

The Asian Tsunami

The 2004 Indian Ocean earthquake was an undersea megathrust earthquake that occurred at on Sunday 26 December 2004. This earthquake was the third most powerful earthquake recorded since 1900, and the confirmed death toll is just under 200,000 due to the ensuing tsunami ('soo-na-mi', from the Japanese words meaning 'harbour wave'). The hardest-hit and most severely affected countries were India (which was hit between 1 and 2 hours of the earthquake), Indonesia (which was hit within a few minutes of the earthquake), Maldives (which was hit within 4 hours), Sri Lanka (hit within 2 hours) and Thailand (hit within an hour). Malaysia, Myanmar, Kenya, Seychelles, Somalia and the United Republic of Tanzania were also affected.

The tsunami had the greatest impact on rural coastal communities, many of which were already poor and vulnerable and had few livelihood options.

Questions&Answers from sheet

1. Q) Name the Ocean where the Earthquake took place.
A) The Indian Ocean
2. Q) Which Indonesian Island was the closest populated area to the epicentre of the earthquake?
A) Sumatra
3. Q) Approximately 1,700 tourists from 36 countries were killed in the tourist in Phuket. Which country does this area belong to?
A) Thailand
4. Q) Malaysia's coastline lies close to the epicentre, why do you think only 68 people were killed here?
A) Since the epicentre was on the western coast of Sumatra, the island largely shielded the Malaysia from the worst of the tsunami.
5. Q) Which country do the Andaman & Nicobar Islands belong to?
A) India
6. Q) Which continent other than Asia was hit by the Tsunami?
A) Africa
7. Q) Which Island of the coast of India suffered more from the Tsunami than anywhere else apart from Indonesia?
A) Sri Lanka

In some places, the effects of tsunami on LEDC's and MEDC's are equal, but in most cases, the LEDC's are more affected by the waves. As LEDC's have less money to spend, they often face a more severe problem. They do not have an effective warning system or lack of it. Human's response time in MEDC's are faster than in LEDC's due to the preparation of the country.

More people are affected and killed in the LEDC's. Most of the LEDC's are unprepared since they do not have the evacuation plan, rescuing team, and food storage. They rely on the international aid (MEDC's) since the MEDC's have better rescuing team that have experiences. These problems happen because of the lack of money since they have a lot of corruption problems within the countries. The economy of the LEDC's will be more affected than MEDC's because the ratio of the money that is used for reparation is higher. Furthermore, it will take LEDC's a longer time to recover from a disaster like a Tsunami.

The areas hit were poorer parts of the world and in general, out of the countries hit, Somalia was the lowest developed country and Malaysia was the highest. According to the development table (on page 4 of the sheet), these measures tell us that most of the countries affected by the Tsunami, their development was significantly low: Somalia had a GNP of (US) \$600, Birth rate of 42.71, life expectancy of 50.4 and adult literacy of 37.8%. Malaysia had a GNP of (US) \$14,700, birth rate of 21.08, life expectancy of 73.79 and adult literacy of 88.7%. However, compared to a country which was not hit by the Tsunami (an MEDC like USA), the development of the countries hit seems very low. The USA had a GNP of (US) \$47200, Birth rate of 13.83, life expectancy of 78.37 and adult literacy of 99%.

So, in a global context, the areas hit were poorer countries (LEDC's) as they had a poor infrastructure and low development.

As a cruel irony, just a month or so before this disaster struck, nations around the Indian Ocean had agreed that they did not need a warning system. The costs for poor countries for such a system are considerable, and the likelihood of a tsunami is very small. Time has provided cruel hindsight, and now affected nations in the Indian Ocean will be installing a warning system in the region.

Factors which can affect the damage of a Tsunami:

- The buildings
In LEDC countries, such as the ones aforementioned, they have poorly built buildings, few emergency facilities and don't have the equipment necessary to help rescue people. In other words they have poor infrastructure.
- Obviously if they occur near to coasts then Tsunamis can cause a great deal of damage and deaths.
- The area (rural and urban)
Population density also affects the impact of an earthquake. Earthquakes can be a devastating phenomenon when they hit densely populated areas. Their effect can be greatly reduced in more sparsely populated areas, which are mostly the rural areas.
- Distance from the epicentre
The closer to the epicentre, the stronger the earthquake. Therefore earthquakes that have epicentres close to major urban areas tend to cause more problems than those that occur some distance from urban areas.
- Emergency response
Lack of emergency services and poor communication links in Less Economically Developed Countries mean that people are not rescued as quickly, or cared for as well, as they would be in a More Economically Developed Country. Also, in a MEDC, they would have a great deal of trained emergency personnel and equipment to help the injured.
- Time of day
Night time earthquakes can make it more difficult to rescue people immediately after an earthquake. However, there are few people on the street, in public buildings and at work.
- Time of Year
Earthquakes can result in higher fatalities if they occur in times of cold weather.