

<b>Human Factors<sup>1</sup></b>	<b>Physical Factors<sup>1</sup></b>
<ul style="list-style-type: none"> <li>- Haiti is one of the poorest countries in the world, with high levels of infant mortality and HIV/AIDS</li> <li>- The county is extremely poor and many peoples income is reliant on remittances sent from abroad (32% of GDP in 2008)</li> <li>- Deforestation in the country is high due to it being used to obtain charcoal (the main fuel source of the poor). This as a result means that landslides occur more easily.</li> </ul>	<ul style="list-style-type: none"> <li>- Haiti is located among a complex set of plate margins. It can be affected by the movement of a convergent plate boundary, however if more affected by two conservative strike-slip faults on the island</li> </ul>

<b>TECTONIC HAZARDS</b>
<p><b>Explore:</b> how the effective management of hazards is dependent on a range of factors.</p> <p><b>Research:</b> the management of a range of hazardous events in both developed and developing countries.</p>
<p><b>CASE STUDY: Haiti Earthquake 2010</b>            Level of economic development: (Low income, developing country)</p> <p>GDP US\$: \$8.765 billion            GDP US\$ per capita: \$818.343            HDI: 0.493            Population: 10,711,067            Source: World Bank Data</p>

<b>Background Information<sup>1</sup></b>
<ul style="list-style-type: none"> <li>- On the 12th January 2010 an earthquake measuring 7 on the Richter scale struck Haiti</li> <li>- The earthquake killed over 200,000 people</li> <li>- The cause of the earthquake was the movement of the Enriquillo-Plantain Garden fault system in the south of the country. It causes land movement of 1.8 metres and destroyed 60% of the capital Port au Prince.</li> <li>- Th epicentre as located south west of the capital on the peninsula and affected several other towns.</li> </ul>

<b>Factors influencing the management of this hazardous event</b>				
<i>Link to Model</i>	<i>BEFORE (modify human vulnerability, modify the event, modify the loss)</i>	<i>DURING (modify the loss)</i>		<i>AFTER (modify the event, modify human vulnerability, modify loss)</i>
Parks (1991)  Disaster Management Cycle (Warfield, 2008)  Expand-Contract Model	<p><i>Pre-Disaster<sup>1</sup></i></p> <p>Haiti was not prepared at all for the impacts of a devastating earthquake due to the fact that they have poor infrastructure and health services.</p> <p>Furthermore the country has very poor governance meaning that no coherent emergency plan was in place for such an event. Additionally many people in the country are so poor that they are living in slums on marginal, unsafe land. Those that did live in houses were not protected though as poor building codes meant that very few homes were earthquake resistant.</p>	<p><i>Relief<sup>1</sup></i></p> <p>The Dominican Republic, a neighbouring country to Haiti was the first to send aid in the form of water, food and heavy lifting machinery. The Dominican Republic also permitted the crossing of the border in order to receive treatment from their hospitals.</p> <p>The relief effort in Haiti though was very difficult and hampered by eh fact that only part of the airport as operational and the ports had be damaged. This meant that supplies by plane and ship struggled to reach the country for many months.</p>	<p><i>Rehabilitation<sup>1</sup></i></p> <p>Due to the fact that Haiti had no emergency plan in place and the UN lost 100 personnel in the earthquake it meant that it was many weeks before a coordinated plan was in place amongst all the NGOs helping after the disaster.</p>	<p><i>Reconstruction<sup>1</sup></i></p> <p>By July 2010 98% of the rubble in Haiti remained uncleared, with 1.6 million still living in relief camps.</p> <p>Some of the aid money sent to Haiti was used in order to pay engineers to assess the buildings that hadn't collapsed in the capital Port au Prince. Each building was traffic lighted, determining whether it needed to be demolished, repaired or was completely safe.</p> <p>The World Bank helped the country by wiping off half of its debt and giving the country 5 years before it had to begin repaying the remaining half. The World bank also helped in community driven projects where local communities rebuilt homes to building codes with earthquake resistance. However this only happened in a small number of areas to make a large impact.</p>
DRE Disaster Risk Equation  Degg Model, (1992)	<p><i>Frequency/magnitude of the hazard<sup>2</sup></i></p> <p>Haiti is classed as a multi-hazed hotpot. In 2008 in just one month it was hit by four tropical storms. However earthquakes in the region are rare with a magnitude 8.1 earthquake in the Dominican Republic in 1946, with the last major earthquake in Haiti of magnitude 7.7 hitting in 1942.</p>	<p><i>Level of vulnerability<sup>1</sup></i></p> <p>Haiti is an extremely vulnerable country. Some reasons as to why it is so vulnerable are shown below:</p> <ul style="list-style-type: none"> <li>- There is poor governance at national and local level meaning that there was not preparedness to such an large disaster</li> <li>- It is the poorest country in the western hemisphere with 70% living on less than \$2 a day</li> <li>- 86% of people in Port au Prince live in slum conditions, meaning that their weak, poorly built shelter just collapsed during the earthquake</li> <li>- Many homes had no earthquake resistance due to poor building codes</li> </ul>		<p><i>Capacity of the population to cope<sup>1</sup></i></p> <p>The capacity to cope of the population is due to the following reasons:</p> <ul style="list-style-type: none"> <li>- There was/is a lack of public awareness and education as to what to do in the event on an earthquake</li> <li>- The country is so poor that there was/is a lack of a coherent emergency disaster plan</li> <li>- Haiti was already recovering from the impact of Tropical Storm Jeanne in 2004, as well as four hurricanes that struck the country in 2008.</li> </ul>

<sup>1</sup> Garrington, Sally, 2012, *The Haiti Earthquake 2010 - A study of vulnerability*

<sup>2</sup> Dunn, Cameron, 2010, *The Haiti earthquake 12 January 2010, PowerPoint Presentation*

