

Information on UNESCO-IOC Tsunami Ready Programme in India

In response to December 26, 2004 tsunami, government of India has established Indian Tsunami Early Warning Centre (ITEWC) at Indian National Centre for Ocean Information Services (INCOIS), Hyderabad under the Ministry of Earth Sciences and is operational since October, 2007. Indian Tsunami Early Warning System comprises a real-time seismic monitoring and sea-level (Tsunami buoys and Tide gauges) network. In addition, INCOIS also takes the help of numerical model to assess the tsunami potential at different locations on the coast. The system is operational round the clock on all days. The ITEWC is capable of detecting tsunamigenic earthquakes occurring in the Indian Ocean as well as in the Global Oceans within 10 minutes of the occurrence of the earthquake and disseminates the advisories to the concerned authorities through email, fax, SMS, GTS and website. The ITEWC is providing advisories to all Indian Ocean rim countries as part of UNESCO-IOC framework.

Tsunami cannot be prevented, but its impact can be mitigated through community and emergency preparedness, timely warnings, effective response, and public education. ITEWC has been organizing regular workshops, trainings and seminars to create awareness about tsunamis to stake holders. ITEWC, INCOIS regularly conducts communication tests and mock exercises to test the efficiency of communication links to evaluate the readiness to handle emergency situations.

Tsunami Ready is a community performance-based programme initiated by the Intergovernmental Oceanographic Commission (IOC) of UNESCO to promote tsunami preparedness through active collaboration of public, community leaders, and national and local emergency management agencies. The main objective of this programme is to improve coastal community's preparedness for tsunami emergencies, to minimize the loss of life and property and to ensure a structural and systematic approach in building community preparedness through fulfilling the best-practice indicators (11 Nos) set by the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS) of UNESCO-IOC. Fulfillment of the guidelines ensures communities have a strong end-to-end tsunami early warning and mitigation system with a particular focus on community awareness and preparedness to respond. The programme contributes to the overall aim and goals of the Sendai Framework for Disaster Risk Reduction (SFDRR) 2015-2030 and its 7 global targets. Additionally, it contributes to Goal 11 of the Sustainable Development Goals 'Make cities inclusive, safe, resilient and sustainable'.

As per the regional guidelines, each community is expected to fulfill 11 important indicators to be recognized as Tsunami Ready. Each community that successfully builds their capacities and demonstrates the following 11 indicators are carefully assessed and provided with a recognition certificate by UNESCO-IOC:

1. Have Community Tsunami Risk Reduction Plan
2. Have designated and mapped tsunami hazard – inundation zones
3. Have a public display of tsunami information
4. Produce easily understood tsunami evacuation maps as determined to be appropriate by local authorities in collaboration with communities
5. Develop and distribute outreach and public education materials
6. Hold at least three outreach or educational activities annually
7. Conduct an annual tsunami community exercise
8. Address tsunami hazards in the community's Emergency Operations Plan (EOP)
9. Commit to supporting the Emergency Operations Centre (EOC) during a tsunami incident, if an EOC is open and activated
10. Have redundant and reliable means for a 24-hour warning point (and EOC if activated) to receive official tsunami threats /information
11. Have redundant and reliable means for a 24-hour warning point and/or EOC to disseminate official tsunami alerts to the public

To implement and monitor the implementation of Tsunami Ready and IOWave Exercises in India, Ministry of Earth Sciences established a National Board under the chairmanship of Director, INCOIS with members drawn from Ministry of Earth Sciences (MoES), National Disaster Management Authority (NDMA), Ministry of Home Affairs (MHA), Odisha State Disaster Management Authority (OSDMA), Andaman & Nicobar Islands Directorate of Disaster Management (DDM) and INCOIS.

The Odisha State Disaster Management Authority (OSDMA), Odisha implemented Tsunami Ready Programme on pilot basis in 6 villages i.e. Boxipalli-Venkatraipur – Ganjam District, Noliasahi – Jagatsinghpur District, Keutajanga – Puri District, Jayadevkasaba Pahi - Balasore District, Podhuan - Bhadrak District and Tantiapal Sasan - Kendrapara District. Tsunami Ready tested the indicator during the IOWave18 Exercise.

The National Board along with UNESCO-IOC delegates initially visited two of these villages Venkatraipur in Ganjam District, Noliasahi in Jagatsingpur District of Odisha during December 2019 and recognized them as Tsunami Ready nationally and recommended for UNESCO-IOC for recognition.

Based on the recommendations of the National Board after evaluation process, the UNESCO-IOC has recognized Venkatraipur and Noliasahi villages from Odisha as Tsunami Ready communities. This is great achievement for Odisha and India. With the UNESCO-IOC recognition of these two communities from Odisha, India is the first country in the Indian Ocean Region and Odisha is the first state to achieve the Tsunami Ready recognition.

A Virtual event was organized on 7 August 2020 for UNESCO-IOC Tsunami Ready Recognition Certification. Chief Guest of the event Dr. M. Rajeevan, Secretary, Ministry of Earth Sciences (MoES), Govt. of India and Guest of Honor Shri. G.V.V. Sarma, Member Secretary, National Disaster Management Authority (NDMA), Govt. of India presented the Certificates of Recognition and Appreciation to the two villages and Officials of OSDMA.

INCOIS initiated activities to extend the UNESCO-IOC Tsunami Ready programme in all Coastal States/UTs on a pilot scale to build tsunami resilient communities. INCOIS has organized a “UNESCO-IOC Tsunami Ready Workshop” for Disaster Management Officers (DMOs) in collaboration with ICG/IOTWMS and IOTIC of UNESCO-IOC during 10-12 December 2019 at INCOIS, Hyderabad. Most of Coastal States/UTs DMOs are ready to implement the Tsunami Ready programme in vulnerable communities in their respected States.