

## **SALIENT FEATURES OF STANDARD OPERATION PROCEDURE FOR SOUTH WEST MONSOON/CYCLONE PREPAREDNESS.**

**\*\*      \*\*      \*\***

- ❖ Previously, there is a practice of preparation of 'Disaster Management Plans' at State Level and District Levels which amounts voluminous efforts
- ❖ So, there is need to focus on 'Building Better' systems that include core infrastructure & key facilities to make them disaster resilient, improved risk transfer protocols, structured responses utilizing technological advancements.
- ❖ Accordingly the Government vide G.O. Ms.No. 6, Revenue (DM.OP) Dept., dated 28.08.2015 has prepared the Standard Operation Procedure (SOP) listing the pre-defined action sets with time lines, department wise and level wise attaching a responsible Officer for each and every action during different phases of the disaster.
- ❖ To overcome the gaps in existing guidelines for South West Monsoon/ cyclone management the SOP Document bringing out more detailed picture of the actions to be taken up based on scientific estimation of size of the disaster.
- ❖ The New SOP Document shall focus on listing the pre-defined action sets for various time lines department-wise, level-wise (State level, District Level, Village Level) attaching a responsible Officer for each and every action along with the listing of required resources for proper accomplishment of the action.

**STATE EMERGENCY OPERATION CENTRE (SEOC):-** It has a small permanent cadre staff and a continuous Duty Officer System to monitor events within the State on behalf of the State Authority. It establishes communication with relevant DEOC for the purpose of coordinating necessary information and resource support.

**DISTRICT EMERGENCY OPERATION CENTRES (DEOC):-** It shall be a permanent facility provided within each District to support the District Authority

during disaster events. Each DEOC is responsible to provide prompt and relevant information to both LEOCs and SEOC concerning any disaster event occurring within their district. It act as a bridge between local Emergency Operating Centre which directly involved in all disaster management activities in vulnerable areas and the State Emergency Operating Centre, by providing necessary direction and resources required to materialize the disaster management plans put forward by SEOCs to mitigate the vulnerability in long term and to manage disaster events more efficiently.

**LOCAL EMERGENCY OPERATION CENTRE (LEOC):-** It is the lowest level of the disaster management that is directly interacting with the vulnerable population and conveying the information received from SEOCs ad DEOCs to the people. The LEOCs at mandal level are supported by shelter level committees formed at each of the village of habitation level to take up the important activities like evacuation, search and rescue, shelter management damage reporting etc.

The LEOC is responsible for :

- Collection, collation and dissemination of information to the DEOC, relevant local agencies and officers and the public.
- Implementation of operational decisions of DEOCs.
- Co-ordination of available resources including those allocated by SEOCs or DEOCs to support the disaster affected community.
- Report the compliance of the activities entrusted to it.
- Appraise the requirements and ground situations to DEOCs for better understanding of the event by DEOCs/SEOCs.

**The Line Departments have to take necessary action on the Standard Operating Procedure in 5 (five) Phases:**

- I. **Preparedness Phase** : This phase will include planning all necessary measures prior to the event to reduce ad-hoc behavior in managing the event and to improve the lead time for performing pre-defined duties or responsibilities with more ease and efficiency. This stage includes updating the databases related to vulnerable areas, population, identifying building that can be used as shelters with required details, inventorying the requirements to fix the vulnerabilities identified well in advance, formation

of teams for evacuation, medical assistance, restoration of services, attaching teas to each of the shelter, taking stock of facilities at identified shelters, listing of resources for tasks to be performed during the event along with the details of supply chains, updating the resource database with the details of their usability etc.

- II. **'Early Warning' or 'On Alert' Phase:** This phase will include all necessary measures to provide timely, qualitative and quantitative warning to the disaster managers to enable them to take preemptive measures for preventing loss of life and reducing loss/damage to the property.
- III. **During the event Phase:** This Phase will include activating Search and Rescue teams for extending help to people who are not covered during 'On alert' phase or due to incidents that warrant emergency support. All necessary measures for smooth conduct of shelter management.
- IV. **Relief Phase:** This phase will include all necessary measures to provide immediate relief and succor to the affected people in terms of their essential needs of food, drinking water, health & hygiene, clothing, shelter.
- V. **Restoration Phase:** This phase will include all necessary measures to bring the affected services like communications, electricity, sanitation, water supply, road connectivity etc to normalcy.

**In addition to the above, a Village/Habitation Committee** shall also be constituted with Sarpanch and members of Panchayat or members from local communities like fisherman etc., shall be formed to look after the well being of cyclone shelter or identified shelter structure. Keeping the shelter for alternate use during normal phase and to maintain the access to the shelter in accessible condition. The committee shall be encouraged to keep utensils required for cooking, arranging water storage space at shelter and create space for storing consumables like rice etc.

The following are the Line Departments in connection with SOP:-

- 1. Revenue Department.
- 2. Police Department.

3. Medical & Health department.
4. Animal Husbandary Department.
5. Agriculture Department.
6. Panchayath Raj Institute Department.
7. Roads & Buildings Department.
8. Irrigation and Command Area Department.
9. Fisheries Department.
10. Rural Water Supply Department.
11. Power Transmission Corporation.
12. A.P. Civil Supplies Department.
13. A.P. Civil Supplies Corporation.
14. Fire Department.
15. Bharath Sanchar Nigam Ltd., (BSNL)
16. Information & Public Relations Department.

## **REVENUE DEPARTMENT**

### **On Alert Phase:**

1. Estimate the area that is likely to be severely affected
2. Disseminate the information related to the forthcoming event to the people in the habitation to which a particular team is responsible and request them to get ready for possible evacuation taking required important documents and valuables.
3. The control Rooms shall be opened and activate all the teams
4. Upon receipt of final instructions, drawing resources from pre-defined locations.
5. Complete the evacuation as per pre-defined evacuation routes.
6. Register the people arriving at the shelters
7. Enquire the people about the missing members from their families to report to SAR teams for fool proof evacuation.
8. Seek support of SDRF/NDRF/Army based in the Severity assessed.

### **During Disaster Phase:**

1. The Officer in-charge of the Control Room should maintain a record of incoming and outgoing messages. All the incoming messages should be sent to Collector and Joint Collector and in their absence the DRO.
2. All the warnings should be communicated immediately to all the district officers, Divisional officers, Tahasildar by-e-mail, wireless, Telephone etc. Record of the messages sent should be maintained.
3. Monitor and rescue people continuously by organizing search through Army, Navy, Air force, NDRF, SDRF, Voluntary and youth organizations by deploying navy boats and helicopters.
4. Arrangements for moving such affected people to the nearest relief camps.
5. Keep adequate number of vehicles ready at the nearest possible.
6. Keep additional number of floats like tires, inflated rubber tubes,
7. Provide first aid and medical assistance for injured and sick people.

8. Deploy Police personal and Volunteers to maintain law and order
9. Regulate and reposition the external supplies.
10. Continuously provide authentic information to all people

**Post Disaster Phase:**

1. Provide information about the requirements in the affected area.
2. Arrange receiving points for receiving external aid.
3. Activate the restoration teams.
4. Prioritize the affected area based on the severity of the event.
5. Monitor Restoration of Road and tele-communication, Electricity, Drinking Water Supply and House construction
6. Proper record should be made for the dead and missing persons
7. Ensure Mass inoculation and vaccination programmers in the affected areas to prevent outbreak of epidemics by coordinating with Medical & Health Department.
8. Continue Search and disposal of the dead bodies and the carcasses. Sanitation of highest order is maintained
9. It is essential that spread of epidemics is prevented among people and animals.
10. The Dist. authorities and Line departments should provide comprehensive loss reports to the visiting State and central Govt. teams for arranging compensation.
11. Supply of all essential commodities, such as rice, wheat, pulses, salt, kerosene, diesel etc. Should be ensured to all the habitats in the disaster affected areas.
12. Enumeration of Losses and Damages in a systematic manner, documenting and reporting the same.

## **POLICE DEPARTMENT**

### **On Alert Phase:**

1. The Police authorities shall provide VHF/Mobile wireless sets with operators in Control Room at Dist. Collectorate and at other temporary Control Rooms
2. Establish communication with Control Room.
3. Collect information of vulnerable points and diversion routs.
4. Procurements of necessary equipment, storage of petroleum and other lubricants.
5. Shall obtain sufficient maps from the Collectorate regarding vulnerable village's

### **During Disaster Phase:**

1. Ensure passage of warnings and precautions to the people in affected areas
2. Superintendent of Police will coordinate with District Collector, DROs and other agencies.
3. Provide guidance and assistance for forming task forces by MROs for evacuation, rescue and emergency relief operations.
4. Help revenue and medical department in transporting Injured and sick persons to Medical centers.
5. Ensure enforcement of law and order in the affected/evacuated villages and at shelters to avoid thefts and unlawful acts.

### **Post Disaster Phase:**

1. Continue to pass warnings and precautions to the people in affected areas. Introduce latest transport and communication facilities.
2. Assist local officers in identifying the dead persons and for making proper records.
3. Update list of trained Police personnel at Districts.
4. Provide assistance to people who are in a position to move from relief camps to their places.

## **MEDICAL & HEALTH DEPARTMENT:**

### **Pre Disaster Phase:**

1. Prepare a list of precautions to be taken by the public before, during and after the disaster
2. DMHO to prepare and circulate in vulnerable areas.
3. Plan methods for quick transportation of seriously injured and sick person from disaster.
4. Keep teams of doctors ready with stocks of medicines
5. Ensure availability of adequate doctors, trained personnel, medical stores and equipment for movement at short notice to vulnerable areas.
6. Plan for establishment of field medical centers, mobile clinics, emergency operation centers.
7. Plan for stocking sufficient quantities of blood of different groups at nearby Blood banks. Update the list of Govt. /private doctors and supporting staff.

### **During Disaster Phase:**

1. A medical control room at district and division levels shall be established with help lines.
2. Where ever necessary seriously injured and sick persons are shifted to Dist./State/Referral hospitals for specialist services. Provide fist aid and medical assistance for injured and sick people.
3. DMHO will move maximum number of medical and Para medical teams, ambulances and mobile hospitals with adequate equipments, medicines etc. Each team should be allotted specific place in the disaster area and specified relief centers.
5. DMHO will take maximum precautions to prevent breakage of epidemics/water borne diseases in the disaster areas.



6. Utilize the services of private doctors, allopathy, ayurveda and Homeopathy in the disaster-affected areas. Organize mobile health units and temporary hospitals for providing medical relief and for preventing break of epidemics.

**Post Disaster Phase:**

1. Ensure continuation of educating people on precautions to be taken for maintaining hygiene and health in adverse conditions.
2. DMHO to continue provision of medical facilities at the affected areas and relief.
3. DMHO will obtain information on the medical relief provided at disaster areas, quantities of medicines used, the quality of services provides.
4. Update and send plans for additional requirement of facilities.
5. Vector borne like malaria, filarial, dengue, chickengunia, Japanese encephalitis, sprinkling of bleaching power and lime on the drains and roads to prevent gastro enteritis with the help of Sanitation team.

## **ANIMAL HUSBANDRY DEPARTMENT**

### **Pre Disaster Phase:**

1. District Demographic profile of families engaged in fishing, fish farming, poultry, dairy, sheep, goat and pig rearing, their location, unit size etc will be mapped and provided to Mandal and Village levels.
2. Cattle rearing community at vulnerable places will be advised not to go for heavy animals.
3. Ensure that boats and other equipments of fishermen are moved to safer places.
4. Provide medical help to distressed animals.
5. Check out a strategy to deal with drought situation so as to ensure continuous supply of Fodder and water to the animals.

### **During Disaster Phase:**

1. Mandals and Villages will arrange for shifting fishermen staying very near the sea and at low lying areas to safer places and relief camps. Ensure that boats and other equipments of fishermen are moved to safer places and secured.
2. Ensure that poultry farms take measures to safeguard their poultry birds and equipments.
3. Arrange for providing medical help to distressed animals. Ensure sufficient quantities of medicines and vaccines are stored at places nearer to the vulnerable villages. Arrange for visits of veterinary doctors to affected villages.

### **Post Disaster Phase:**

1. For increasing the awareness among fishermen community, provide training/conduct mock drills.
2. Coordinate for veterinary help to distressed animals.
3. Private Doctors to establish veterinary service centers in vulnerable areas.
4. Provide sufficient food/fodder/water for animals kept at safe yards.
  - Animal Cyclone Shelters to be constructed
  - Sufficient Feed to be stored
  - Local Bodies to take care of removal of Carcass of dead animals

## **AGRICULTURE DEPARTMENT:**

### **Pre Disaster Phase:**

1. Collect standard database village wise, crop wise, survey number wise, former wise data from village revenue officer (VRO)
2. Formation of village, mandal, division, and district level disaster team with other departments consisting Agriculture, veterinary, Sericulture, Fisheries, Horticulture, Revenue, Panchayathi Raj, Irrigation, and Drainage etc.
3. Existing seed storage godowns (Seed store/oil seed godowns etc) are to be repaired for storing of seeds during calamities.
4. Ensure that sufficient quantities of agricultural inputs such as seeds, fertilizers, pesticides, equipments and fodder are available at three levels.
5. Move and position the staff meant for disaster management duties at their pre decided places.

### **During Disaster Phase:**

1. Coordinate with Mandals and Villages to get feedback on seriousness of disaster, level of distress, relief provided, steps taken for saving maximum standing crop, extent of flooded agricultural lands and estimated loss of crop.
2. Dist. will direct Mandals/Villages to be in close coordination with other line departments to ensure adequate relief is provided to the farming community.

### **Post Disaster Phase:**

1. Ensure that adequate and timely relief/credit is made available to farmers for purchase of agricultural inputs through Govt. /private and easy loans through banks.
2. Seeds, fertilizers and pesticides should be provided at subsidized rates.
3. Develop data base village wise crop wise, irrigation, source wise, insurance details, credit facilities etc.
4. Fodder should be supplied in sufficient quantities at low prices.
5. The enumeration team while enumerating the crop loss, should also record the names of the tenant farmers, along with the owners name.

## **PANCHAYATH RAJ INSTITUTE (PRIS) DEPT:**

### **Pre Disaster Phase:**

1. District level committee shall have public representatives and the will participate and take steps for facing the disaster.
2. Direct the 3 levels to take advance action for provision of safe drinking water during crisis. Make arrangements for maintaining continuous supply and availability of food,
3. Kerosene and other essential items.
4. Rural Water supplies should be maintained efficiently to avoid disruption. Chlorine/bleaching powder should be stocked in sufficient quantities.
5. Identify low-lying areas and arrange for bailing out water in case of inundation. Clear all the drains to ensure free flow of storm water.
6. The village Disaster Management Committee shall procure tarpaulins other materials from agricultural market committee, corporations and locally, to meet the future requirements.
7. Identity dried branches of trees of roads sides and cut them to avoid accidents, the dried up wood stored and may be used at cooking centers.
8. The Gram Panchayath shall take steps to keep the required sand bags and wooden poles at the vulnerable points like M.I of tanks, ponds etc.
9. The Gram Panchayath shall clean the drainage system and arrange additional drainage system to drain the excess water.

### **During Disaster Phase:**

1. The control room will be further strengthened.
2. Direct the 3 levels to take suitable action for provision of safe drinking water.
3. Coordinate with line authorities to drain water quickly. First priority for water pump hoses, sub stations hospitals etc. Second priority will be residential areas.
4. Arrange vehicles for transport of people from the low lying areas to cyclone shelters. Assist Revenue department in evacuating the people from low lying areas to safe places.
5. Inform the people through mikes, tom-tom through the volunteer teams and help people prepare for to evacuation from the areas.

6. Inform the people to drive away the cattle sheep and goat to the safe and elevated places.
7. Make arrangement for the cooking and supply of food at the cooking centers identified. And keep all the sanitation material at cyclone centers/ relief centers.

**Post Disaster Phase:**

1. Removal of dead bodies, animal carcasses with the help of Revenue, Police and Medical Departments.
2. Planning and implementation of Rehabilitation of affected people.
3. Assist Revenue department in the assessment for dead persons, livestock and damages to houses and properties of individuals, agriculture, community assets.
4. Identification of material availability locally for construction of temporary sheds.
5. Ensure communication facilities such as Telephone, cell phones, wireless sets and their functioning. And procure sanitation material like lime, phenyl, bleaching power, with equipment.
6. Coordinate with line authorities to drain water quickly.

## **ROADS AND BUILDINGS DEPARTMENT**

### **Pre Disaster Phase:**

1. S.E shall conduct the disaster preparedness meeting twice in a year and advice the field functionaries to gear up for the situation.
2. The AEE shall keep the available machinery
3. Machinery will be in working condition, at all times.
4. The Dy. EE shall verify the working condition of the machinery once in three months.
5. Shelters and private buildings identified for use as relief camps should be checked.
8. Dist. authorities to make a final check of roads, bridges, culverts and buildings and carry out urgent repairs where ever necessary.
10. Move machinery and equipment meant for repair of roads and buildings.

### **During Disaster Phase:**

1. Alerting of field teams.
2. Enquiring the availability of machinery and requesting them to keep them ready for deployment where ever necessary.
3. Deputing of field staff from non affected areas to assist staff in likely affected areas.
4. Preparation for post disaster activities.

### **Post Disaster Phase:**

1. Ensure restoration of traffic movement where ever possible by quick repair of breaches.
2. Coordinate with State and plan for providing adequate number of drains by the side of roads
3. Sanction and entrustment of temporary restoration works.

## **IRRIGATION AND COMMAND AREA DEVELOPMENT :**

### **Pre Disaster Phase:**

1. Catchments maps are to be ready for all irrigation sources and all the vulnerable locations in the sources are to be identified along with the Water Users Associations.
2. Check and repair the main Irrigation canal system and control structures.
3. During the closure period the irrigation staff has to procure required stores i.e. empty gunny bags, sand, bullies of 1m length with 100mm dia, gaslights, bamboo thatties, gamelas, country twine, needles, crow bars, hammer with handles, torch light etc.
4. One flood store will be maintained under the control of each Dist. Collector. The flood store will keep empty sand bags, dewatering pumps, diesel generators, tarpaulins, tents etc.
5. The Asst. Engineer should make arrangement to intensify patrolling of river banks round the clock and as soon as the reservoir comes to full tank level and the spillway gates are to be operated to avoid further storage in the reservoir with intimation to Revenue Authorities.
6. Before cyclone / flood the AEE / DEE will inspect each and every vulnerable point and the areas prone for inundation for taking precautionary temporary measures and the summary of all actions intimated to the higher officers.
7. Strengthen the weak bunds of all irrigation sources and arranges.
8. Move all emergency duty officers/staff and equipments to vulnerable area.

### **During Disaster Phase:**

1. Materials such as empty cement bags, sand, metals, stone bellies etc. will be stocked in adequate quantities in all flood stores
2. Strengthen the weak bunds of all irrigation sources wherever necessary to prevent breaches.

3. After flood / cyclone warning, control room are to formed at SE/EE/ offices respectively.

4. Continue to clear the mouths of all drains for free flow of flood water.

**Post Disaster Phase:**

1. After floods recede necessary arrangements have to be made to the farming community to safe guard agriculture by making temporary restoration arrangements to the affected irrigation sources,

2. The officers involve for restoration of post disaster damaged irrigation sources are AEE/ AE, DEE, EE, and SE. and identify the breaches and take up restoration work.

3. Restore the damaged infrastructure.

4. Review and request for construction of dams, check dams and new irrigation/drainage canals for long term improvement.

5. Suggest measures for strengthening the river banks and canal bunds to avoid breaches.



## **FISHERIES DEPARTMENT**

### **Pre Disaster Phase:**

1. Demographic profile of families engaged in fishing, fish farming.
2. Arrange medical relief to fishermen. Provide medical help to distressed animals. Stock sufficient quantities of medicines and vaccines at places nearer to the vulnerable villages.
3. The FDO and fisherman elder will identify the vulnerable fishermen colonies
4. List of NGOs involved with fishermen activities and their capability for providing assistance.
5. Identification of vulnerable habitations, creek points, likely marooned areas,
6. Up keeping of the available life saving appliances, communication equipment
7. Assessment of probable damages to the boats and nets, fishermen huts, household articles.
8. Ensure that boats and other equipments of fishermen are moved to safer places and secured.
9. Telephone numbers and other contacts of Officers, village elders and president / secretaries of fishermen. Cooperative Societies have to be collected and shall be provided to all concerned up to habitation level.

### **During Disaster Phase:**

1. Mandal and villages will arrange for shifting fishermen staying very near the sea and at low lying areas to safer places and relief camps.
2. Ensure that boats and other equipments of fishermen are moved to safer places
3. Dissemination of cyclone warnings, weather reports to the fishermen localities, fishing boat operator's departmental personnel and liaison.
4. Alerting fishermen elders and fishing boat operators at sea to return to shore.

5. Collect data of number of boats operating at sea and guide them to a probable
6. Evacuation of field staff / volunteers from other safe areas to provide assistance
7. Mobilize expert swimmers to the cyclone / flood hit areas.

**Post Disaster Phase:**

1. Plan and implement schemes for educating fishermen communities of the vulnerable villages on the measures to be taken pre/during/post disasters to avoid loss of the lives and properties.
2. For increasing the awareness among fishermen.
3. Coordinate for medical relief to fishermen.
4. Ensure quick disposal of carcasses.
5. Seek help of Coast Guard in case of any emergency for search operations
6. Assess the loss / damages to household articles, fishing implements.
7. Visit of teams to the affected fishermen habitations
8. Preparation of estimated value of such loss/ damages
9. Consolidation of the assessed losses/ damages and reporting.
10. To sanitise all water sources utilized by the fishers in post disaster and clearance of debris/mud accumulated during disaster.

## **RURAL WATER SUPPLY:**

### **During Disaster Phase:**

1. Keep ready stock of all relevant with the department
2. The team has to observe the required stock of H<sub>2</sub>S vials availability with GPs to check bacteriological contamination.
3. Ensure that the list of tankers is to be ready along with capacity of tankers, their address, contact members and distance from vulnerable areas.
4. Availability of generators and their owners along with contact address and distance to the vulnerable area are too.
5. During the disaster awareness is to be created by the team members among people to construct and use ISLs in order to avoid open defecation during Cyclone/ Floods.

### **Post Disaster Phase:**

1. The list of damages occurred during cyclone/ floods are to be identified.
2. Ensure that permanent restoration may also be taken with local funds
3. Monitoring of water quality should be restored
4. Ensure that Chlorine and chlorine – liberating compounds are the most common disinfectants.
5. Chlorinate lime or bleaching powder, which has 25% by weight of available chlorine when fresh, its strength should always be checked before use.

## **A P TRANSCO**

### **During Disaster Phase:**

1. Diesel generators will be pressed into service for providing lighting at important places.
2. Appoint one officer as "NODAL OFFICER - Power Supply" at district level.
3. Review and update precautionary measures and procedures.
4. Assist the district authorities to make arrangements for standby generators in the following public service offices from the time of receipt of alert warning
  - Hospitals
  - Water department
  - Collectorate
  - Police stations
  - Telecommunications buildings
  - Meteorological stations.
  - Petrol stations
5. Dispatch emergency repair gangs equipped with food, bedding, tents, and tools. On the recommendations of the collector/district control room/" Officer-in- charge.

### **Post Disaster Phase:**

1. Ensure that power supply is maintained at all important places in affected areas through diesel generators till regular supply is restored.
2. Depending on the present experience, Districts will plan and position additional diesel generators wherever necessary.
3. Updated long term restoration plans received from state level will be implemented in the affected areas. These plans will include up gradation of distribution network to with stand hazards from future disasters.
4. Establish temporary electricity supplies for transit camps, feeding centers, relief camps.
5. Establish temporary Plan for emergency accommodations for staff from outside the area.

## **A.P. CIVIL SUPPLIES DEPARTMENT**

### **During Disaster Phase:**

1. Local Civil supply Dept. officials should ensure adequate and timely supply of essential commodities to the Relief camps, and fair price shops at the vulnerable villages.
2. Ensure supply of dry food, bakery and other ready to eat items to the vulnerable areas.
3. To maintain and provide adequate supplies of essential items to the people of affected villages and relief camps.

## **FIRE DEPARTMENT**

### **Pre Disaster Phase:**

1. All executive staff should be trained in Cyclone & Flood Rescue Operations.
2. All the recruits shall be trained in swimming and rescue operations.
3. A Rapid Rescue Force shall be formed with persons below 40 years of age for cyclone prone areas.
4. Periodical refresher courses must be organized.
5. Conducting periodical mock drills or exercises in vulnerable areas.
6. Identification and collecting of information with addresses and contact numbers of Public sector private agencies in the jurisdiction of fire stations having fire fighting Vehicles and rescue tools.
7. Obtaining the list of swimmers from other agencies via Fisheries Department.
8. Checking the serviceability of the emergency and rescue equipment available in the Fire Stations
9. Rescue Tools, Dragon lights, life buoys, Life jackets, Manila Ropes, Cotton ropes, ladders and Breathing Apparatus sets etc.
10. Keeping one logistics vehicle for transporting rescue equipment and man power.

### **During disaster phase:**

1. Conducting possible Search & Rescue Operations in co/lamed buildings; submerged marooned arms to rescue the living person's trarbed under debris, from, damaged buildings Structures and stranded on tree cops with the available manpower and resources.
2. Render first aid to the injured and providing; artificial respiration to the victims.
3. Recover the dead bodies from the damaged buildings

4. Cut off supplies if utility services like LPG/electricity from damaged buildings.
5. Cutting of fallen trees to clear road blockages.
6. Bailout water from submerged areas, if required.

### **Post Disaster Phase**

1. Mobilizing the victims to safe places.
2. Identifying the vulnerability of collapse and damaged of buildings with the help of R&B / PR engineers & to prevent the re-entry of habitants/others.
3. Removal of fallen trees and other obstructions to facilitate transportation, restoration of electricity and other communications.
4. Bailing out of flood water with heavy duty pumps and floating pumps in submerged areas and from drinking water wells.
5. Assist local bodies in clearance of debris if there are any suspected victims.

### **BHARAT SANCHAR NIGAM LTD. (BSNL):**

- House all electrical and switching equipment in damage proof buildings.
- All storage batteries should be charged fully during alert for long use.
- Establish an emergency tool kit at each exchange.
- Assemble equipment and emergency stocks of materials likely to be necessary for restoration of services. Arrange emergency standby cable for dispatch to the affected area.

Remove fuses from the lines and disconnect the power supplies to equipment in disaster areas, if necessary.



## **DEPARTMENT OF INFORMATION & PUBLIC RELATIONS.**

### **Pre-Disaster Phase:**

1. The main task before the onset of the disasters is educate people who are living in vulnerable places.
2. The involvement of local Non Governmental Organizations with their better communication skills. To create awareness among people about DO's and DON'T's for the people should be printed as leaflets and distributed widely.
3. Information about the warnings should be passed by the District PROs to the concerned authorities and the public.
4. Information centre' should be organized at the district Headquarters.
5. Message about hazard warnings, from the authorities, have to be passed on to the public through available communication systems.
6. Information about the Hazard given in the warnings and their effect on the people assets' should conveyed through all means available.
7. Daily press meetings should be held on measures taken to avoid false rumors, rich generally spread in such incidents.

### **Post Disaster Phase:**

1. The department should give information about relief camps, material supply for shelters, medical camps, distribution of rice, kerosene, compensation, etc., through media and other communication systems
2. Relief and rehabilitation information and feedback collected from the public about relief measures taken by the government may be sent to the higher authorities. The department should arrange photo exhibition on damages For Press briefings and. for visit of the central teams which visit the affected areas to assess the losses.

**During Disaster Phase:**

1. To give wide publicity to the inculcate awareness among public through print and electronic media.
2. Obtain the feedback reports and process to the concerned authorities for onward process
3. Conducting of press tours in the affected areas
4. Conducting press tours during the visits of VIPs/higher officials etc., in the affected
5. Maintain close liaison with media.

## **HORTICULTURE:**

### **Pre-Disaster Phase:**

1. Districts will prepare a long term action plan for meeting relief requirements of farmers in vulnerable areas.
2. Prepare departmental action plans with all plausible mitigation measures to minimize Flowers losses with long term perspective.
3. Existing seed storage godowns (Seed store/oil seed godowns etc) are to be repaired for storing of seeds during calamities.
4. Ensure that sufficient quantities of agricultural inputs such as seeds, fertilizers, pesticides, equipments and fodder are available at three levels. If necessary, they will be supplied at short notice at vulnerable areas.

### **During Disaster**

1. Coordinate with Mandals and Villages to get feedback on seriousness of disaster, level of distress, relief provided, steps taken for saving maximum standing crop, extent of flooded agricultural lands and estimated loss of crop.
2. Dist. will direct Mandals/Villages to be in close coordination with other line departments to ensure adequate relief is provided to the farming community.

### **Post Disaster Phase:**

1. Ensure that adequate and timely relief/credit is made available to farmers for purchase of agricultural inputs.
2. Seeds, fertilizers and pesticides should be provided at subsidized rates.
3. Fodder should be supplied in sufficient quantities at low prices.

## **MUNICIPAL AND URBAN DEVELOPMENT**

### **During Phase:**

1. The Local Bodies will participate actively in the emergency as volunteers.
2. The Municipality will monitor the situation at ward level from time to time on sanitation, prevention of epidemics, safe drinking water facility, clearance of debris etc.. With the help of SHGs, SLFs, AWWs and Public Health Workers.
3. Establish communication links with ERCs and Search & Rescue Teams in all Municipal Corporations and alert them to be in stage of readiness.
4. Make transport arrangement for mobilization of all emergency
5. Make arrangements for logistic support to all emergency response team.

### **Post Disaster Phase:**

1. Ensure maintenance of record.
2. Depute additional officers and supporting staff to cyclone affected areas.
3. Ensure that key administrative and lifeline buildings are brought back to operation quickly
4. The Municipalities should give information about relief camps, material supply for shelters, medical camps, distribution of rice, kerosene, compensation, etc., through media and other communication systems
5. Ensure restoration of traffic movement where ever possible by quick repair of breaches.