Earthquake Case Study (Haiti – LEDC/ LIC)

Location

Haiti is a small island located in the Caribbean, South East of the USA and East of Cuba. Its capital city is Port-au-Prince.

Haiti's vulnerability on the Caribbean tectonic plate



Causes

The earthquake was caused by the North American Plate sliding past the Caribbean Plate at a conservative plate margin. Both plates move in the same direction, but one moves faster than the other. The pressure that was built up because of the friction between the 2 plates was eventually released causing a magnitude 7 earthquake on the Richter Scale with an epicentre 16 miles West of Port-au-Prince and a shallow focus of 5 miles. The earthquake struck at 16:53 (4:53pm) local time on Tuesday 12 January 2010.

Effects



Primary (caused directly by the earthquake)	Secondary (result from primary effects)
316,000 people were killed and 1 million people were made homeless. 3 million people were affected by the earthquake	1 in 5 people lost their jobs because so many buildings were destroyed. Haiti's largest industry, clothing was one of the worst affected
250,000 homes and 30,000 other buildings, including the President's Palace and 60% of government buildings, were either destroyed or badly damaged	The large number of deaths meant that hospitals and morgues became full and bodies then had to be piled up on the streets
Transport and communication links were also badly damaged by the earthquake	The large number of bodies meant that diseases, especially cholera, became a serious problem
Hospitals (50+) and schools (1,300+) were badly damaged, as was the airport's control tower	It was difficult getting aid into the area because of issues at the airport and generally poor management of the situation
The main prison was destroyed and 4,000 inmates escaped	People were squashed into shanty towns or onto the streets because their homes had been destroyed leading to poor sanitation and health, and looting became a real problem

Development in Haiti

Development Indicator	Value
GDP per capita (average income)	\$1,200 per person each year
People living in poverty	80% of people live on \$2 or less per day
Life expectancy	62 years old
People per doctor	0.25 doctors per 1,000 people
Adult literacy rate	53% over 15 years old can read/write
Access to clean water	46% of people have access to clean water

- In 2010 Haiti ranked 145 out of 185 countries on the Human Development Index (HDI)
- . . . By 2014 this had dropped to 168



Image courtesy of Wikipedia Short Term	Long Term
\$100 million in aid given by the USA and \$330 million by the European Union	98% of the rubble on the roads hadn't been cleared restricting aid access
810,000 people placed in aid camps	1 million people still without houses after 1 year so still have to live in aid camps
115,000 tents and 1,000,000+ tarpaulin shelters provided	Support for people without jobs, which equates to nearly 70% of the population, through cash/food-for-work projects
Healthcare supplies provided to limit disease	Temporary schools created and new teachers trainee
Lack of immediate aid through poor planning, management and access meant that people had to try and rescue each other	Water and sanitation eventually supplied fo 1.7 million people
4.3 million people provided with food rations in the weeks following the earthquake	
Many countries responded to appeals for aid, pleateams, engineers and support personnel. Communifacilities, hospitals, and electrical networks had be rescue and aid efforts. There was much confusion problems with flights further complicated early re	nication systems, air, land, and sea transport een damaged by the earthquake, which slowed over who was in charge, air traffic congestion, a
	dies having to be buried in mass graves. As rescu

tailed off, supplies, medical care and sanitation became priorities. Delays in aid distribution led to angry appeals from aid workers and survivors, and looting and outbreaks of violence were observed.



Management after the quake.

The US raised \$48million to help Haiti recover after the earthquake. The EU gave \$330 million and the World Bank waived the countries debt repayments for 5 years. The Senegalese offered land in Senegal to any Haitians who wanted it! 6 months after the quake, 98% of the rubble remained not cleared, some still blocking vital access roads. The number of people in relief camps of tents and tarps since the quake was 1.6 million, and almost no transitional housing had been built. Most of the camps had no electricity, running water, or sewage disposal, and the tents were beginning to fall apart. Crime in the camps was widespread, especially against women and girls. Between 23 major charities, \$1.1 billion had been collected for Haiti for relief efforts, but only two percent of the money had been released One year after the earthquake 1 million people remained displaced, 6 months after the quake 98% of the rubble was still where it fell. These have grave consequences for the long term development of Haïti.

Aid

The Dominican Republic which neighbours Haiti offered support and accepted some refugees. Medicin San frontiers, a charity, tried to help casualties whilst the USA took charge of trying to coordinate Aid distribution. In Februrary, many pop stars came together to record 'We are the World 25' to release as a charity record for the Haiti relief fund, which raised approx. \$8million for the refief effort.

