HYDERABAD THE HINDU
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Monitoring earthquakes the better way

INCOIS in the process of setting up sensors in Andaman & Nicobar Islands

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The Indian Tsunami Early Warning System (ITEWS) of the INCOIS is in the process of setting up an elaborate system of sensors in the Andaman & Nicobar Islands for real-time monitoring of earthquakes in the region.

Strong Motion Sensors with GPS have already been established at 28 locations in the islands, while three more 'cabins' housing the sensors deep in the forests are awaiting permission from the environment and forest departments of the administration, according to INCOIS director Satheesh C. Shenoi. The plan is to have such sensors at 35 locations in all and these are to be put inside six-by-six-metre structures. They would be interconnected and would have a satellite-linked facility so as to enable the scientists here to monitor the minute land mass movements and seismic data real-time and be in a position to get a better estimate of the impact and act quickly, he explained. Eight of the sensor stations have been satellite-linked, while the remaining ones are recording the data which can be accessible once they are all interconnected. This is likely to happen in a couple of months. Four more sensor stations are also in the pipeline at various locations once the requisite forest clearances come through, said the director.

Satheesh C. Shenoi

The INCOIS, under Ministry of Earth Sciences, has also in place a fail-safe satellite-based communication system, Emergency Operation Centres, with VSAT-based VoIP phone and fax, electronic display board, a computer-based earthquake alert and web access system. The system is capable of displaying ticket messages related to tsunami event and triggering of a built-in siren alert system audible for up to one kilometre radius which can be triggered by INCOIS or by the EOCs.

The ITEWS comprises a real-time network of seismic stations, tsunami buoys and tide gauges to detect 'tsunamigenic' earthquakes and monitor tsunamis. The real-time data is collated at INCOIS in collaboration with the Indian Meteorology Department, National Institute of Ocean Technology (NIOT), the Survey of India (SOI) and international sources.