of Urban Flood Early Warning System</li> <li>3. Establishment of Local Network of Automatic Rainfall Gauges (ARGs) for Real-time Monitoring with a density of 1 in every 4 sq km in all 2325 Class I, II and III cities and towns</li> <li>4. Geo-spatial information generation by contour mapping at 0.2 - 0.5 m along with the inventory of the existing storm water drainage system</li> <li>5. Identification and implementation of non-structural measures for urban flood preparedness like Pre-Monsoon De-silting of Drains will be completed before March 31 every year, community engagement and public awareness campaigns.</li> </ol>
<p><b>3.</b></p>	<p><b>Management of Drought</b></p> <ol style="list-style-type: none"> <li>1. Preparation of State/District Plans with defined roles &amp; responsibility matrix, timeline, and Standard Operating Procedure (SoP) for drought management.</li> <li>2. Establish a separate Drought Monitoring Cell (DMC) at the state level. DMC will prepare vulnerability maps. In addition, it will conduct regular assessment</li> </ol>

	<p>for (1) food/fodder production, (2) depletion of water resources, (3) livestock population, (4) land degradation, and (5) deforestation, to undertake preventive, mitigative and preparedness measures.</p> <ol style="list-style-type: none"> <li>3. Preparation and implementation of a contingency plan in case of late-onset of monsoon or dry spells and encourage the farmers to take crop insurance (PMFBY).</li> <li>4. Promotion of micro-irrigation, low water intensity crops, and crop diversification along with other drought mitigation measures. Plan for awareness campaigns among the farmers to popularize drought management practices like intercropping, mulching, weed control, intercultural operations.</li> <li>5. Incorporate research and development programs into drought management and document lessons learnt from previous drought events. Based on the lessons learnt, the drought management plans may be revised periodically.</li> </ol>
<p><b>4.</b></p>	<p><b>Museums</b></p> <ol style="list-style-type: none"> <li>1. Conduct a nationwide survey of museums to assess their current preparedness and availability of resources.</li> <li>2. Create a streamlined DRM plan for all museums along with SOP for Post-disaster Documentation and Damage and Loss Assessment.</li> <li>3. Conduct trainings for handling emergencies in museums.</li> <li>4. Develop a manual on best practices and document lessons learnt.</li> <li>5. Develop inter-agency coordinated strategies for emergency management in museums. The same needs to be streamlined into state disaster management plans.</li> </ol>
<p><b>5.</b></p>	<p><b>Cultural Heritage Sites and Precincts</b></p> <ol style="list-style-type: none"> <li>1. Identification and Documentation of Cultural Heritage Sites and Precincts – Photographic documentation of site attributes along with geo-tagging, 3-D mapping of sites, the possibility of crowd-maps and local stakeholder engagement &amp; preparedness.</li> <li>2. Risk analysis through Scenario Building by identifying vulnerabilities and hazards at the site</li> <li>3. Prepare plans for Emergency Preparedness and Disaster Response</li> <li>4. SOP for Post-disaster Documentation and Damage and Loss Assessment</li> <li>5. Develop inter-agency coordinated strategies for emergency management at State-level for State-protected Cultural Heritage Sites and Precincts</li> </ol>

<p>6.</p>	<p><b>Preparation of Action Plan – Prevention and Management of Thunderstorm &amp; Lightening / Squall/ Dust/ Hailstorm and Strong Wind</b></p> <ol style="list-style-type: none"> <li>1. Preparation of a State Action Plan based on NDMA Guidelines 2018-19. Preparation of detailed department-wise SOPs with clearly defined roles and responsibilities</li> <li>2. Disseminate Nowcast -warning to the public through print/ electronic/social and other mass media, including SMS, at the local level. Disseminate Do's and Don'ts on Thunderstorm and Lightning Dust/Hailstorm, Squall and Strong Winds</li> <li>3. Ensure appropriate medical staff and facilities at the pre-identified vulnerable places in thunderstorm prone districts. Ensure the stockpiling of life-saving drugs, detoxicates, anesthesia, and Halogen tablets in vulnerable areas.</li> <li>4. Promote installation of lightning conductors/arresters in all public buildings including schools, industries, Government, and private buildings in the vulnerable areas. Undertake drives to check the structural strength of hoardings and old buildings, to take appropriate action.</li> <li>5. Designate a nodal officer for emergency response with clearly defined roles and responsibilities to undertake assessment of damage from weather-related incidents, collection of updated data/information from the field, and reporting to State/national level, and for reviewing/ updating the Action Plan.</li> </ol>
<p>7.</p>	<p><b>Temporary Shelters for Disaster - Affected Families</b></p> <ol style="list-style-type: none"> <li>1. Pre-identification of material depots and suppliers for tents/ shelter kits/ prefabricated shelters and materials such as tarpaulins, CGI sheets, bamboo, etc. up to the village level and approve MoUs for supply at a short notice, starting within 24 hours, as per the requirement.</li> <li>2. Compile and maintain a consolidated database of trained construction artisans such as masons, plumbers, electricians, etc. from government/ private vocational training institutes, NGOs, and CSR organizations. Also, compile a database of professionals (engineers and architects) and contractors.</li> <li>3. Pre-identify suitable safer land to be used for temporary (emergency and intermediate) shelters, if relocation is needed after the disaster (where in-situ construction is not possible), workout arrangement for its use, in coordination with district and local bodies. (ensure inclusion of landless and tenants)</li> <li>4. Response plan for any public health needs to prevent and mitigate a sudden outbreak of the epidemic, water, and food contamination as well as other public health-related problems in temporary shelters. Ensure arrangements for the supply of clean drinking water, clean toilets, waste disposal, and other necessary hygienic practices.</li> </ol>

	<p>5. Prepare and implement a capacity building plan for the district and village panchayats, the government personnel, private engineers/ architects, contractors, and masons. Prepare relevant IEC materials for all involved stakeholders including homeowners.</p>
<p><b>8.</b></p>	<p><b>Disability Inclusive Disaster Risk Reduction</b></p> <ol style="list-style-type: none"> <li>1. Creation and maintenance of a database for identification and listing of any individual with disabilities. A list of NGOs and Disabled People Organisations (DPOs) should also be maintained.</li> <li>2. Identify hazard-specific vulnerabilities faced by people with disabilities which can increase the risks due to disasters</li> <li>3. Inclusion of disability issues in all the policies and plans for disaster management and development programs in line with the RPWD Act, 2016, and international agreements. Evaluation of schemes through a social and third audit to ensure disability inclusion in the development programs.</li> <li>4. Updatons and Implementation of design codes for universal accessibility of infrastructure. Ensure all the post-disaster reconstruction activities are as per the accessibility requirements of persons with disabilities.</li> <li>5. Prepare contingency plans and SOPs for the key stakeholders such as rescue personnel, medical, relief workers, etc. in participatory matters with Disabled People Organizations (DPOs).</li> </ol>
<p><b>9.</b></p>	<p><b>Preparation of Action Plan – Prevention and Management of Heat Wave (Revised Guidelines).</b></p> <ol style="list-style-type: none"> <li>1. Preparation/revision of Heat Action Plan based on NDMA Guidelines and local experiences. Coordination among all stakeholders. Define the roles and responsibilities of all stakeholders clearly.</li> <li>2. Estimation of the local temperature threshold for action to be taken by the state</li> <li>3. Periodical review of preparedness &amp; mitigation measures. Long term planning for heat resilient infrastructure in urban and rural areas. Inclusion of green building environment and implementation of building codes for heat wave risk mitigation.</li> <li>4. Ensuring adequate heat wave related health facilities with sufficient provisions for basic medicines in the primary health centers. Identification and implementation of mainstream heat health-related precautionary measures like re-scheduling of working hours and reduce piece rate etc. Ensure shed and</li> </ol>

	<p>drinking water facilities for workers at all work place.</p> <p>5. Creating a system for information dissemination for heat wave warning and create awareness through print media, electronic media, social media, etc. and display board with color-coding warning/ alert. Effective dissemination of Do's and Don'ts for a heat wave.</p>
<p><b>10.</b></p>	<p><b>Management of Earthquakes</b></p> <ol style="list-style-type: none"> <li>1. Enforcement and monitoring compliance of earthquake-resistant building codes, town planning bye-laws and other safety regulations: <ol style="list-style-type: none"> <li>i. licensing of engineering professionals</li> <li>ii. establishing an appropriate mechanism for compliance review of all construction designs submitted to ULBs;</li> <li>iii. undertaking mandatory technical audit of structural designs of major projects by the respective competent authorities</li> </ol> </li> <li>2. Development of an inventory of the existing built environment; assessing its seismic risk and vulnerability by carrying out a structural safety audit of all critical lifeline structures.</li> <li>3. Improved awareness of earthquake risk and vulnerability and seismic risk reduction measures to various stakeholders through sensitisation workshops, seminars and public awareness campaigns.</li> <li>4. Preparation of DM plans by schools, hospitals, super malls, entertainment multiplexes, etc. and carrying out mock drills for creating greater public awareness.</li> <li>5. Carrying out the vulnerability mapping of earthquake-prone areas and creating inventory of resources for effective response.</li> </ol>
<p><b>11.</b></p>	<p><b>Management of Chemical (Industrial) Disasters</b></p> <ol style="list-style-type: none"> <li>i. Capacity Development – Capacity development of local people, Civil administration and Industries.</li> <li>ii. Offsite DMP of each district should involve all hazardous chemical impacts of respective districts (based on Detailed QRA) Installation, Transportation hazards etc. This point is still pending in many districts.</li> <li>iii. GIS mapping of hazardous industries and resource mapping for disaster preparedness.</li> <li>iv. Risk indexing of hazards in each district</li> <li>v. Fire Fighting capacity development of hazardous districts as per risk of respective districts.</li> </ol>

<p><b>12.</b></p>	<p><b>Management of Medical Preparedness and Mass Casualty Management</b></p> <ul style="list-style-type: none"> <li>i. Development of Medical Preparedness Plans as part of the all hazard disaster management plan based upon the national guideline.</li> <li>ii. Allocation of resources and provision of necessary finances for efficient implementation of the Medical Preparedness Plan</li> <li>iii. SDMAs to formulate suitable mechanism for active involvement of professional experts for planning, implementation and monitoring of community centric medical preparedness and mass casualty management activities.</li> <li>iv. Continuous updating and enhancement of the India Disaster Resource Network and its integration with DM plans</li> <li>v. Preparation of District Medical Preparedness Plans as part of the DDMP based on the MPMCM guideline</li> </ul>
<p><b>13.</b></p>	<p><b>Management of Floods</b></p> <ul style="list-style-type: none"> <li>i. <b><u>Preparation of Flood Management plans -:</u></b> It is expected that state governments will prepare their FMPs, which will be holistic, participatory, inclusive, ecofriendly and gender-sensitive in nature and the implementation of which will result in a flood- resilient India. The plans will focus on the community and the collective efforts of the government and NGOs. These plans will include Identification of Flood prone areas, Flood forecasting modernization mechanism, Dept. level SOP preparation and intra state coordination strategies if required.</li> <li>ii. <b><u>Risk assessment of critical infrastructures on regular basis-:</u></b>For Floods, it is required to prepare a mechanism for risk assessment of critical infrastructures i.e. Inspections of dams, embankments and other structural measures by the state governments – twice every year, once before monsoon (April-May) and second time after monsoon (November-December) and restoration/strengthening works by the state governments–every year. With this procedure for monitoring of structural measures–by the state governments should be adopted–throughout the year with special attention during monsoon. Expansion and modernization of flood forecasting and warning network and DSS for flood management as and when required.</li> <li>iii. <b><u>Capacity building of local state dept. and stakeholders on Structural/Non-structural mitigation measures-:</u></b> Capacity building measures usually involve implementation of the flood proofing measures such as raising of villages, constructions of floods shelters, making public utility installations flood safe, identification of spots vulnerable to river bank erosion and plan remedial measures to protect such areas.</li> </ul>

	<p>iv. <b><u>Preparedness for Emergency Medical Response-</u></b>Local scale emergency medical response systems will be established to deal with medical preparedness, emergency treatment, mortuary facilities and disposal of bodies and carcasses, public health issues including trauma and control of epidemics in Flood prone areas and Health dept. of the concerned state should identify their role while making Dept. level response plans.</p> <p>v. <b><u>Establishing Effective Community Level First Responder Support Vulnerable areas of Flood</u></b></p> <p>Encourage local residents to constitute consisting of ex-servicemen, retired police personnel, paramilitary forces and PRI Institutions to participate in Flood Mitigation activities. Mass gathering and awareness activities i.e. Flood safety Week etc. should be organized for the people living in vulnerable areas. This will also include various youth organizations, namely (i) NCC, (ii) NSS, and NYKS to have the inherent advantage of outreach at the grass-root level and also have the advantage of ready availability for immediate assistance at the ground level in the event of any disaster.</p> <p>vi. <b>Review and modification of Rule Curves and Operation Manuals of all Reservoirs</b></p>
<p><b>14.</b></p>	<p><b>Management of Biological Disasters</b></p> <p>i. Uptake of various pharmaceutical and non-pharmaceutical interventions in DM and Development Plans.</p> <p>ii. Defining and establishing a well orchestrated medical response to biological disasters by having a command and control function at the district level with the district collector as commander.</p> <p>iii. Aspect of community preparedness to be included in the State DM plan using the PPP mode.</p> <p>iv. SDMAs/DDMAs to identify the various requirements of critical infrastructure to be developed with PPP models to mitigate the impact of biological disasters.</p> <p>v. The various response protocols—including emergency medical response by instituting the ICP under the overall directions of the incident commander, transportation of patients and treatment at the hospitals—will be developed and practiced through regular mock drills in a simulated environment.</p>

<p><b>15.</b></p>	<p><b>Management of Nuclear and Radiological Emergencies</b></p> <ul style="list-style-type: none"> <li>i. Establish monitoring mechanism to prevent illicit movement of radioisotopes by installing radiation detectors at all identified locations at border posts, and ports [Item # 7.14.1(3) of NDMP-2019]</li> <li>ii. Developing capability for response by preparing a national plan for nuclear and radiological emergencies [Item # 7.14.5 (5) of NDMP-2019]</li> <li>iii. Appoint, and maintain area wise details of radiological safety officers, trained medical personnel, first respondents, trained volunteers, etc. and maintain adequate stock of radiation detection, monitoring instruments, safety kits, first aid medicines [Item # 7.14.5 (7) of NDMP-2019]</li> <li>iv. To identify the places/buildings such as community buildings/schools /hospitals for use as emergency shelters including provision for food, water, medicines and other relief materials should be made at the shelters for the affected public [item # 7.14.5 (7) of NDMP-2019]</li> <li>v. Setting up of at least one mobile radiological laboratory unit in each district and at least two such units in each metropolis [Item # 7.14.5 (7) of NDMP-2019]</li> </ul>
<p><b>16.</b></p>	<p><b>Management of Landslides and Snow Avalanches</b></p> <ul style="list-style-type: none"> <li>i. <b>Techno-Legal Regime</b> The state governments/SDMAs will adopt the model techno-legal framework for ensuring compliance with land use zoning and landslide safety issues in all development activities and plans.</li> <li>ii. <b>Creation of Public Awareness on Landslide Risk Reduction</b> Handbooks, posters, and handbills containing the status of landslide hazards will be distributed, and details of landslide indicators along with precautions to be adopted and suggestive measures will be displayed near landslide prone sites. Short video films on landslide risk, vulnerability, and importance of preparedness and mitigation measures will be prepared for the general public. The electronic and print media will also be made an integral part of the campaigns.</li> <li>iii. <b>Awareness Drives for Specific Target Groups</b> State governments/SDMAs, in collaboration with the nodal agency, NGOs, and other identified agencies, will organise awareness programmes on the various aspects of landslide management for specific target groups of</li> </ul>

	<p>stakeholders.</p> <p>iv. <b>Landslide Preparedness</b> Local authorities like gram panchayats, with the help of NGOs and volunteer groups from within the community will prepare and implement community based DM plans. A database of these groups, their contact details, and fields of specialisation will be created and maintained at the district and state levels.</p> <p>v. <b>Medical Preparedness</b> MFRs for administering first aid and resuscitation measures at the incident site and during the transportation of casualties, will be identified and trained. All members of the medical and paramedical teams will conduct regular exercises based on the SOPs laid down by the respective DMAs as part of their DM plans.</p> <p>vi. <b>Landslide Education</b></p> <ul style="list-style-type: none"> <li>• The affected state governments will make sincere efforts to strengthen the field of natural disaster education in general, and landslide education in particular, by incorporating the best available technical and nontechnical inputs on landslide safety in educational curricula at the secondary and senior secondary levels in all schools.</li> <li>• The state governments/SDMAs, in collaboration with their respective boards of secondary education, will ensure that the subject of disaster safety and disaster preparedness is introduced at the senior secondary level (Class XI and XII) and at the undergraduate level in technical and non-technical disciplines as well, and that landslides form an integral part of disaster education.</li> <li>• Investments in disaster education, public awareness, community leadership development, and disaster education of unemployed youth, physically challenged, elderly, women, and school children will be encouraged.</li> <li>• Technical institutes, polytechnics, and universities located in vulnerable areas will develop adequate technical expertise on the various subjects related to landslide management.</li> <li>• Technical institutes, polytechnics, and universities located in vulnerable areas will develop adequate technical expertise on the various subjects related to landslide management.</li> </ul>
17.	<p><b>Management of Chemical (Terrorism) Disaster</b></p> <p>i. A mechanism to monitor and perform regulatory checks of stocks and transportation of chemicals that have inherent potential to act as tools for terrorist activities.</p> <p>ii. Assuring Risk and vulnerability assessment, surveillance mechanism, intelligence gathering, early warning system and safety and security of</p>

	<p>chemical agents.</p> <p>iii. Capacity building by training at various levels of first responders and other emergency functionaries. Community awareness is also a necessary element. Adequate Medical preparedness in nearby area to be developed.</p> <p>iv. Development of indicators for possible modes of delivery and the after effects of chemical agents.</p> <p>v. Necessary PPEs and other fire fighting equipment's availability at districts level to deal with emergency.</p>
<b>18.</b>	<p><b>Psycho-social support and mental health services in disasters</b></p> <p>i. Incorporation of psychosocial support and social vulnerability reduction strategies in State and District DM plans</p> <p>ii. Incorporation of a resource list of all skilled and trained manpower, all government and non-government organizations working in the field of Psycho Social Care in the SDMPs and DDMPs</p> <p>iii. Incorporation of Psychosocial Care in Hospital Disaster Management Plans</p> <p>iv. DDMPs to Identify potential care-providers within the community so that they can be trained and included in the network of potential resources for Psycho Social Care for DRR</p> <p>v. SDMPs and DDMPs to reflect appointment of a Nodal Officer in every state and district ensure disaster preparedness for Psychosocial Support</p>
<b>19.</b>	<p><b>Management of Tsunamis</b></p> <p>i. Multi-hazard vulnerability mapping for addressing the preparedness, mitigation and emergency response requirements in the coastal areas.</p> <p>ii. Consideration of tsunami risk and vulnerability of the coastal areas while designing buildings and other structures in tsunami and cyclone-prone coastal areas especially in the design of public infrastructure like roads, schools, hospitals, multi-purpose shelters etc.</p> <p>iii. Coastal communities to recognise the importance of incorporating tsunami safety measures in the construction of residential buildings, tremendous gains can be achieved in tsunami mitigation.</p> <p>iv. SDMPs/DDMPs to conduct regular public awareness campaigns for familiarizing communities in coastal areas with the tsunami early warning mechanisms through workshops, drills and exercises. School children in the coastal areas right from elementary school level need to</p>

	<p>be made aware of safe evacuation procedures.</p> <p>v. Development of inventory of designs of temporary shelters, intermediate shelters and disaster-resilient, with the flexibility to use traditional and local knowledge, coping capacities and locally available materials</p>
<b>20.</b>	<p><b>Management of the Dead in the aftermath of Disasters</b></p> <ol style="list-style-type: none"> <li>1. Disposal of the Dead will be made an integral part of "all hazard" District Disaster management Plans and SOPs on the subject will be prepared by the District Authorities, based on these National Guidelines, their past experience and best practices available.</li> <li>2. Establishment of Dead Body Management Group in the Incident Response System.</li> <li>3. India Disaster Resource Network, displaying the availability of forensic experts and those associated with DNA profiling</li> <li>4. Based on their Disaster Management Plans, Authorities should acquire equipment for various components of the disposal of dead bodies or identify</li> <li>5. Surge capacity in hospital mortuaries to be explored.</li> </ol>
<b>21.</b>	<p><b>National Disaster Management Information and Communication System</b></p> <p><b>Implementation of Data Fusion Center (NDMIS) on GIS Platform</b></p> <ol style="list-style-type: none"> <li>i. Development of digital Cartographic Base at the appropriate scales and contour intervals.</li> <li>ii. Upgradation of hazard maps of India with respect to various natural hazards (in term of locations, frequency, duration and intensity) to be obtained.</li> <li>iii. Establishment of the necessary computational and data handling hardware along with necessary software, for development of various applications on the GIS-platform to empower the stakeholders (for pre-, during-, and post - disaster scenarios).</li> <li>iv. Development for Decision Support System (DSS) Tool.</li> <li>v. Establishment of Emergency Operation Centers at State and District levels with requisite facilities in consultation with respective authorities.</li> <li>vi. Development of NDMA portal with modules for group messaging system, incident reporting system, resource analysis and relief needs and system administration.</li> <li>vii. Creation of data base at SEOC and DEOC with information such as</li> </ol>

	<p>viii. vulnerable districts, canal, relief material and shelter details etc. Establishment of SEOC and DEOCs as per needs of NDCN: while the network equipment and related hardware and software would be catered for centrally, the civil / electrical infrastructure would have to be provisioned under respective State / Districts establishments.</p>
<p><b>22.</b></p>	<p><b>Seismic Retrofitting of Deficient Buildings and Structures</b></p> <p>i. State Governments should undertake a host of initiatives in association with appropriate organisations and bodies, including</p> <ol style="list-style-type: none"> <li>a. appropriate changes in bye-laws of municipal areas and metropolises, to introduce quality control and quality assurance provisions to encourage and allow retrofitting with no legal blocks</li> <li>b. support to all stakeholders on Seismic Retrofit Technologies for various construction typologies;</li> <li>c. incentives in terms of smaller municipal taxes, lower interest rates for bank loans intended for seismic retrofitting of buildings and structures; and</li> <li>d. mechanism for building a Seismic Retrofit Fund, for undertaking seismic retrofitting of public interest government and private structures</li> </ol> <p>ii. Selective Seismic retrofitting on pilot basis that can be fore-runners for the massive effort of seismic retrofitting in India. As part of this pilot, schools and hospitals can be taken up as the demonstration structures for greater visibility, impact and use.</p> <p>iii. Undertake seismic retrofitting in a phased manner of existing <i>government-owned constructions</i>, and encourage seismic retrofitting of existing <i>privately-owned constructions</i>, through appropriate incentive schemes</p> <p>iv. Buildings to be retrofitted in the jurisdiction of Urban Local Bodies (ULBs), can be displayed with RED and YELLOW tags marking the location coordinates (latitudes and longitudes) on each building, where RED tag would represent high level of seismic un-safety of the building and YELLOW represent moderate level of un-safety.</p> <p>v. Capacity building of professional architects, engineers, contractors and artisans in retro-fit technologies.</p>

<p><b>23.</b></p>	<p><b>Boat Safety</b></p> <p>I. <b>Preparation of Regulations and operating procedures</b> for passengers boat transport which includes safety standards, training in operational matters, planned maintenance; Schedules of Safety awareness programmes, Mock drills and pre-departure safety briefs for passengers with effective communication between master, surveyors and boat owners to facilitate proper boat inspections and surveys.</p> <p>II. <b>Preparation and Implementation of Accident management plans</b> i.e. occasion wise, season wise, Standard operating procedures (SOP's), Search and Rescue Procedures (SAR) with response mechanism at boat/vessels, rescue elements with medical action plan with their roles and responsibilities.</p> <p>III. <b>Weather Forecasting for Safe Boat Operations</b> which includes Severity/intensity of event i.e. rainfall, cyclones etc. on regular intervals, inter agency coordination i.e. CWC, IMD, STATE NODAL AGENCIES etc. and mechanism for early warning generation in the vulnerable areas.</p> <p>IV. <b>Structural and non-structural mitigation measures-:</b> Measures taken on the constructional and structural strength, free board stability, registration number seating capacity, monitoring mechanism, safety briefings with availability of basic safety kits in boats i.e. Lifesaving jacket, Life Buoys, Life Rafts, Fire pump, first aid kit, Rubber fenders, safe embarkation, ladders etc. and its awareness issues.</p> <p>V. <b>Community level awareness and promotion of volunteerism-:</b> In order to strengthen local communities it is required to create awareness among local stakeholders on boat safety issues and they should be well versed with its regulation operation, safety and handling procedures.</p>
<p><b>24.</b></p>	<p><b>Landslide Risk Management Strategy</b></p> <p>A. Taking up pilot projects at least at 10 sites in next two years to strengthen up of existing methodology right up to hazard and risk level.</p> <p>B. Creation of meso level LHZ Maps on 1:10,000 scale in order to cater to the requirements of Landslide Hazard Management planning at District, Tehsil and Block level.</p> <p>C. Wireless networking of all landslide monitoring stations and establishment of real time rainfall monitoring control room. Also, development of early warning communication mechanism.</p> <p>D. The threshold model, as established for different regions, can be used to calculate probability of landslides based on predicted rainfall and its accuracy.</p>

<p><b>25.</b></p>	<p><b>Incident Response System</b></p> <p>These Guidelines intended to provide all States/UTs with a preferred mechanism for effective, efficient and comprehensive management of disasters in India. One of the important illustrative action points in the Incident Response System (IRS) is the Notification of IRS. Although the Guidelines on the IRS were issued in July 2010 under Section 6 of DM Act – 2005, till date, only 11 States/UT (Ten States and one UT) out of 36 States/UTs have notified the IRS at State/District level. The List of 25 States/UTs who have not yet notified IRS is as under:</p> <p>(1) Arunachal Pradesh, (2) Bihar, (3) Chhattisgarh, (4) Goa, (5) Gujarat, (6) Haryana, (7) Jharkhand, (8) Karnataka, (9) Madhya Pradesh, (10) Maharashtra (11) Manipur,(12) Odisha,(13) Punjab,(14) Rajasthan, (15) Sikkim, (16) Tamil Nadu, (17) Telangana, (18) West Bengal, (19) Chandigarh, (20) Dadra &amp; Nagar Haveli and Daman &amp; Diu, (21) Delhi, (22) Jammu &amp; Kashmir, (23) Ladakh, (24) Lakshadweep, (25) Puducherry</p>
<p><b>26.</b></p>	<p><b>School Safety Policy</b></p> <ol style="list-style-type: none"> <li>1. Monitoring the implementation of the State Action Plan submitted by various States/UTs.</li> <li>2. Effective implementation of ten Actionable points developed under the policy including: <ul style="list-style-type: none"> <li>• Districts where school safety advisory committee has been constituted</li> <li>• Structural and nonstructural safety audit in school</li> <li>• Development of school DM Plan</li> <li>• Inclusion of Disaster Management in school curriculum</li> <li>• Issued “Recognition Certificate” under sub-rule (4) -Rule 15 of RTE Rules 2010</li> <li>• Students and teachers undergone regular training in school safety and disaster preparedness</li> <li>• schools which conform to the safety standards as per local building bye-laws(as approved by local authorities)</li> <li>• schools which adhere to safety norms with respect to storage of inflammable and toxic material</li> <li>• schools where fire extinguishers have been installed</li> <li>• Schools which have conducted annual mock drills</li> </ul> </li> <li>3. Focus on educational infrastructure and supportive action thereof, within State Disaster Management Plans</li> <li>4. Mainstream Disaster Risk Reduction related works under SSA / RMSA</li> <li>5. Develop child friendly IEC material in the vernacular medium for developing</li> </ol>

	the understanding of children on various hazards and dos and don'ts of response.
27.	<p><b>Management of Cyclones</b></p> <ol style="list-style-type: none"> <li>1. Community participation for Maintenance &amp; Management of Cyclone Shelters in NCRMP States.</li> <li>2. Community Participation in Maintenance &amp; Management of Saline Embankment [Constructed in AP &amp; Odisha].</li> <li>3. Shelter Level Training to CSMMC and Task Force Members.</li> <li>4. Capacity Building.</li> <li>5. Community Awareness about Early Warning Dissemination System (EWDS).</li> </ol> <p><b>Cyclone Management issues in NCRMP States [AP, Odisha, Goa, Gujarat, Karnataka, Kerala, Maharashtra and West Bengal]</b></p> <ol style="list-style-type: none"> <li>1. <b>Community participation for Maintenance &amp; Management of Cyclone Shelters in NCRMP States</b> <p>Multi-purpose Cyclone Shelters (MPCS) constructed/being constructed under NCRMP are handed over to Cyclone Shelter Management &amp; Maintenance Committee (CSMMC) constituted at village level.</p> <p>The CSMMC is entrusted to manage and maintain the MPCS as a caretaker to the community asset; ensure safe custody of the building and the shelter equipment; keep the building in readiness for use as shelters by the evacuated persons during the disaster and to carry out minor repair work from time to time. Necessary training on shelter management is provided to CSMMC Members, and on First Aid and Search &amp; Rescue to Shelter based Disaster Management Teams/Volunteers.</p> <ul style="list-style-type: none"> <li>• NCRMP States will ensure training on Shelter Management to CSMMC Members and on First Aid and Search &amp; Rescue to Shelter based Disaster Management Teams/Volunteers, and maintain CSMMC A/C for systematic management and maintenance of MPCS.</li> </ul> </li> <li>2. <b>Community Participation in Maintenance &amp; Management of Saline Embankment [Constructed in AP &amp; Odisha]</b> <p>Embankment Surveillance Committee is established to increase the sense of community ownership and timely identification of repair needs and report to the State Department.</p> <ul style="list-style-type: none"> <li>• NCRMP States will establish Embankment Surveillance Committee for timely identification of repair needs and further systematic maintenance of Saline Embankment.</li> </ul> </li> </ol>

	<p><b>3. Shelter Level Training to CSMMC and Task Force Members</b></p> <p>Shelter Level Trainings on sectors viz.; Shelter Management, First Aid, Search &amp; Rescue are to be provided at community level.</p> <ul style="list-style-type: none"> <li>• NCRMP States will ensure to impart Shelter level trainings on the specified sectors to the CSMMC and Task Force Members in routine manner.</li> </ul> <p><b>4. Capacity Building</b></p> <p>Capacity building trainings under the five Priority Sectors, viz.; Education, Health, Panchayati Raj Institute, Urban Local Body &amp; Rural Development based on NIDM sector specific training modules are being provided to Government Officials of project States (Goa, Gujarat, Karnataka, Kerala, Maharashtra and West Bengal) under NCRMP Phase II.</p> <ul style="list-style-type: none"> <li>• NCRMP States will impart training to the concerned State Government Officials, based on NIDM modules on the five Priority Sectors.</li> </ul> <p><b>5. Community Awareness about Early Warning Dissemination System (EWDS)</b></p> <p>The capacity of Government Officials and Coastal Community (village representatives) is to be strengthened through mock drills and similar exercises for operating, maintaining and using these EWDS equipment in disaster preparedness and response.</p>
<p><b>28.</b></p>	<p><b>Hospital Safety</b></p> <p>Concept of safe hospital may be ensured with defined actions are as follow:</p> <ol style="list-style-type: none"> <li><b>1. Awareness Generation Exercise</b> Education and Sensitization of medical professionals is the basic premise for risk reduction in hospitals and other health facilities.</li> <li><b>2. Coordination &amp; Management</b> Hospital Incident Response System many be established in each hospital to enable effective preparedness and response during disasters.</li> <li><b>3. Planning</b> Hospital Disaster Management Plan shall be to optimally prepare the staff, institutional resources and structures of the hospital for effective performance in different disaster situations.</li> </ol>

	<p><b>4. Training</b> All hospital staff shall be regularly oriented to the Hospital Disaster Management Plan (especially each time the plan is updated or modified). Hospital staff who will implement the HDMP shall be trained every alternate month.</p> <p><b>5. Mock Drills</b> Every hospital/healthcare facility shall conduct periodic drills and rehearsals to test the response capabilities to emergencies in real time which will serve as opportunities for practical learning for the hospital staff.</p> <p><b>6. Establishment of formal networks of hospitals with MoU's for Resource Sharing</b></p> <p><b>7. All Existing Hospitals will be retrofitted to meet higher performance standards</b></p> <p><b>8. All Architectural Elements, Utility Systems, Equipment and Contents in Hospitals to be built and/or retrofitted to higher performance levels to remain fully functional</b></p> <p><b>9. Maintenance and Inspection of existing hospital structures for continued adherence to higher standards</b></p> <p><b>10. Building new hospitals to new (higher) standards</b></p>
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