

Why Less Economically Developing Countries (LEDCs), suffer more from the effects of natural hazards than More Economically Developed countries (MEDCs)

LEDC's suffer more from the effects of natural hazards than MEDC's as they are capable of stopping of the effects that LEDC's cant as MEDC'S have the money, resources and experience while LEDC's don't have much .

LEDC's are **less economically developed countries**

MEDC's are **more economically developed countries**

80% of the world's population live in poor countries. This effectively means LEDC's control only 20% of the world's resources. While 20% of the world's population live in rich countries. MEDC's control 80% of the world's wealth.

LEDC's are poorly developed countries and so when it comes to natural disasters like earthquakes and volcanoes the primary effects happen and so the secondary effects and then the follow up effects happen but with MEDC's you might be able to prevent and prepare the natural disasters, so you stop the primary effects which means there should be no secondary effects and so on. This isn't always the case as MEDC's may be able to prevent some of the primary effects and so might be able to prevent some of the secondary effects. So when it comes to natural disasters **LEDC'S lose people while MEDC's lose money**. MEDC's can predict so then they can plan and then prevent or prevent some of the damage being done and then prepare.

MEDC's have the money so they can predict by internet, phone, radio and etc etc. If you know there is a natural disaster coming up you can invest money to prevent it. If you can prevent it you can prepare it. Later on if you know things could get worse then you can plan for the future. This can't happen in LEDC'S as they have no money or resources.

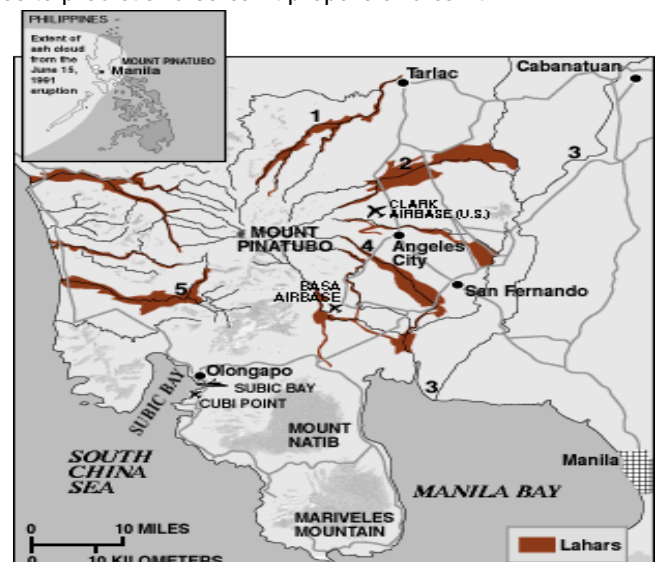
Primary effects can be people dying directly from the disaster. Secondary effects can be people being injured from buildings being collapsed which was caused by the disaster or lahars. Follow on effects can be like buildings being collapsed and ashes on to the rubble which results to a fire or landslides which happened from the disaster then blocking off railways and electricity. In LEDC's most people die of secondary effects as most of the buildings aren't structured well and are not able to withstand earthquakes.

In LEDC's and MEDC's when a natural disaster happens the **outcome is normally different**. If both were going to have an earthquake, the outcome would be different. Like in LEDC's you might get a lot of buildings being collapsed while in a MEDC's you might get the odd building a maybe a bridge being collapsed. This is because MEDC's were able to predict and so were able to prepare and they have the money to invest. Like the buildings had an excellent structure and were able to withstand earthquakes. LEDC's don't have the equipment/resources to predict and so can't prepare and can't do much to help as they don't have enough money. To show this here are a few examples of what the outcomes may be.

An example of a volcano is the eruption of Mount Pinatubo in the Philippines, in 1991. It is on a destructive margin, happens to be between the 'Eurasian' plate and the 'Indo-Austrian' plate in the Philippines.

It is an andesitic, composite volcano, so when it does erupt it will be explosive and so there will be a lot of pyroclastic flow.

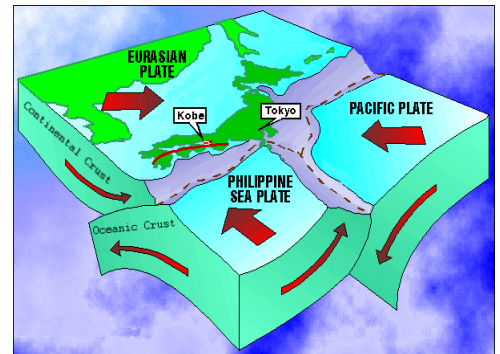
Ray Punongbayan had predicted that the volcano would erupt in the coming months. He knew the Philippines didn't have the money and resources and so he called on the US to help him out. Dave Harlow and team helped out and managed to save millions of people's lives. They didn't get it exactly right but people were out of harms way when it did erupt. This could



have gone totally wrong if Ray didn't predict there was going to be an eruption. The primary effects of eruption would have been straight from the eruption but many people didn't die from it as they were out of harms way. The secondary effects were the lahars, typhoons, buildings being collapsed, As it was situated in a LEDC area not a lot of things happened after the eruption. Still after 2 years people were in refugee tents. People didn't get fresh water straight away and food but if this happened somewhere in America, people would have got supplies straight away and any help they needed. They would have moved somewhere and got on with their lives at least in the next month or so. This shows the difference between LEDC's and MEDC's.

By this you can see that if this was in a MEDC, less people would have died, less building being damaged, supplies being sent straight away and work repairs being done on railways or bridges or whatever was damaged.

Another example of an earthquake is the Kobe in Japan which occurred on 17th January, 1995, at 5:46 am Japan Standard Time. Three plates meet near to the coast of Japan close to Kobe. The oceanic Plate is moving beneath the Eurasian Plate at a rate of about 10 centimeters per year. The Kobe Earthquake happened because of the friction resulting from the two plates colliding. The Earthquake happened only 16 kilometers below the surface. This was in a MEDC area but still had a devastating affect. According to the final estimates, 6,434 people were killed, while 300,000 were left homeless due to this natural disaster. The earthquake gave a major jolt to the Japanese economy. The damage was estimated around \$102.5 billion.



An example of an earthquake is the Kashmir in Pakistan where many people died in 2005. The earthquake happened as the result of the Indian plate gradual movement north to the Eurasian plate at a speed of five centimetres a year. Since there had not been any seismic activity in a long time energy started to accumulate making a giant earthquake.

This was in a LEDC area so they couldn't really do that much. Some people were killed by the primary effects but most were killed by the secondary and follow on effects. Many buildings being collapsed which resulted to crushing people. Landslides were secondary effects but because of that many of the electricity and telephones have been blocked of which is a follow on effect. It is said that 73,000 died. People were digging out the rubble with their own hands looking for family members or friends because there wasn't enough rescue teams to help out.

Roads were blocked because of landslides making it hard for workers to get to the more badly affected areas. Pakistan had very little buildings that were able to withstand earthquakes as big as this one and very little people could afford to have modern earthquake proof buildings. Also many bridges in Kashmir were very old fashioned and collapsed almost instantly.

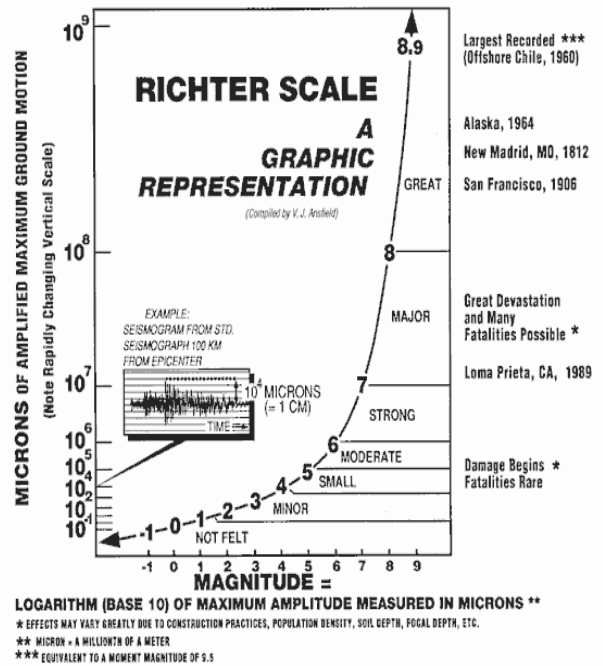
Also as many people's homes were destroyed they weren't able to get anything back as they didn't have money to get insurance but in MEDC's most people have insurance and so they would have got some of their belongings back. They weren't really prepared for the earthquake so in that case they were not able to evacuate people to safety. They won't be able to supply fresh water, food and first aid as they don't have the money. They had to really on other countries or charities to help out.



The Richter scale is used to describe the magnitude scale, or the power of the earthquake.

A recording of 7, for example, indicates a disturbance with ground motion 10 times as large as a recording of 6. Earthquakes measuring just one or two on the scale are very common and can happen every day in places like San Francisco. These earthquakes are so small that people cannot feel them; they can only be picked up by a seismometer.

Earthquakes measuring around seven or eight on the Richter scale can be devastating..



Mercalli Scale	Richter Scale
I. Felt by almost no one.	2.5 Generally not felt, but recorded on seismometer.
II. Felt by very few people.	3.5 Felt by many people.
III. Tremor noticed by many, but they often do not realize it is an earthquake.	
IV. Felt indoors by many. Feels like a truck has struck the building.	
V. Felt by nearly everyone; many people awakened. Swaying trees and poles may be observed.	
VI. Felt by all; many people run outdoors. Furniture moved, slight damage occurs.	4.5 Some local damage may occur.
VII. Everyone runs outdoors. Poorly built structures considerably damaged; slight damage elsewhere.	
VIII. Specially designed structures damaged slightly, others collapse.	6.0 A destructive earthquake.
IX. All buildings considerably damaged, many shift off foundations. Noticeable cracks in ground.	
X. Many structures destroyed. Ground is badly cracked.	7.0 A major earthquake.
XI. Almost all structures fall. Bridges wrecked. Very wide cracks in ground.	8.0 Great earthquakes.
XII. Total destruction. Waves seen on ground.	8.0 and up

The Mercalli Scale gives an indication of the intensity of an earthquake while the Richter Scale refers to its magnitude.

The intensity of an earthquake at a particular locality is a measure of the violence of earth motion produced there by the earthquake. It is determined from reported effects of the tremor on human beings, furniture, buildings and etc.

Unlike the magnitude which has a unique value for a particular earthquake, the intensity of an earthquake at a place depends on the distance of that place from the epicentre, the depth of the focus, the intervening and local earth structures and the type of fault motion that caused the earthquake.

To conclude, having showed the evidence to say that LEDC's suffer more from the effects of natural hazards than MEDC's, LEDC's are less capable of doing things in all areas. LEDC's don't have the money or resources and so can't predict or prepare or prevent and plan for the future. It shows that LEDC, 80% of the world population use only 20% of the world's resources. As they don't have money they can't help the economy after the natural disasters, so every time a natural disaster happens in the same place it will get worse and worse. Even though LEDC don't have things like undergrounds and buses they are not able to repair the damage done and carry on with their lives in the next few months. In MEDC's stuff like undergrounds would have been repaired and help to the people who have lost their homes. To end LEDC's will always suffer more from the effects of natural hazards than MEDC's .

By Daniel Chen