

PROGRESSION OF VULNERABILITY →

**PRESSURE AND RELEASE MODEL OF DISASTERS
HAITI EARTHQUAKE**

ROOT CAUSES (V1)

Poverty, 80% living below poverty line

High death rate due to AIDS, malaria

Lack of basic health care

75% of households lack running water

Adult literacy low, men 54%, women 50%

Slums in capital city

Densely populated

IDEOLOGIES

Corrupt political system

Struggle for political power

Many coups

Political violence

**DYNAMIC (V2)
PRESSURES**

LACK OF

Seismograph stations

Earthquake resistant structures

Disaster management systems

Social support systems

Effective education system

MACRO FORCES

Desertification

Deforestation

Large population Migration

Large debt repayments

Money borrowed from US, German and French banks

**UNSAFE (V3)
CONDITIONS**

FRAGILE PHYSICAL ENVIRONMENT

Poor construction practices

Deforestation and desertification

Flooding devastation in 2008

Overcultivation

Soft sediment amplifies the seismic waves

FRAGILE LOCAL ECONOMY

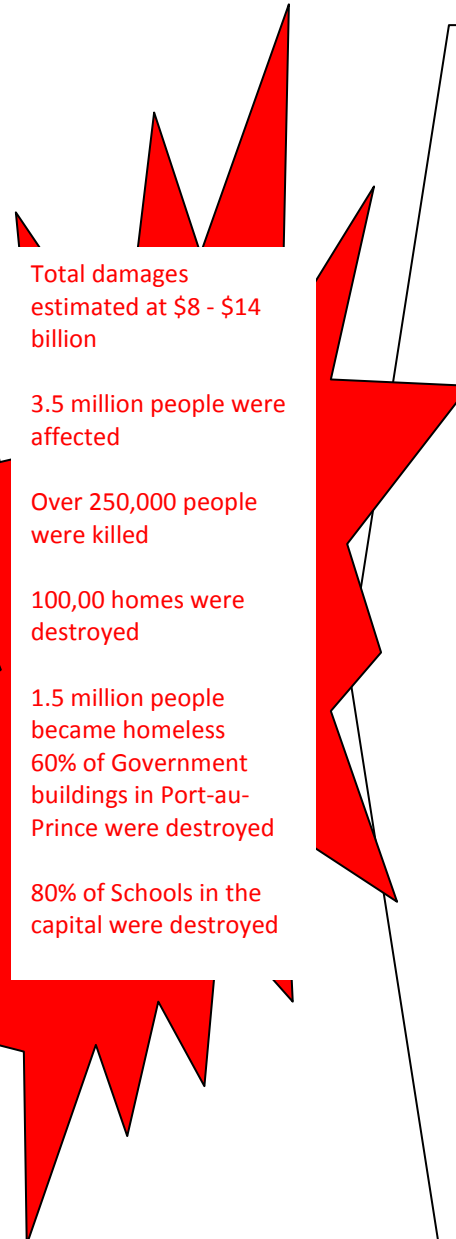
Haiti is the poorest country (Human Development Index)

GDP per capita only \$1300

Low income levels

Government budget is made up of 30-40% foreign aid

DISASTER



HAZARD

Earthquake measures 7.0 magnitude on the Richter scale

Focus very close to the surface, 6.2 miles, not much energy lost before waves reach epicentre

Shaking lasts for 30-40 seconds

After shocks followed periodically, averaging 4-5 in magnitude