

TAMIL NADU STATE DISASTER MANAGEMENT AGENCY

From
Dr. K. Satyagopal, I.A.S.,
Principal Secretary / Commissioner of
Revenue Administration,
Chepauk, Chennai 600 005.

To
District Collectors of Coastal Districts
and the District Collectors of
Coimbatore, Salem, Erode, Tiruppur,
Namakkal, Perambalur,
Tiruchirappalli, Karur, Ariyalur,
Dindigul and Sivaganga.
(w.e.)

Lr.No.N.C.I(4)/5779/2016, dated 25.10.2016.

Sir,

Sub: Natural Calamities – North East Monsoon 2016 –
Preparedness Measures for Management of Cyclone
Instructions issued - regarding.

- Ref: 1. This Office Circular Ref No.N.C. I(4)/5779/2016, dated
29.8.2016.
2. This Office Circular Ref.No.N.C.I(4)/ 5779/2016, dated
12.09.2016.
3. This Office Circular Ref.No.N.C.I(4)/ 5779/2016, dated
16.09.2016.
4. This Office Circular Ref.No.N.C.I(4)/ 5779/2016, dated
23.09.2016.
5. This Office Circular Ref.No.N.C.I(4)/ 5779/2016, dated
04.10.2016.
6. Guidelines of NDMA on Management of Cyclone.

Tamil Nadu is prone to multi hazards, and is frequented by hazards of serious nature during North East Monsoon. The vulnerability of the coastal community became exceedingly evident when Tsunami struck the southern coast of India. Besides Tsunami, the coastal community faces disasters like cyclone and floods periodically. Communities in other hazard prone plains and hilly regions of the State face threats from Landslides, Earthquakes and Floods.

2) North East Monsoon season is associated with low pressure formation and cyclonic storms resulting in heavy to very heavy rainfall. Detailed instructions have already been issued to the District Collectors with regard to the preparedness measures to be taken for the North East Monsoon 2016.

3) The most destructive features associated with land falling Tropical Cyclones are the (1) Strong gale force winds (2) Storm surges and (3) Torrential rains . The storm surge which raises the water level in the eye of the cyclone is the worst effect of tropical cyclone and accounts large number of deaths. Strong winds combined with gentle slope of the sea floor can increase the surge height. The houses very close to the shoreline are at risk. The strong winds may also uproot trees which may injure and kill people and damage houses, vehicles, and property. Uprooting of trees and electric posts can also expose the community to face the risk of injury and electrocution. It is also to be noted that apart from the Coastal Districts, the Non-Coastal Districts are also affected by the impact of Cyclones.

4) All the District Collectors are hereby instructed to take the following preparedness measures to tackle any eventualities that may arise if any cyclonic storm strikes Tamil Nadu during the North East Monsoon 2016. In addition any additional measures that may be required based on the past experience in the district should also be put in place.

Pre-Disaster - Cyclones - 48 to 72 hours before expected landfall

- Early warning information is normally provided by Regional Meteorological Centre. District Administration should be aware of and keep track of other standard weather bulletins. The DEOC should monitor the situation on an hourly basis.
- DDMA should inform all Heads of Departments and the coastal community through the jurisdictional Fisheries and Revenue Department staff and advise them not to venture into the sea for fishing activities. For the public open loudspeaker announcements should be used. Press / Audio – Visual media and Social media should be used to sensitize the community.
- The Fisheries Department while assessing the situation should keep track of the number of fishermen in the sea and monitor their return. In case of

missing persons, Coast Guard should be informed for assistance to track them down. Maximum efforts at this stage to be taken to ensure that none of the fishermen be in the sea 24 hours before the expected landfall or sometime even prior to that as the sea becomes rough.

- The Fire and Rescue Services, Police, Home Guards and Medical team should be alerted on the directions given by the DDMA to be in readiness for emergency operations.
- Transport arrangements to be made for evacuation if the status of the threat is enhanced.
- Officials should be deputed to shelters to assess the facilities and arrange for proper lighting, water supply both for drinking and washing, adequate toilet facilities, as per number of people that can be accommodated.
- RTO to play a lead role in arranging for private buses and trucks/lorries for transport not only of people but also of relief materials to the identified shelters.
- The people residing in the possible flooding areas that had been drawn up during non-disaster time should be advised to move to safe places. Children in particular should be advised to avoid low lying areas, refrain from crossing through water bodies and channels.
- Heavy rain can result in overflow of dams and lakes. The PWD and the Block office to place their staff on high alert to ensure round-the-clock monitoring of flood levels in water bodies under their control and ensure release of water in accordance with existing flood manuals.
- This phase will test the effectiveness of the connectivity of the district administration with that of the communication system in the coastal hamlets.
- To Check/assure the non-submergence of Water supply sources
- To assure the electricity supply either by TNEB or by Genset
- Securing sand bags to prevent breaches at appropriate places
- To check the availability of Tree cutting machines
- To clean the storm water drains.

Level 2: (Alert) 24 to 48 hrs before expected landfall

- When the approximate position of the cyclone system is located at a distance of 500 km from the coast, the DDMA should meet frequently to review the situation as per the status of the IMD forecast.
- In the event of the cyclone moving north and the threat reducing, the IMD will provide information on the expected wind speeds for the district. If the influence of the cyclone is in the peripheral zone of the storm, immediate action is not required.
- Whether the storm intensifies or otherwise, the review of disaster preparedness should be made by the DDMA at periodical intervals with the constant watch on fresh bulletins from IMD.
- The Rescue and Relief teams should be stationed by this time to familiarize themselves with the terrain and the settlements they are to assist.
- As it is advisable to switch off the power supply during landfall to avoid electrocution related accidents due to snapping of overhead supply lines: Generators to be kept ready to be used for relief operations and in relief camps.
- Announcements to be made - to close windows and have them secured; loose material to be secured by suitable methods. Sandbags to be stacked on roofing that needs to be secured. High speed winds can lead to more destruction.
- Arrangements for additional Ambulance help to be made.
- Arrangements should be made for free flow of traffic by imposing one-way traffic where necessary.
- Bulldozers and other Earthmoving equipment needed for clearing roads affected by fallen trees to be moved appropriate places close to coastal villages but not on the roads identified for evacuation - to avoid obstruction of evacuating vehicles.
- If the cyclone is upgraded as Super Cyclone or Very Severe Cyclonic Storm, the assistance of the military may be sought.
- During cyclone the existing communication networks will invariably collapse. Each officer should know his/her role in advance.
- Battery operated Megaphones are quite useful for making announcements.

- As the Police department has a stand- alone communication system - excellent coordination need to be in place to serve as effective back-up.
- The mobile companies to be advised to stock appropriate quantity of diesel to run the generators to operate the mobile towers.

Level 3: (Warning) 12 to 24 hours before expected landfall

- This warning is issued when the cyclone is located at a distance of 200 km from the coast.
- The DDMA/DEOC in consultation with the SDMA/SEOC need to order for the evacuation of people depending on the intensity of the Cyclone. The advisories from Government of India / NDMA may also to be taken into consideration. Vulnerable people should be evacuated first including elderly, disabled, children, women, widow and the shelter to which they are heading should be informed to their family members and neighbours.
- Local volunteers and youth may assist in listing out the names of the people evacuated and the location where they are accommodated. The official in-charge of the shelter should alert the control room if the shelter is fully accommodated.
- The eye of the cyclone is generally 30 to 65 km in diameter; the spiralling winds may influence a region of up to 50 to 60 km.
- Evacuation should be completed in about 12 hours as the wind speed is expected to be very high when the eye wall reaches the shore. The duration of very high winds may be for 6 hours and in the location of landfall it is normal to have unusually calm weather whereas the adjoining villages are being devastated by winds.
- Proper patrolling is necessary at this stage to avoid looting and arson by anti-social elements.
- The official in-charge of the relief shelters should ensure that food packets and water are made available in the relief camps and if possible arrange milk for infants and children.
- Diapers, mats, women dignity kits and bleaching powder should be provided in the shelters.
- The medical team should be available to provide for minimum medical care at the camps with necessary medicines.

- Sufficient numbers of boats are to be kept ready near low lying area already identified.

Level 4: (Lookout) 0 to 12 hours

- The lookout is issued when the cyclone system is within a distance of 200 km from the coast.
- Floods are the main cause of fatalities due to the cyclone - all instructions on avoiding flooding will need to be reiterated.
- Sufficient number of Boats should have been mobilized and located in easy access to spots which have a history of flooding.
- The wind velocity will increase during this period and reach a maximum. If the wind speed reduces suddenly, it does not mean that the cyclone has dissipated. It is also possible that in the same location the eye of the storm is making landfall. The wind will once again become destructive and attain high speed after an interval which will depend on the forward motion of the cyclone. The time of lull in the wind may last up to six hours.

Cyclone De- Warning Stage

- When the system weakens or is not going to affect coastal area under alert, a de-warning message will be issued.

Post Disaster

- After the Cyclone, it becomes necessary to assess the Damage and each department will need to follow the guidelines given to it.
- A committee should be formed to identify missing person, dead and injured and assess the damage of properties, loss or injured of livestock, loss of crops, agricultural lands, etc for providing suitable relief.
- Removal of debris; Clearing the fallen trees; Restoring power lines; Restoration of basic Infrastructure - All of this requires a massive effort and will need special mobilization of extra manpower.
- Teams for Disposal of Dead Bodies and Disposal of Carcasses will need to be organised on war-footing where the casualties have been high.
- Spoilt foodstuffs that are dumped on the road should be disposed.

- Air dropping of food and essential commodities in the inaccessible areas of cyclone and rain affected should be considered by the District Administration.
- Food Arrangement where accessible need to be arranged. Cooked or dry food need to be provided at the Shelters.
- Sufficient clothing and blankets need to be provided to the affected people to ensure their dignity, safety and well-being.
- Warm and inner clothes and additional clothes need to be provided to Children, sick, elders, women and widows.
- Immediate restoration on roads to motorable condition.
- Keeping ready the Earth moving machineries like JCB, Tractors etc.,

5) The District Collectors besides taking necessary action have to monitor the situation closely in the event of a Cyclone upto the end of post disaster phase. The Collectors have to send regular updates and shall not hesitate to escalate the problem to State level as and when the situation warrants by bringing it to the notice of Principal Secretary/ Commissioner of Revenue Administration so that assistance can be strengthened from the State level.

Sd/- K. Satyagopal
Principal Secretary/
Commissioner of Revenue Administration.

Director
(Disaster Management)