

Satellite, web technology help Andhra Pradesh, Odisha minimise Hudhud cyclone damage

M Somasekhar



Facing Hudhud The two cyclone-prone States are hoping to lower the disaster-related death toll even further this year.

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Hyderabad, October 13:

Odisha's 1999 'super cyclone' killed 10,000 people. The October 2013 'Phailin', that battered Odisha and Andhra Pradesh, claimed less than 50 lives. The States are aiming to further lower the human loss caused by the latest 'Hudhud' cyclone, that hit the east coast exactly a year after Phailin, by bringing it below last year's toll. What has made this feat possible? It's a combination of advancements in weather monitoring technology, preparedness by respective State administrations and co-ordination with disaster mitigation and defence personnel to tackle natural calamities.

Regular alerts

For nearly a week, meteorology experts from the India Meteorological Department (IMD) have been putting out bulletins on the formation, movement and alerts on the potential intensity of the Hudhud cyclone. The Hyderabad-based, INCOIS and later NASA of US also stepped in as the cyclone gathered momentum to pitch in with their technology inputs, which included satellite imagery, wave, wind speed and potential rainfall data.

The continuous bulletins giving alerts and warnings helped the State Government of Andhra Pradesh and Odisha gear up preparations to minimise loss, especially human, while taking steps to reduce economic destruction as well. Learning from the havoc of the super cyclone, the IMD and other meteorology agencies, built up infrastructure like a network of satellite, ocean and ground-based technological tools to improve accuracy of forecasts, as they tracked Phailin.

Interestingly, the IMD's forecasts, which differed from those of some global agencies and raised a controversy, finally proved right in the case of Phailin. The preparedness of both the Odisha and AP Governments in co-ordination with the National Disaster Response Force efforts proved fruitful in keeping damages to the minimum.

This time around, the IMD and related agencies have moved fast in tracking Hudhud. Ahead of the approach of the Hudhud cyclone, which battered Visakhapatnam and several coastal districts in the two States with winds reaching 200 kmph and heavy rains wrecking much economic loss, people were moved to safe places and provided relief. The impact was so high that the radars and the weather stations in the area also got affected.

If the IMD has been continuously feeding satellite information, the Hyderabad-based Indian National Coastal, Ocean Information Systems (INCOIS) has been putting out real time data on the cyclone giving the progress of various parameters like wave height, and wind speeds, which have proved to be accurate with a 15 per cent margin of error, scientists told *BusinessLine*.

The Wave Rider Buoys and Automatic Weather Stations (AWS) deployed in Visakhapatnam and Gopalpur by INCOIS have been getting real time sea and weather related information. The wave height forecast at 9.4 m was recorded, while the AWS on board RVS Kaustubh, a research vessel that is presently stationed in the Visakhapatnam harbour, registered a high value of around 177 kmph at 11.30 am on Sunday.

Better infrastructure

Both AP and Odisha, which perennially face the threat of natural disasters like cyclones and floods, have been improving their forecast and relief-cum-rehabilitation infrastructure. A series of Doppler Radars, weather stations, ocean-based buoys and tracking systems are being set up, though at a slow pace. The NDRF, under the National Disaster Management Authority, is also proposing to set up some units and training facilities in the coastal States.

The AP Government's initiative to use crowd sourcing, by seeking pictures on the cyclone's impact, contributions for a specially designed Website on the National Remote Sensing Centre through an Android app, a Facebook page and optimally utilising the imagery from the Centre, has also brought in encouraging response to improve administrative steps in handling natural disasters.

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