

**WORLD
TSUNAMI
AWARENESS
5 NOVEMBER DAY**



Indian Tsunami Early Warning Centre

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Background

Though tsunamis are rare, they are among the most devastating natural disasters. The Indian Ocean tsunami caused by an earthquake of magnitude 9.1 off the West coast of Sumatra, Indonesia was the worst natural disaster in history killing around 2,30,000 people along the coast of the Indian Ocean. In 1960, the Chilean tsunami was generated by huge earthquake of magnitude 9.5, the largest recorded magnitude that caused substantial damage not only along the coast of South America but also around the Pacific Ocean.

The recent devastating Japan tsunami near Sendai in 2011 was accounted for world's most expensive catastrophe. It should be noted that the impairments especially casualties were not only due to the hazard level rather the vulnerability including the population along the coast and their preparedness. The huge casualties in the case of the Indian Ocean Tsunami were especially due to absence of early warning systems in the region at that time.

From the past experiences, we learnt that "Disaster mitigation has to start from people's understanding of the disasters". As tsunamis know no coastal borders, the international cooperation is the key for reducing tsunami risk. In December 2015, the United Nations General Assembly designated 5th November as World Tsunami Awareness Day to promote a global culture of tsunami awareness.

The date of 5 November was chosen in honour of a true story from Japan: "Inamura-no-hi", which means the "burning of the rice sheaves". During an 1854 earthquake, a farmer saw the tide receding, a sign of a looming tsunami. He set fire to his harvested rice to warn villagers, who fled to high ground. In the aftermath, he helped his community build back better to withstand future shocks, constructing an embankment and planting trees as a tsunami buffer.



Credit/The Cabinet Office of Japan: A drawing of Goryo Hamaguchi, a village leader in Hirogawa, Wakayama Prefecture, who set fire to piled sheaves of his newly harvested rice in order to warn people against tsunami on 5 November 1854.

image source : <https://news.un.org/en/story/2016/11/544422-feature-feudal-era-japanese-village-leader-stands-beacon-tsunami-education>

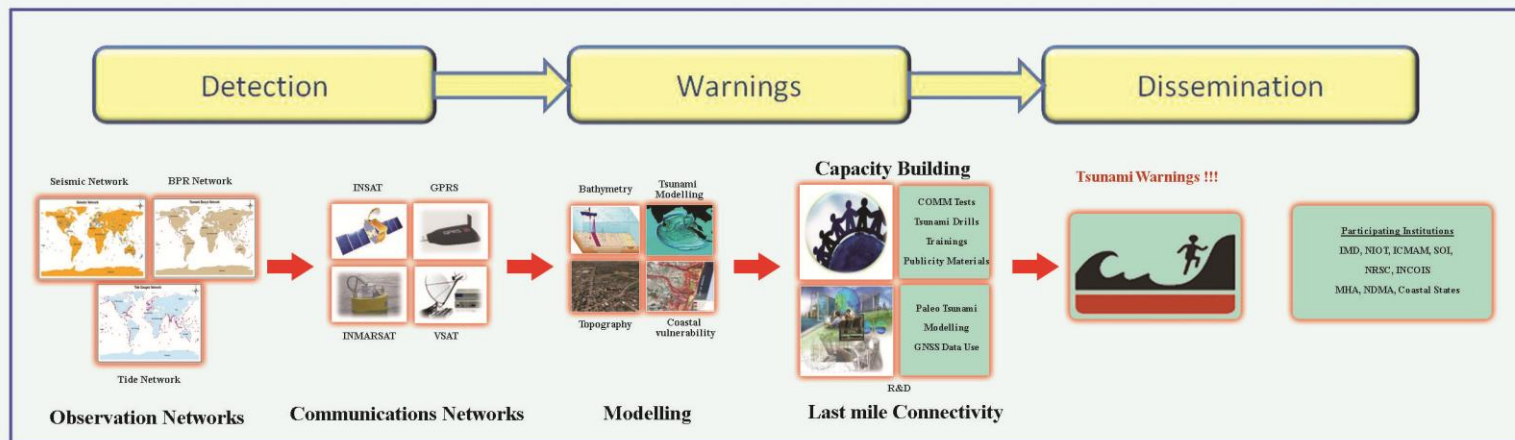


Fig. ITEWS Components

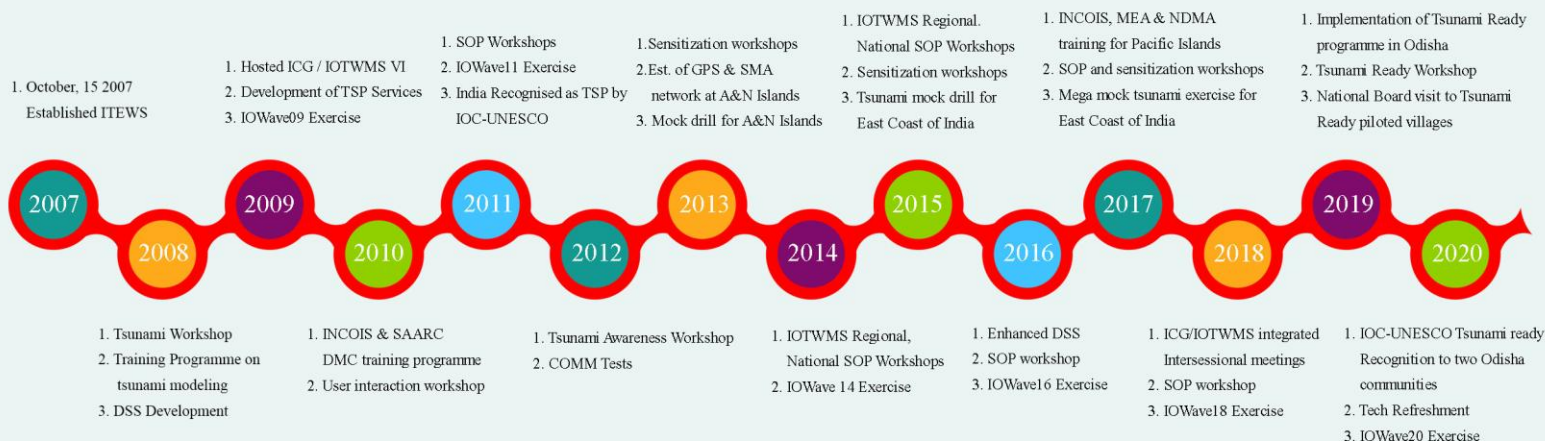
In response to the 2004 tsunami, the Government of India established the Indian Tsunami Early Warning System (ITEWS), with the warning centre operating from the Indian National Center for Ocean Information Services (INCOIS), Hyderabad, India. As a nodal agency responsible for issuing tsunami early warning services for India, it is also recognized as the Tsunami Service Provider for providing tsunami advisories to the Indian Ocean rim countries. The Indian Tsunami Early Warning System comprises a real-time network of seismic stations, tsunami buoys, tide gauges and 24 X 7 operational Warning Centre to detect tsunamigenic earthquakes, to monitor tsunamis and to provide timely advisories to vulnerable community.

Threat Status and Advice



Indian Tsunami Early Warning Centre (ITEWC) disseminates tsunami advisories to various stakeholders through multiple dissemination modes simultaneously (Fax, Phone, Emails, GTS and SMS etc.). Earthquake information, tsunami bulletins as well as real-time sea level observations are also made available on a dedicated website www.tsunami.incois.gov.in for officials, public and media. Users can also register on the website for receiving earthquake alerts and tsunami bulletins through emails and SMS. The ITEWC also assists all coastal states through education programmes and regular tsunami communication and evacuation exercises, increasing the coordination, readiness for and understanding of tsunamis among stakeholders with special emphasis on school children and other coastal communities around the nation.

Journey since 2004 ...



Be Tsunami Smart!

Tsunamis can be detected using our human senses

Recognize a tsunami's natural signs

Feel

- Strong local earthquakes may cause tsunamis.
- Feel the ground shaking severely?

See

- As a tsunami approaches shorelines, water may recede from the coast, exposing the ocean floor, reefs and fishes.
- See an unusual disappearance of water?

Hear

- Abnormal ocean activity, a wall of water, and approaching tsunami create a loud "roaring" sound similar to that of a train or jet or aircraft.
- Hear the roar?

Run

- Immediately leave low-lying coastal areas.
- Move inland to higher ground.
- run if you see a tsunami coming!

Tsunami Preparedness

1. Be aware of tsunami facts. This knowledge could save your life!
2. Share this knowledge with family and friends. It could save their lives!
3. Determine if you live, work, play, or transit a coastal low lying area or tsunami evacuation zone.
4. Follow the advice of local emergency and law enforcement authorities. Do not return until authorities say it is safe.
5. Stay away from bodies of water. If you are at the beach or near the ocean, and you feel the earth shake, move immediately inland to higher ground. Do not wait for a tsunami warning to be issued. Stay away from rivers and streams that lead to the ocean due to strong tsunami wave action and currents.
6. Take shelter. If you live in a tsunami evacuation zone and hear that there is a tsunami warning, your family should evacuate your house. Walk in an orderly, calm manner to the evacuation site or to any safe place outside your evacuation zone. If you are in school and you hear there is a tsunami warning, you should follow the advice of teachers and other school officials. If you are unable to quickly move inland, high, multi-story, reinforced concrete buildings may provide a safe refuge on the third floor and above.