

Tsunami

Introduction

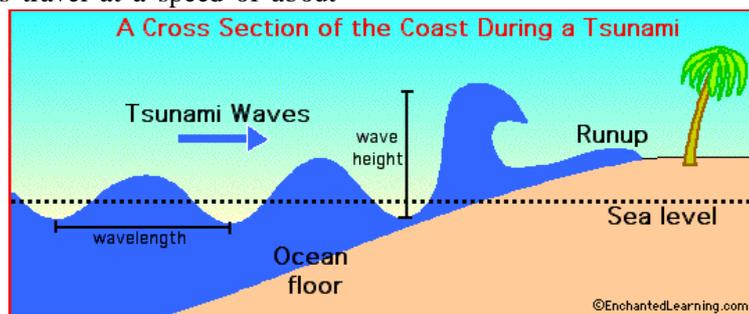
The tsunami of 26 December 2004, causing the death of more than 250 000 people in countries bordering the Indian Ocean, has given rise to wide concern about the absence of Tsunami

Warning System in the Indian Ocean. Since then, countries in the Indian Ocean, including Mauritius, have developed national warning system in their respective countries.

What is a tsunami?

A tsunami is a series of ocean waves caused by the displacement of a large volume of a body of water generated mostly by an underwater earthquake. Landslides, large glaciers and meteorites and other disturbances above or below water all have the potential to generate a tsunami. The waves travel at a speed of about

800 km per hr. unnoticed in the open sea and can hardly be distinguished from other sea swells. When they approach the coast, their height gradually increases and can reach more than 25 m with devastating force, flooding low-lying areas causing death and widespread destruction.



Source: <http://www.enchantedlearning.com/subjects/tsunami/>

Signs of a tsunami approaching

A distinct sign that a tsunami is approaching is the retreat of the sea by almost 100 m followed in about 15 minutes by an invasion of sea water inland. Three to six such events can occur.

A roaring sound can also be heard when a tsunami is approaching.

The Tsunami of 2004

The 2004 Indian Ocean Tsunami was among the deadliest natural disasters in human history with over 250,000 people killed in 14 countries of the Indian Ocean. It was caused by an earthquake of

magnitude 9.3 on the Richter scale off Sumatra, Indonesia, the third largest earth quake ever recorded.



It caused inundation of coastal communities with waves up to 30 metres. It caused the entire planet to vibrate as much as 1 centimetre and triggered other earthquakes as far away as

Alaska. Indonesia was the hardest hit country followed by Sri Lanka, India and Thailand.

Seychelles was the most affected island in the South West India Ocean. The bridge linking the Seychelles international airport with the capital, Victoria was completely destroyed. The sea water surges caused widespread damage to beaches, coastal vegetation, roads, bridges, houses and other infrastructure. Ten people were reported killed. In Mauritius, sea water penetrated up to 100 m inland in the north without much material damage. However, half of Port Mathurin was inundated. Many fishing boats were lost.

Tsunami warning system in Mauritius

The warning system comprises the following stages:

Tsunami Watch. A strong earthquake, generally of the magnitude greater than or equal to 7.0 on the Richter scale has occurred in a region adjacent to the Indian Ocean and the likelihood of a tsunami is possible.

The public, sea-goers and fishermen are advised not to venture out at sea or on the beach, boats to be secured ashore and vessels to proceed off lagoon.

Tsunami Warning. The bulletin is issued when it is confirmed that a destructive tsunami will affect Mauritius / Rodrigues within the next 5-7 hours.

Plan for the evacuation of vulnerable coastal areas is implemented.

Termination. It is issued after information from the Police, Fisheries posts, Environment officials, observations from tide gauges at Port Louis and Port Mathurin confirm that significant tsunami waves are no longer being noted.

More information can be obtained from the Mauritius Meteorological Service website (<http://metservice.intnet.mu/?cat=30>)

ADD's contributions to tsunami awareness

ADD conducted a sensitization campaign in more than 50 primary and secondary schools in mid 2011 in Mauritius. Presentations were also made to the general public in 15 Social Community Centres. In Rodrigues, 6 primary and 4 secondary schools were covered. About 2000 people have been sensitized.

Materials and products prepared include a cartoon strip "*M. Conntou and Ti Malin*", a A2 poster, a sticker and a CD with the secondary presentation and the primary school and general public presentation.