

# [Case study of indian ocean tsunami](https://assignbuster.com/case-study-of-indian-ocean-tsunami-case-study-samples/)

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Case Studyof the Indian Ocean Tsunami On December 26, 2004, the Indian Ocean earthquake, or the Sumatra-Andaman earthquake, caused a tsunami that killed 230, 000 people and was recorded as the deadliest tsunami in known history. The earthquake was recorded as between 9. 1 and 9. 3 on the Richter scale, the second largest earthquake ever recorded. It was also recorded as the longest one, triggering earthquakes as far away as Alaska. Following the disaster, a worldwide effort raised billions of dollars in tsunami relief. Consequences

The initial toll by the U. S. Geological Survey was 283, 100 dead. However, actual figures counted 229, 886. About one-third of the dead are children because they were least able to fight the waters. Additionally, nearly 9, 000 foreign tourists were dead or missing. The disaster affected Indonesia, Sri Lanka, India, Thailand, the Maldives, Somalia, Myanmar, Malaysia, Seychelles and others in South East Asian. In some areas, drinking water supplies and farm fields are contaminated for the long term by the ocean's salt waters.

The United Nations stated that the relief effort will be the costliest in history andreconstructionmay take up to ten years. One of the biggest fears was the spread of diseases, which prompted non-governmental organizations and relief agencies to increase humanitarian aid. Furthermore, the economic impact is devastating on both the national and local levels. Costal fishing communities are some of the poorest in the region, and fishing exports account for substantial earnings of the countries. Nearly two-thirds of the fishing fleet and infrastructure were destroyed.

The earthquake and ensuing tsunami changed the seabed in the Malacca Straits, and new navigational charts would have to be created. Additionally, tourism is greatly impacted as foreigners canceled their trips to South East Asian. The disaster also has a great environmental impact as it inflicted severe damage on ecosystems such as mangroves, coral reefs, forests, coastal wetlands, vegetation, sand dunes and rock formations, animal and plant biodiversity and groundwater. The spread of wastes and industrial chemicals further polluted waters and threaten ecosystems.

The invading seawater also contaminated freshwater, destroying the criticalenvironmenthabitable for coral reefs. Citizen Response The public was generous in donating to tsunami aid. For instance, in the United Kingdom, the public donated nearly US$600, 000, 000. Compared to the government, the donation was quite substantial, averaging around $10 per person, including the homeless and children. Government Response Governments and humanitarian organizations responded by providing sanitation facilities and fresh drinking water to prevent a wave of diseases from increasing the death toll.

The quick response mitigated and contained diseases such as cholera, diphtheria, dysentery, and typhoid that could have inflicted even more damage. Also, there was a substantial movement to bury bodies to prevent the spread of disease. Globally, countries provided over US$3 billion in aid. The government of Australia pledged nearly US$820 million and the United States pledged $950 million. In the US, a joint effort by former Presidents George H. W. Bush and Bill Clinton led the effort to provide private aid to tsunami victims.

The Boxing Day Tsunami of 2004 must go down in human history as one of our greatest ever disasters. A magnitude 9. 0 earthquake, the most powerful to hit anywhere in the last 40 years, created tidal waves in the Indian Ocean that killed at least 225, 000 people in 11 countries. Sri Lanka was hit quite hard, with over 32, 000 dead and approx. 5 percent of the population there left homeless. In Indonesia more than 150, 000 were killed and over 12, 000 lost their lives in India, most in the Andaman and Nicobar Islands. In Thailand there were more than 5, 000 deaths many of whom were foreign tourists.

The devastation to services, property and buildings from the effects of the Tsunami was so immense that international appeals were launched for aid to the victims, of unprecedented proportions. The disaster spawned immediate and renewed scientific interest in Tsunamis from researchers all over the world. How Tsunamis are formed, where they may strike, their likelihood of occurrence of any significance, their characteristics and ways in which their potentially devastating effects may perhaps be mitigated, are questions that many researchers are seeking answers to.

Whilst Tsunamis are not an entirely new phenomena, and a significant amount of scientific literature can be found that addresses many of these questions (Bryant, 2001), it is clear that much still needs to be done to gain a better understanding of Tsunami wave-structure interaction effects on buildings and building elements n a key issue withrespectto structure integrity and survival against the effects of a Tsunami. Indian Ocean Tsunami (26th December 2004) The Indian Ocean tsunami (sometimes called the Boxing Day tsunami in the UK) was caused by a 9. 1 magnitude earthquake.

The earthquake occurred under the Indian Ocean NW of the Indonesian island of Sumatra. The earthquake was at a depth of 30km and caused a huge rupture that triggered waves of up to 30m in height. The giant tsunami affected many countries around the Indian Ocean. The hardest hit was Indonesia, where up to 170, 000 people were killed (exact figures are unknown because many bodies were never recovered). In total about 230, 000 people are believed to have lost their lives, with a further 125, 000 injured and over 1. 5 million displaced (again these figure vary because not all bodies were recovered or injured recorded).

The tsunami killed locals and tourists alike, many tourists were killed because they were on beaches or in hotels nearthe beach. Many local who work in the tourism or fishing industry were also effected. In many fishing villages fatalities were actually higher amongst women, because many men were at sea fishing (if you are out of sea, past where the sea bed shallows, tsunami actually appear as big ripples and will not destroy the boats). The Indian Ocean tsunami triggered one of the biggest humanitarian efforts of all time. Below is a summary of some of the different responses at different scales.