Basic Elements of State and District Disaster Management Plan & Standard Operating procedure (SOP)
State Disaster Management Plan (SDMP)

As per section 23(1) of DM Act 2005, the State Plan prepared by State Executive Authority (SEC) As per section shall be approved by the State DM Authority (SDMA).

DM Plan includes:

- Vulnerability of State to different disasters
- Measures to be adopted for prevention & mitigation of disasters
- Integration of Mitigation measures with the development plan and projects
- The Capacity Building Plan and Preparedness measures
-Roles and Responsibilities of each department.
Objectives of the Plan:

➢ Assess various hazards, Vulnerability, Capacity and risk associated with the State
➢ Lay down various measures and guidelines for prevention and mitigation
➢ Lay down preparedness measures for all stakeholders
➢ Build the capacity of all stakeholders in the state to cope with the disasters and promote community-based disaster management.
➢ Mainstreaming disaster management concerns into the developmental planning process
➢ Develop efficient, streamlined and rapid disaster response and relief mechanism in the state.
➢ Provide clarity on roles and responsibilities for all stakeholders involved in various phases of disaster management
➢ Ensure co-ordination and promote productive partnership with all other agencies related to disaster management
➢ Commence recovery programme as an opportunity to build back better in case of a future disaster by incorporating community participation in the programme.
Out line of State Disaster Management Plan (SDMP)

- State Profile - Social, Economic and Demographic details of the State
- Hazard, Vulnerability and Risk analysis
- Institutional Mechanism
- Mainstreaming DRR into Development Plans
- Preparedness & Capacity Building
- Disaster Response & Relief
- Rehabilitation & Reconstruction
- Funding Disaster Management
District Disaster Management Plan (DDMP)

As per the Section 31 of Disaster Management Act 2005, District Disaster Management Authority (DDMA) of each District in the country shall prepare District Disaster Management Plan (DDMP) which is to be approved by State Disaster Management Authority.

➢ District vulnerable to different forms of Disaster, measure to be taken for prevention, mitigation, capacity building and preparedness.

➢ The DDMP shall also include response plans and procedures for providing allocation of responsibilities to the Departments of the District and local authorities in the District.

➢ Prompt response to Disaster and relief, procurement of essential resources and establishment of communication system and dissemination of information to the public to respond to any threatening disaster situation or disaster.

➢ Describe unique features of district under consideration with statements on hazards and their impacts on life and property.
Objectives of the plan:

DDMP shall include Hazard Vulnerability Capacity and Risk Assessment (HVCRA), prevention, mitigation, preparedness measures, response plan and procedures. An indicative list with possible plan objectives is given below:

• To identify the areas vulnerable to major types of the hazards in the district.
• To adopt proactive measures at district level by all the govt. departments to prevent disaster and mitigate its effects.
• To define and assign the different tasks and responsibilities to stakeholders during the pre-disaster and post-disaster phases of the disaster.
• To enhance disaster resilience of the people in the district by way of capacity building.
• Reduce the loss of public and private property, especially critical facilities and infrastructure, through proper planning.
• Manage future development to mitigate the effect of natural hazards in the district.
• To set up an Emergency Operations Centre at the District level to function effectively in search, rescue, response.
• To develop the standardized mechanism to respond to disaster situation to manage the disaster efficiently.

Contd..
Objectives of the Plan:

• To set up an early warning system so as to prepare the community to deal with the disaster and responsive communication system based upon fail-proof proven technology.

• To prepare a response plan based upon the guidelines issued in the State Disaster Management Plan so as to provide prompt relief, rescue and search support in the disaster affected areas.

• To adopt disaster resilient construction mechanism in the district by way of using Information, Education and Communication for making the community aware of the need of disaster resilient future development.

• To make the use of media in disaster management.

• Rehabilitation plan of the affected people and reconstruction measures to be taken by different govt. departments at district level and local authority.
1. Introduction
2. Hazard Vulnerability of the District
3. Institutional Arrangements for Disaster Management (DM)
4. Prevention Measures
5. Preparedness Measures
6. Capacity Building and Training Measures
7. Response & Relief Measures
8. Reconstruction, Rehabilitation and Recovery Measures
10. Procedure and methodology for monitoring, evaluation, updation and maintenance of DDMP
11. Coordination Mechanism for implementing DDMP
12. Standard Operating Procedures (SOPs)
## Key line Departments

<table>
<thead>
<tr>
<th>Departments</th>
<th>Departments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>Revenue</td>
</tr>
<tr>
<td>Fire</td>
<td>Information &amp; public relation department</td>
</tr>
<tr>
<td>Police</td>
<td>Police</td>
</tr>
<tr>
<td>BSNL</td>
<td>Horticulture</td>
</tr>
<tr>
<td>Transport</td>
<td>Municipal &amp; Urban Administration</td>
</tr>
<tr>
<td>Water Resource</td>
<td>Public Health</td>
</tr>
<tr>
<td>Education</td>
<td>District disaster management Authority</td>
</tr>
<tr>
<td>Women &amp; Child Development</td>
<td>PWD</td>
</tr>
<tr>
<td>Rural Water &amp; Sanitation</td>
<td>Panchayat Raj</td>
</tr>
</tbody>
</table>
Institutional Mechanism for Disaster Management

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Member of DDMA</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>District Collector/Magistrate</td>
<td>Chairperson</td>
</tr>
<tr>
<td>2</td>
<td>Chairperson of Zila Parishad</td>
<td>Co-Chairperson</td>
</tr>
<tr>
<td>3</td>
<td>Superintendent of Police</td>
<td>Member, Ex-Officer</td>
</tr>
<tr>
<td>4</td>
<td>Addl. Deputy Commissioner / Joint Collector</td>
<td>Chief executive Officer, Convener</td>
</tr>
<tr>
<td>5</td>
<td>Project Director, District Rural Development agency (DRDA)</td>
<td>Member</td>
</tr>
<tr>
<td>6</td>
<td>Chief executive Officer of the Zila Parishad</td>
<td>Member, Ex-Officer</td>
</tr>
<tr>
<td>7</td>
<td>District Medical and Health Officer of the District</td>
<td>Member, Ex-Officer</td>
</tr>
</tbody>
</table>

District Disaster Management Authority

- District Magistrate
- HQ IRT
- Incident Commander Sub-Division IRT
- Incident Commander Thesil IRT
- Incident Commander Block IRT
- District EOC
General preparedness plan

Establishment and functioning of the Control Rooms

Training for Disaster Management Team Members

Communication System

Plan Updation

Organization of Mock Drills

Community Awareness on Various Disasters

Aspects of Awareness Building

Formation of Village Disaster Response Party with functions of SAR, First Aid and coordination to support local administration during disasters

Building awareness on Crop Insurance and its benefits

Building awareness on Livestock Insurance and its benefits

Cyclone and Flood resilient constructions

Ecosystem preservation and restoration

Interpreting warning and evacuation process

Flood and Fire preparedness at household level

Do’s and Don’ts regarding various hazards

Climate change and livelihood in rural areas
Recovery Plan

Key Features of the Plan

Moving from Response to Recovery
- Detailed Loss and Damage Assessment
- Standard Operating Procedures for Recovery

Immediate Recovery
- Critical Infrastructure
- Social Recovery
- Economic Recovery

Long Term Recovery
- Infrastructure and Environment Recovery
- Social and Economical Recovery

Holistic Recovery Process
- Community Participation
Key Highlight of Resource Inventory

Contact details with Nodal person for disaster management of 17 departments

Department-wise trained manpower list

Department-wise list of equipments, Machines and Vehicles for Disaster Response (including Private Contractors)

- Name of the equipment
- Quantity
- Location
- Focal person for contact and number

All types of Equipments, Machines, Materials, Shelters and Vehicles covered

- Disaster Response
- Immediate transportation
- Cyclone shelter
- PHC-wise appointed doctors and their contact number
Hazard Specific Action Plans

- Flood
- Cyclone
- Heat Wave
- Earthquake
- Landslides
- Chemical Disaster
- Nuclear and Radiological Disasters
- Biological Disasters
- Oil Spills and Mine Disasters
- Tsunami
## Standard Operating Procedure (SOP) for Cyclone Management

### Revenue Department

#### Normal Phase
- Hold Quarterly Meeting of DDMA (In period of Dec/Jan, Mar/April, June/July, Sep/ Oct)
- Updating District DM Plan (Once in six month)
- Testing of Communication Systems
- Updating list of NGOs
- Prepare List of Shelters
- Identify Vulnerable Habitations
- Prepare list of Resource Persons
- Conduct Mock Drills (April & September)
- Identify Vulnerable Points
- Prepare List of Response utility items
- Prepare Evacuation Routes
- Prepare list of vulnerable population
- Prepare list of strategic resources and inventories
- Ensure training and capacity building of staff
- Ensure immediate movement of resources and men once disaster

#### Alert Phase
- Estimate Area of Landfall
- Disseminate information to people
- Activate Teams and Control Room
- Drawing resources from pre-defined location
- Report compliances of each activity
- Shortage to be appraised to DEOC
- Complete evacuation as per defined route
- Register people arriving at shelter
- Enquire about the missing people
- Seek support of SDRF/NDRF/Army/Navy/ IAF if required.

#### During Disaster Phase
- Record complete flow of incoming and outgoing information in Control Room.
- Disseminate warning to District Officials
- Monitor and Rescue People
- Transportation arrangements for survivors and relief materials
- Keep adequate number of floats like rubber tube, wooden planks, etc.
- Arrange for First Aid and Medical assistance
- Deploy Police and volunteers to maintain Law and Order
- Regulate external supplies
- Check authenticity of information

#### Post Disaster Phase
- Report about requirements in affected areas
- Arrange receiving points and channelize external aid.
- Activate restoration teams
- Monitor the various restoration work
- Record the details of No. of dead and missing person
- Notify authorities of No. of dead and missing persons for compensation
- Ensure mass inoculation and vaccination to prevent epidemics.
- Continue Search and Disposal of dead bodies
- Ensure spread of epidemic is prevented for people and animals
- Prepare and collect reports related to loss from each departments.
- Record all relief measures undertaken
- Supply essential commodities to affected households
- Documenting losses and damages
<table>
<thead>
<tr>
<th>Normal Phase</th>
<th>Pre Disaster Phase</th>
<th>During Disaster Phase</th>
<th>Post Disaster Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ SP to ensure Mobile VHF sets up with number to Police stations.</td>
<td>□ Ensure availability of VHF operators at District and Temporary Control Rooms.</td>
<td>□ Disseminate all warnings and precautions through announcements and loud speakers.</td>
<td>□ Continuously pass message related to the warning and precautions to the people.</td>
</tr>
<tr>
<td>□ Ensure Police stations are equipped with cars/jeeps and wireless sets.</td>
<td>□ Establish communication of affected area with Control Rooms.</td>
<td>□ Teams to be deployed at risk points.</td>
<td>□ Assist official in identification of dead bodies and make proper records.</td>
</tr>
<tr>
<td>□ Prepare the list of the trained persons from police station for DM activities.</td>
<td>□ Collect information about vulnerable points and diversion routes from engineering department.</td>
<td>□ Collect vital information from District Collector.</td>
<td>□ Continue to support rescue, relief and rehabilitation.</td>
</tr>
<tr>
<td>□ Prepare district wise list of the retired/reserved constables/other useful personnel and circulate in Police Stations.</td>
<td>□ Procure necessary equipments, petrol and other lubricants.</td>
<td>□ Support Search and Rescue operations</td>
<td>□ If necessary coordinate with NCC, Scouts and Guides, Army, Navy and IAF to support rescue, relief and rehabilitation.</td>
</tr>
<tr>
<td>□ Build network with other hospital, blood bank and ambulance services.</td>
<td>□ Disseminate all warnings and precautions through announcements and loud speakers.</td>
<td>□ Provide guidance to MROs to form teams related to evacuation, rescue and emergency relief operations.</td>
<td>□ Update the list of trained professionals at District/ Mandals.</td>
</tr>
<tr>
<td>□ Conduct district wide training programs for better management of disasters.</td>
<td>□ Obtain sufficient maps of vulnerable villages for Collectorates.</td>
<td>□ Help Revenue and Medical official in transportation of injured and sick person.</td>
<td>□ Maintain Law and Order.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Ensure enforcement of Law and Order in the affected area and at shelters.</td>
<td>□ Support the people to move to their own houses.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Assisting community in organizing transport for injured.</td>
<td>□ Maintain proper records of death and arrange speedy legal post - mortem.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Take strong action against hoarders, black marketeers and those manipulating relief materials.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Provide security to VIPs.</td>
</tr>
</tbody>
</table>
Medical and Health Department

Normal Phase

- District Superintendent to prepare Hospital Emergency Plan for Mass Causality.
- Take all structural and non-structural precautionary measures for safety of hospital.
- Conduct Mock Drills
- Identify requirement of equipments and medical stock
- Build network with other hospital, blood bank and ambulance services.
- Prepare village wise list of people requiring special attention such as infants, pregnant women, senior citizens, people with special needs, etc.
- Prepare list of essential life saving medicines
- Identify supply location of all medicines
- Form Medical teams for vulnerable areas.
- Provide details of nearest medical assistance to deployed teams

Pre Disaster Phase

- Prepare the list of precaution measures taken by all public before, during and after disaster.
- DMHO to circulate the list of precautionary measures among public.
- Plan for quick transportation services for injured/sick.
- DMHO to nominate a nodal officer to be with MRO - MPDO
- Activate field teams, mobile hospitals, para-medic teams, surgery facilities, first aid kits, etc. at various District Hospitals and PHCs.
- Prepare standby teams of doctors with equipments to be deployed at vulnerable areas.
- Plan for additional space for extra beds in hospitals.
- Plan for field medical centers, mobile clinics, emergency operation centers and counseling center at vulnerable areas.
- Plan for stocking of blood of different blood group.
- Update the list of all govt/ private medical professionals in district.

During Disaster Phase

- DMHO to ensure continuous connection with Control Room and District Collector.
- Establish medical control room at district and divisional level.
- Mobilize medical and para-medic teams, ambulances and mobile hospitals to the affected area.
- Ensure continuous replenishment of resource to the field teams.
- DMHO to liaision with state to provide specialist teams.
- Ensure sufficient number of temporary medical camps
- DMHO ensure the precautionary measures to prevent breakage of epidemics/water borne diseases in the affected areas.
- Utilize the services of private, allopathy, ayurveda and homeopathy doctor in the disaster affected area.
- Arrange on spot specialist services to the affected people.

Post Disaster Phase

- Ensure continuous education of people regarding precautionary measures to maintain health and hygiene.
- Ensure adequate measures to prevent epidemic by use of disinfectant and chlorination.
- Monitoring of status of resources at hospital and teams.
- Maintain detailed record of persons treated.
- Sprinkling of Bleaching Powder and Lime on drains and road.
- Carry out post disaster immunization such as Polio, Measles and Vitamin – A.
- Ensure Back up electricity in PHCs and Referral Hospitals.
- Ensure Hospital are equipped with generators.
- Documenting losses and damages
### Animal Husbandry Department

#### Normal Phase
- Mapping of location and demographic profile of the families engaged in animal husbandry work and circulate it to Mandal and Village level.
- Educate communities about type of animals to rear to avoid losses during disasters.
- Identify safe shelter for animals with adequate fodder and water arrangements.
- Conduct trainings and mock drills.
- Inspect Animal Cyclone Shelters
- Prepare list related to resource inventory, list of shelter places, medical needs, etc.
- Form teams to extend services during disasters.

#### Pre Disaster Phase
- Activate Control Rooms and ensure warning and precautions are properly disseminated.
- Mapping of location and demographic profile of the families engaged in animal husbandry work and circulate it to Mandal and Village level.
- Educate communities about type of animals to rear to avoid losses during disasters.
- Ensure boats and equipments of Fishermen are moved to safe places and secured in association with fisheries department.
- Provide medical help to distressed animals.
- Ensure continuous supply of fodder and water to the animals.

#### During Disaster Phase
- Ensure warning have been properly received by vulnerable communities.
- Mandals and villages to arrange shifting of fishermen very near to the sea.
- Ensure boats and equipments of Fishermen are moved to safe places
- Ensure proper measures are taken by poultry farms to protect birds.
- Move cattle, sheep, goats, pigs, etc. to safer places
- Ensure continuous supply of fodder and water to the animals.
- Provide medical help to distressed animals.
- Arrange for visit of Veterinary Doctor.

#### Post Disaster Phase
- Ensure continuous dissemination of warning.
- Plan and implement schemes for educating fishermen and animal rearing communities of vulnerable areas.
- Educate about measures to be taken before/during/after the disasters.
- Conduct mock drills.
- Coordinate veterinary help to distress animal.
- Conduct mass vaccination programmes.
- Plan for strengthening storage facilities for medicines and vaccines.
- Plan for establishment of more mobile veterinary health units.
- Ensure sufficient supply of fodder and water to the animals.
- Removal of Carcass of dead animals in support of local bodies.
## Panchayati Raj Department

### Normal Phase
- Holding meetings of Gram Panchayat, Youth and Elder Groups, Jan Sabha, NGOs.
- Activate Control Room to monitor warning signals.
- Identification and preparation of database of vulnerable areas.
- Identification and repair of Cyclone Shelters.
- Implementation of DM Plan at Mandal and Village level.
- Instruct all officials to plan for drinking water and sanitation requirements.
- Provide hand pumps, bilge pumps, etc. to drain water quickly.
- Prepare list of water tankers available with all departments and agencies.
- Mapping and continuous cleaning of natural drainage channel.
- Identify building that may be used as shelters.
- Conduct training and mock drills.

### Pre Disaster Phase
- Activate Control Room
- Mapping of resources with NGOs/CBOs and other agencies.
- Identify alternate route for shelters and relief centers.
- Identified shelters to be ready for operations.
- Make arrangements for food, water, kerosene and other essential items.
- Direct authorities to arrange sufficient number of hand pumps & bilge pumps
- Position water tankers in likely affected areas.
- Cleaning of natural drainage routes with help of Gram Panchayat
- Identity low lying areas and make arrangements for bailing out water
- Establish connection between village DM committee and Revenue officials.
- Village DM Committee to procure tarpaulins
- Identify and remove dry branches of tress.
- Gram Panchayat to arrange sand bags and wooden poles at vulnerable areas.

### During Disaster Phase
- Control Room to monitor warning and pass information to public.
- Direct all officials to provide safe drinking water.
- Coordinate with line authorities to drain water. First from Water pump hose, sub stations and hospitals and then from residential areas.
- District officials to stock essential food items and medicines, etc.
- Assist civil supplies in arranging rice, food items, fire wood, gas, etc.
- Ensure availability of first aid teams.
- Arrange transport for people.
- Inform people about warnings and ask them to drive away cattle to safe place
- Make arrangement of cooking and supply of food at cooking centers

### Post Disaster Phase
- Removal of Dead bodies and Caracas with help of Revenue, Medical and Police Dept.
- Plan and implement rehabilitation of people.
- Assist Revenue Dept. in overall loss assessment.
- Supervise preparedness level of Gram Panchayat.
- Ensure integration of long term mitigation plan with development plan.
- Identification of locally available materials.
- Ensure functioning of communication system.
- List out donor’s trust and request for assistance.
- Mapping of hazard and vulnerability district and block wise.
- Coordinate with departments to remove water quickly.
- Promote construction of disaster resilient structures.
- Continue supply of food and essential items.
<table>
<thead>
<tr>
<th>Normal Phase</th>
<th>Pre Disaster Phase</th>
<th>During Disaster Phase</th>
<th>Post Disaster Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Identify building that may be used as shelters and prepare a list of these buildings.</td>
<td>□ SE to organize DM meet twice a year with field functionaries before monsoon.</td>
<td>□ Alerting field teams</td>
<td>□ Inspection of road and removal of traffic obstruction.</td>
</tr>
<tr>
<td>□ Inspect and identify vulnerable roads, bridges, culverts and buildings.</td>
<td>□ AEE should ensure availability of machines such as Power Saw with Work Inspectors.</td>
<td>□ Ensuring availability of machines and equipments for deployment.</td>
<td>□ Quick repair and restoration of traffic movements.</td>
</tr>
<tr>
<td>□ Repair/Reconstruct all vulnerable roads, bridges, culverts and buildings.</td>
<td>□ Dy. EE to ensure working of machines in once in 3 every month.</td>
<td>□ Mobilization of field staff from non affected areas to affected areas.</td>
<td>□ Coordinate and Plan with state to provide drains by side of roads.</td>
</tr>
<tr>
<td>□ Ensure that building codes are strictly followed.</td>
<td>□ Inspection of buildings identified for shelters.</td>
<td>□ Preparation of post disaster activities.</td>
<td>□ Sanction and entrustment of temporary restoration.</td>
</tr>
<tr>
<td>□ Mapping of vulnerable points for future inspection.</td>
<td>□ Special attention to be given securing windows, doors and walls of shelters.</td>
<td></td>
<td>□ Updating maps</td>
</tr>
<tr>
<td>□ Ensure that new construction do not block natural drainage.</td>
<td>□ Inspection of roads, bridges, culverts and buildings.</td>
<td></td>
<td>□ Increase drainage facilities.</td>
</tr>
<tr>
<td>□ Construct good network of roads in all vulnerable coastal areas.</td>
<td>□ Mobilize machines and equipments for repair/construction work.</td>
<td></td>
<td>□ Construct strong road network for transport, relief and rehabilitation.</td>
</tr>
<tr>
<td>□ Issue guidelines for regular retrofitting of buildings and structures.</td>
<td>□ Ensure presence of all the staff in Head Quarters.</td>
<td></td>
<td>□ Identification and mapping of weak roads and bridges.</td>
</tr>
<tr>
<td>□</td>
<td></td>
<td></td>
<td>□ Procurement of saw cutters, earth movers, etc, for construction and maintenance work.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ Bailey bridge to be fabricated for ready to use, if available.</td>
</tr>
<tr>
<td>Normal Phase</td>
<td>Pre Disaster Phase</td>
<td>During Disaster Phase</td>
<td>Post Disaster Phase</td>
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</tr>
<tr>
<td>- Keeping stock of empty cement bags, sand, metal, stone bellies, etc. in all flood store.</td>
<td>- Preparation of catchment maps with details of irrigation sources, Water User Associations/Distributor Committees/Project Committees.</td>
<td>- Maintain stock of empty cement bags, sand, metal, stone bellies, etc. in all flood store for plugging breaches.</td>
<td>- Safeguarding of agriculture by temporary restoration arrangements like forming ring bunds, close breaches, removing shoals and rectifying damages.</td>
</tr>
<tr>
<td>- Ensure no human encroachments near drains and low lying areas</td>
<td>- Inspect and repair main irrigation canal system and control structures.</td>
<td>- Communicate 1st Flood Warning to Collector.</td>
<td>- Identify breaches and start restoration work.</td>
</tr>
<tr>
<td>- Ensure repair/restoration of canal, irrigation tanks and desalination of damage fields.</td>
<td>- During flood warning, inform all officials in village at downstream of dam.</td>
<td>- Disseminate flood warning to public in villages using AIR/ live telecast.</td>
<td>- Restore damage structure.</td>
</tr>
<tr>
<td>- Ensure the clearance of all irrigation drains.</td>
<td>- Procure empty gunny bags, sand, bullies, gas lights, bamboo thatties, gamlas, country twine, needles, crow bars, hammer with handle, torch lights, etc.</td>
<td>- Strengthen weak bunds.</td>
<td>- Review and request for construction of dams and new irrigation canals, if necessary.</td>
</tr>
<tr>
<td></td>
<td>- Flood store under District Collector must have empty sand bags, dewatering pumps, diesel generators, tarpaulins, tents, etc.</td>
<td>- Control Room to be open at SE/EE office.</td>
<td>- Suggest measures for strengthening of river banks and canal bunds.</td>
</tr>
<tr>
<td></td>
<td>- AEE to intensifying river banks patrolling.</td>
<td>- Arrange required vehicles at stores.</td>
<td></td>
</tr>
</tbody>
</table>
### Normal Phase
- Prepare village wise list of details of crop sown, area sown, owner of the farmer, insurance etc.
- Equip District officials with the latest technologies to assess standing crop position.
- Develop mechanism to advice farmers about safe guarding of crops.
- In case of losses, develop procedure to estimate damages and inform state authorities.
- Check for feedback from Mandals on seriousness of disaster, level of distress, position of standing crops and likely losses.
- Prepare a long term action plan for meeting relief requirements of farmers in vulnerable areas.
- Prepare a contingency plan ready to minimize the crop loss.
- Create awareness to farmers on threats and mitigation measures.
- Update credit facilities and crop insurance details from financial institutions.

### Pre Disaster Phase
- Collect database from VRO of village wise, crop wise, survey number wise, farmer wise data.
- Formation of interdepartmental teams of district officials from various line departments.
- Ensure availability of Contingency Plan of ANGRAU at Mandal level in month of May.
- Prepare vulnerability maps of villages
- Repairing of existing Seed Banks.
- Formation of Seed Banks with the help of RMGs.
- Encourage RMGs to construct pucca godowns to store harvested crops under Grameen Bandar Yojana Scheme.
- Arrange for adequate quantity of agricultural inputs like fertilizers, pesticides, equipments and fodder at all levels.
- Appoint Nodal officer to coordinate all activities in district.
- Move and position staff deputed for disaster duties at pre decided places.

### During Disaster Phase
- Coordinate with Mandal and Village for feedback on seriousness of disaster, level of distress, relief provided, saving standing crops, flooded agriculture land and loss of crops.
- Ensure adequate relief to all farming community in coordination of all other line departments.

### Post Disaster Phase
- Plan field visits of village teams in vulnerable crop areas and provide advices to farmer.
- Ensure speedy and adequate relief/credit measures to the farmers.
- Seed and other agricultural inputs should be provided at subsidized rates.
- Develop a database of village wise, crop wise, irrigation source wise, insurance details, credit facilities, etc. to forecast damage due to disasters.
- Supply of fodder at subsidized rates.
- Maintain proper record of the farmer's crop loss for providing compensation towards loss.
- Mapping of Village level Crop Pattern and Extent.
- Plan for separate budget for enumeration purpose.
## Rural Water Supply

### Pre Disaster Phase
- Identify non-functioning schemes/hand pumps with Gram Panchayat teams.
- Repair all non functioning platforms and tap fountains.
- Instruct Gram Panchayat to utilize funds for restoration/repair work.
- Identify vulnerable water sources for chlorination purpose.
- Rising of hand pumps above flood water level.
- Ensure enough stock of liquid chlorine/ Bleaching powder with Gram Panchayat.
- Identify safe places of water storage in Gram Panchayat area.
- Identification and demarcation of unsafe sources of water.
- Identify safe water sources by field teams with testing kits.

### During Disaster Phase
- Observe the stock of H₂S vial availability with Gram Panchayats to check bacteriological contamination.
- Ensure availability of Chronosopes at vulnerable areas to test residual chlorine.
- Ensure data related to water tankers is ready for use for deployment.
- Ensure list of generators along with owners details and distance from vulnerable location is ready to use.
- Build awareness among people to construct and use ISLs.
- Provide safe and good water.

### Post Disaster Phase
- List of destroyed/ contaminated sources with budget for restoration.
- Use of Local funds for permanent restoration
- Ensure monitoring of water quality.
- Ensure availability of chlorine/ chlorine liberated compounds.
- Check the strength of chlorine used before use.
- Rate Contract Systems to be evolved.
- Collectors to notify the private vendors of generators and water tankers to be used.
### Normal Phase
- Provide power continuously before and after the disaster event.
- Order in which supply should be prioritized are:
  - Communication/transmission stations.
  - Water works
  - Hospitals
  - Relief Camps
  - Shelters
  - Railways
  - Important Road Points.

### During Disaster Phase
- Arrange diesel generators for providing services at important places.
- All personnel to work under District Collectors.
- Ensure communication with District Control Room
- Appoint Nodal Officer for Power Supply at district level.
- Review all precautionary procedure to protect staff and equipment.
- Arrange standby generators for hospitals, water department, Collectorates, Police station, Telecommunication building, Meteorological Station and Petrol Pump.
- On orders of Collectors/ District Control Room/Officer In-Charge Power Supply disconnect supply of affected areas.
- On orders of Collectors/ District Control Room/Officer In-Charge Power Supply deploy teams for repairs with food, bedding, tents and tools.

### Post Disaster Phase
- Ensure Power Supply at all critical locations.
- Districts to plan and position generators wherever necessary.
- Implementation of updated long term restoration plans.
- Ensure availability of chlorine/chlorine liberated compounds.
- Establish temporary electricity supplies for transit camps, feeding camps, relief camps and district control room.
- Establish temporary plan for emergency accommodation of staff.
## Normal Phase
- Modernization of Equipments
- Imparting training to officers and staff is search and rescue operations.
- Merger of Civil Defense with AP Fire Service.
- Conduct Mock Drills

### On Receipt of Warning
- Establish contact with all Control Rooms.
- Appoint Nodal Officer – Communication at district
- Review all precautionary procedure to protect staff and equipment.
- Fill fuel in all vehicles & Park in safe areas.

Inspect and repair all:
- Radio Mast
- Anchorages
- Foundations & Cables
- Poles
- Overhead Circuits
- Upgrade equipments to tolerate wind speed
- Appoint Disaster Officer in the affected area

## Pre Disaster Phase
- Training of all executive staffs and recruits in search and rescue operation.
- Formation of Rapid Response force with person below age of 40 years.
- Conduct periodical training of staff.
- Appoint officers for managing different phases of disasters.
- Conduct trainings and mock drills.
- Identify and prepare database of agencies having private fire vehicles/rescue tools.
- Collect database of swimmers from fisheries department.
- Prepare action plan for DM
- Identify and list out vulnerable areas, cyclone shelters/ safe places.
- Checking Serviceability of rescue equipments.
- Keep stock of POI.
- Keep stock of fire extinguishing medium.
- Keep one vehicle for meeting logistics requirement.
- Aware about duties of officer during disasters

## During Disaster Phase
- Conducting Search & Rescue operations.
- Render fist aid service to the injured.
- Minor demolition of Structure with support of Roads & Building and Panchayati Raj Dept., if necessary to support search and rescue operation.
- Recover Dead Bodies.
- Cut off supplies of utility services like LPG and Electricity.
- Cutting of fallen trees to clear roads.
- Bailout water from sub merged area.
- Arrest spill of hazardous material.
- Coordinate with other agencies involved in search and rescue operations.

## Post Disaster Phase
- Mobilizing victims to safe places.
- Prevent re – entry of habitants in the vulnerable structures.
- Removal of fallen trees from roads.
- Salvage of valuable materials
- Bailout water from sub merged area with help of heavy duty pumps and floating pumps.
- Assist local bodies in clearance of debris.
### A.P. Civil Supplies Department

#### Normal Phase
- Storage of Bulk Stocks of food grains at strategic places.
- Strengthen the public distribution system.
- Store proportionate requirements at accessible and in accessible places.
- DSO review the stock storage and alert officer about immediate supply during disaster.
- Essential items should be kept ready for dispatch.
- Ensure supply of durable food items like bread, biscuits, dry food and fast food items to relief camps.

#### During Disaster Phase
- Ensure adequate and timely supply of essential commodities to the Relief camps, and fair price shops.
- Ensure supply of dry food, bakery and other ready to eat items to relief camps.
- Ensure that distribution of affected people as per the identification provided by MRO’s.
- Provide the essential items to relief camps and in affected villages.
- Based on the new guidelines pass the stock to godowns and supply points.
- Recommend to higher authorities where ever new godowns/fair price shops are required.
## Normal Phase
- Check the functioning of life saving appliances and provide and render services of such equipment.
- List out the active fishermen, families with Livelihood with complete address for identification.

## Pre Disaster Phase
- Prepare Demographic profile of families engaged in fishing and fish farming.
- Establish control room and monitoring cells with operators.
- Arrange medical camps for fishermen.
- Arrange vaccines for distressed animals.
- Identify vulnerable areas, communities and need of resources required.
- List of NGOs involved with fishermen activities and their capability for providing assistance.
- Identify vulnerable habitations, creek points, marooned areas, rate of inundation and receding waters.
- Identify location of fishing crafts prone to damage.
- Educate fishermen families.
- Ensure availability of lifesaving appliances and communication equipment.
- Assess probable damages to the boats and nets, fishermen huts and house hold articles.
- Ensure that boats and other equipments of fisherman are secured.
- Ensure that relief boats, swimming experts and lifesaving equipments available in rescue activities.

## During Disaster Phase
- Arrange team for shifting fishermen family to the safe and relief camps.
- Ensure that boats and other equipments of fishermen are moved to safer places and secured.
- Ensure proper dissemination of cyclone warning and weather reports to fishermen communities.
- Alerting fishermen elders and fishing boat operators at sea to return to shore.
- Collect data of number of boats operating at sea and escape from safe return.
- Mobilization of field staff / volunteers from safe areas to most vulnerable areas.
- Mobilize expert swimmers to the cyclone / flood hit areas.
- Alerting the teams for post disaster activities.
- Arrange medical relief to fishermen.

## Post Disaster Phase
- Educate fishermen communities about the pre/during/post disaster to avoid losses of lives and properties.
- Conduct training and mock drills with fishermen community.
- Coordinate for medical relief to fishermen.
- Plan for strengthening storage facilities for medicines and vaccines.
- Ensure quick disposal of carcasses.
- In case of emergencies coordinate with coast guard for search operations.
- Asses the loss / damages to household articles and fishing equipments.
- Arrange field visits of teams to the affected fishermen habitations, shore areas to inspect the type of loss/ damages to the fishing boats and nets.
- Preparation of estimated value of such loss/damages.
- Consolidation of all losses for reporting.
- To sanities all water sources utilized by the fishers.
- Clearance of debris/mud accumulated during disaster.
### Horticulture Department

#### Alert Phase
- Equip district to assess standing horticulture position
- Ensure feedback from mandals regarding standing flowers, likely losses and level of distress
- Ensure district prepare long term action plan on relief requirements of farmers
- Preparation of dept action plan
- Repair seed storage godowns for storage during calamities
- Ensure the availability of seeds, fertilizers, pesticides, equipments and fodder are available at three levels

#### During Disaster Phase
- Nodal officers should provide suitable instructions to the field officers regarding their duties and function before, during and after disasters
- Coordinate with madals regarding feedback on seriousness of disaster, level of distress, relief provided, extent of flooded agricultural lands and estimated loss of crop
- Ensure close coordination with other district depts. to ensure adequate relief is provided to the farmers

#### Post Disaster Phase
- Adequate and timely relief/credit is made available
- Seeds, fertilizers and pesticides should be provided at subsidized rates
- Fodder should be supplied in sufficient quantities at low prices
<table>
<thead>
<tr>
<th>Alert Phase</th>
<th>During Disaster Phase</th>
<th>Post Disaster Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Advertise through different safety measures</td>
<td>□ Information on warnings and effects should be circulated</td>
<td>□ Information about relief camps, material supply for shelters, medical camps, distribution of rice, kerosene, compensation, etc., to be given through Media and other communication systems.</td>
</tr>
<tr>
<td>□ Disseminating alerts through News papers, A.I.R., TV, Photo exhibitions, Song &amp; Drama programs, documentary film shows speeches / lectures</td>
<td>□ Vulnerable people should be informed through local T.V. channels, PA system with the department, NGOs and volunteers</td>
<td>□ Information on relief, rehabilitation and feedback collected from the public about relief measures is to be sent to the higher authorities for further improvement.</td>
</tr>
<tr>
<td>□ Do’s and Don’ts to be circulated</td>
<td>□ Information on shelters and medical camps, availability of food, medicines etc. need to be provided</td>
<td>□ Arrange photo exhibition on damages for Press briefings and for visit of the Central teams for assessment</td>
</tr>
<tr>
<td>□ Warnings to be sent through PROs and Public through PA system</td>
<td>□ Conduct press meets to curb rumors</td>
<td>□ Conduct of press tours to the affected areas and liaison with media.</td>
</tr>
<tr>
<td>□ Set up information centers</td>
<td>□ Both positive and negative activities taken up by departments should be circulated</td>
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<tr>
<td>□ Hazard warning messages to public through available systems</td>
<td>□ Reduce the tendency of the media to sensationalize event/situation</td>
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<tr>
<td>□ Circulate precautionary measures through print and electronic media</td>
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</tr>
<tr>
<td>Normal Phase</td>
<td>Alert Phase</td>
<td>During Disaster Phase</td>
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<tr>
<td>□ Ensure delivery of basic urban services like provision of Safe Drinking Water, Sanitation, Roads, Solid Waste Management, and Housing etc</td>
<td>□ Ensure measures are taken for prevention of disasters, mitigation, preparedness and capacity building in accordance with National and State guidelines</td>
<td>□ Ensure participation of local bodies as volunteers.</td>
</tr>
<tr>
<td>□ Strengthen Urban infrastructure, efficient solid waste management and development of public amenities</td>
<td>□ Integrate prevention and mitigation measures into developmental plans and projects</td>
<td>□ Monitoring of on sanitation, prevention of epidemics, safe drinking water facility, clearance of debris</td>
</tr>
<tr>
<td>□ Conservation of Water bodies</td>
<td>□ Provision of funds for prevention of disaster, mitigation, capacity-building and preparedness</td>
<td>□ Establish communication links with ERCs and Search &amp; Rescue Teams in all Municipal Corporations</td>
</tr>
<tr>
<td>□ Provision of Housing in the urban area and especially for the urban poor</td>
<td>□ Develop mitigation, preparedness and response plans, capacity building, data collection and identification and training of personnel</td>
<td>□ Make transport arrangement for mobilization of all emergency</td>
</tr>
<tr>
<td>□ Skill up-gradation and financial support to the urban poor</td>
<td>□ Review policies, rules and regulations</td>
<td>□ Make arrangements for logistic support to all emergency response team</td>
</tr>
<tr>
<td></td>
<td>□ Bring awareness about disasters among all institutions and residents of all communities in the district</td>
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</tr>
<tr>
<td></td>
<td>□ Enforce strict building rules in construction dept.</td>
<td></td>
</tr>
</tbody>
</table>
Thank you