

Instructions: Read the documents below and answer the following questions:

- How long does an earthquake last?
- What are the consequences of an earthquake?
- What are the major dangers for the population?

MONTHLY REPORT

EMERGENCY IN HAITI

Haiti devastated by an earthquake



On January 12th, an earthquake shook Haiti, one of the world's poorest countries.

On January 12th, the earth shook violently at Port-au-Prince, the capital city of one of the world's poorest countries. This country is located in the west of the island of Hispaniola in the Caribbean Sea (between South and North America).

The magnitude (strength of this earthquake was measured at 7.3 on a scale called the Richter scale which is graduated from 1 to 9). When there is an earthquake, the shocks are felt strongest at the epicentre (the place located above the point the earthquake started). In Haiti, the epicentre was located 15 km from the capital, Port-au-Prince.

One third of the city's buildings collapsed after the earthquake. Other Haitian towns were affected. About 90% of the buildings in Léogâne (a city located 30 km southwest of Port-au-Prince) were destroyed. Estimates for the number of casualties range from 170,000 to 200,000 killed and more than



250,000 injured. As everything is in ruins, more than one and a half million people are homeless.

A TERRIBLE CATASTROPHE

- The Haitian cities most affected by the earthquake of January 12th are the capital Port-au-Prince, Jacmel and Léogâne.
- Experts estimate that up to 75% of the capital will have to be rebuilt.
- Hundreds of thousands of Haitians were killed or wounded following the earthquake (see article opposite). In total, 113 people were extricated still alive from the ruins by foreign rescue teams.
- Since January 12th, Port-au-Prince has experienced about 50 aftershocks (weaker earthquakes) within the space of two weeks. These aftershocks are difficult for the population to endure.



paru le : Vendredi 1 Avril 2005
journaliste : Y. Pigenet
expert : E. Jeanvoine

Earthquake – resistant buildings

During an earthquake, it is mainly the collapse of buildings which causes the most victims. By understanding the behaviour of buildings during an earthquake we learn how to construct edifices which do not collapse – a task being carried out since 1968 by the Mechanical Seismic Studies Laboratory (CEA Saclay).

On October 17th 1989, California suffered the effects of an earthquake of a magnitude equivalent to that recorded in Armenia a year before. However, the consequences of the two catastrophes were different. There were actually 72 fatalities in California as against more than 25,000 in Armenia. The generalisation of paraseismic buildings in San Francisco and their quasi-absence in Armenia largely explain this considerable difference in human death tolls.