

Human Factors	Physical Factors
<ul style="list-style-type: none"> - Nepal is an extremely poor country and therefore cannot afford to build earthquake resistance homes - Poor leadership in the country means they have poor preparedness 	<ul style="list-style-type: none"> - Nepal is the 11th most earthquake prone country in the world - Nepal lies on a convergent plate boundary where the Indian plate is being subjected beneath the overriding Eurasian Plate. - The area is very mountainous with the Himalayas making landslides a secondary hazard. - Terrain makes the reliefs efforts harder, especially remote, isolated locations

TECTONIC HAZARDS

Explore: how the effective management of hazards is dependent on a range of factors.

Research: the management of a range of hazardous events in both developed and developing countries.

CASE STUDY: April 2015 Nepal Earthquake

Level of economic development: (Low income, developing country)

GDP US\$: \$21.195 billion
 GDP US\$ per capita: \$743.323
 HDI: 0.558
 Population: 28,513,700
 Source: World Bank Data

Background Information

- A magnitude 7.8 earthquake struck on the 25th April 2015
- The earthquake occurred at a depth of 15km, and was 80km northwest of Kathmandu.
- The Kathmandu valley was raised by 1m and the Kathmandu itself was raised by 80cm

Factors influencing the management of this hazardous event				
Link to Model	BEFORE (modify human vulnerability, modify the event, modify the loss)	DURING (modify the loss)		AFTER (modify the event, modify human vulnerability, modify loss)
Parks (1991) Disaster Management Cycle (Warfield, 2008) Expand-Contract Model	<p><i>Pre-Disaster¹</i></p> <p>¹Despite the earthquake having a high magnitude, only 9,000 people were killed with 23,00 injured. This indicates that the buildings were sturdier than expected.</p> <p>²In order to modify the event many hospitals in Nepal were retrofitted with seismic belts and roof bracings. This prevented collapse in the earthquake and meant that they could continue to provide healthcare after the quake.</p>	<p><i>Relief¹</i></p> <ul style="list-style-type: none"> - After the earthquake the immediate response came from people in damaged areas helping to remove people from the rubble. - 125,000 ex-servicemen from the Gorkha regiments army were recalled from rescue operations - The government made an international relief appeal and release 500 Nepal rupees for relief. - Specialist teams with health kits were deployed with help from the WHO, as well as food to remote areas - The relief efforts were majorly hampered by landslides from the earthquake as well as bad weather making remote villages inaccessible. 	<p><i>Rehabilitation¹</i></p>	<p><i>Reconstruction¹</i></p> <ul style="list-style-type: none"> - One of the main aims for Nepal is to build resilience in its economy and governance so that the vulnerability in the country is removed <p>In order for Nepal to be better protected there are three main things that need to be embedded in their reconstruction:</p> <ul style="list-style-type: none"> - the development a better, more extensive seismic network as well as landslide mapping tools - Enforcement of building codes so that buildings are more resilient to ground shaking. This links to educating people better about how to build earthquake proof homes - Greater control by the government of the buildings, especially on marginal land and unsafe land areas. <p>Finally Nepal needs to adopt a 'Build Back Better' strategy so that the new buildings built are more resistant to earthquakes</p>
DRE Disaster Risk Equation Degg Model, (1992)	<p><i>Frequency/magnitude of the hazard¹</i></p> <p>Nepal is the 11th most earthquake prone country in the world so therefore is used to frequent earthquakes.</p>	<p><i>Level of vulnerability¹</i></p> <p>Many people living in Nepal are living in poverty meaning that they have little funds to help protect themselves during an earthquake.</p> <p>There is also gender inequality in the country. As males move out of the country it leaves women to shoulder responsibility. The inequality though means that they are not educated enough to do so.</p>		<p><i>Capacity of the population to cope¹</i></p> <p>The population of Nepal has poor capacity to cope as they have little preparedness strategies in place in order to respond to a major disaster</p> <p>Nepal also have poor governance meaning that in the event of a disaster the country is not equip to deal with the disaster.</p>

¹ Milton, Debbie, 2015, Nepal "Gorkha earthquake, 25th April 2015

² (no author given) 2015, un.org, Nepal's emergency preparedness saved lives in earthquake aftermath – UN health agency

