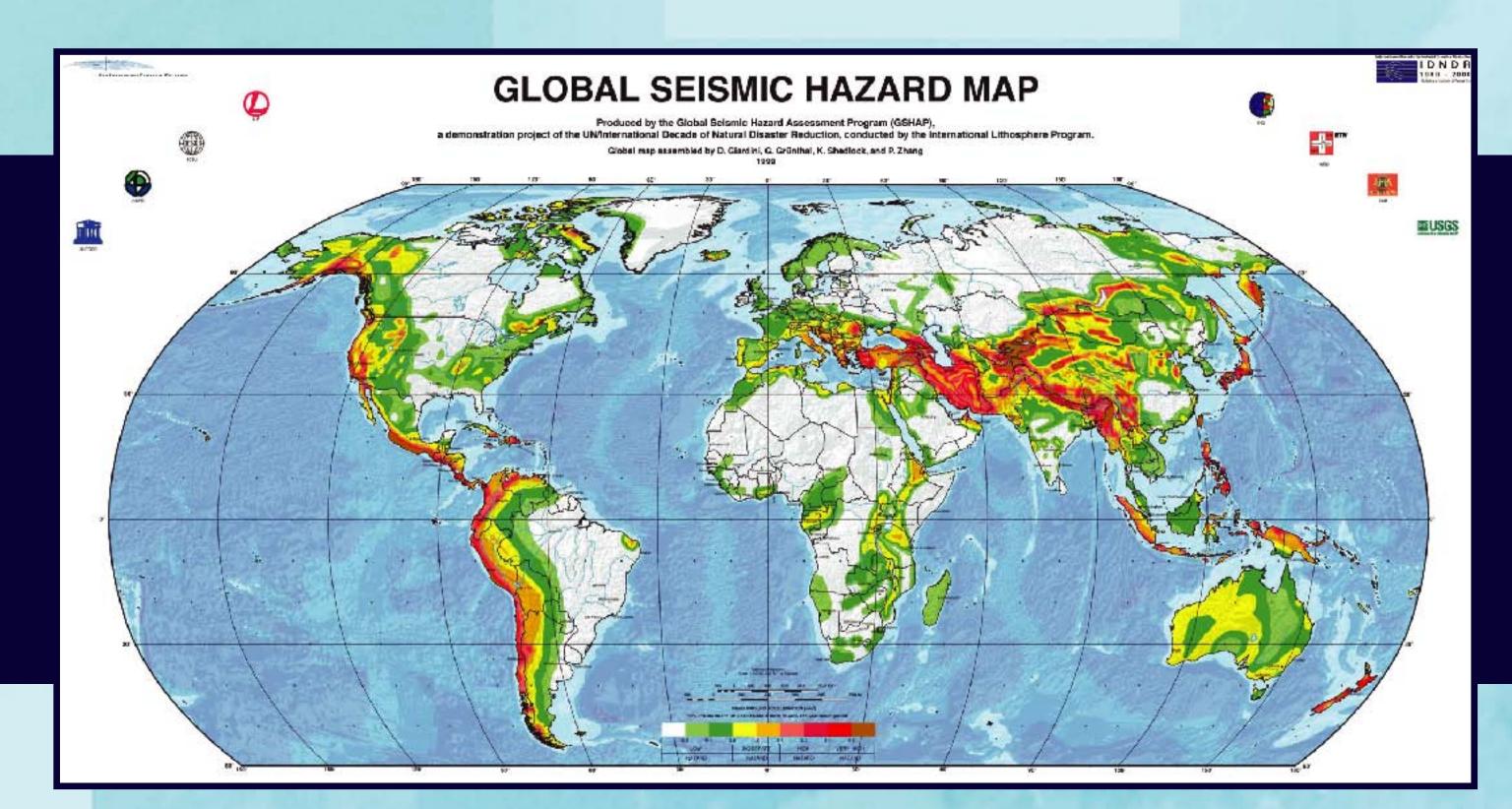
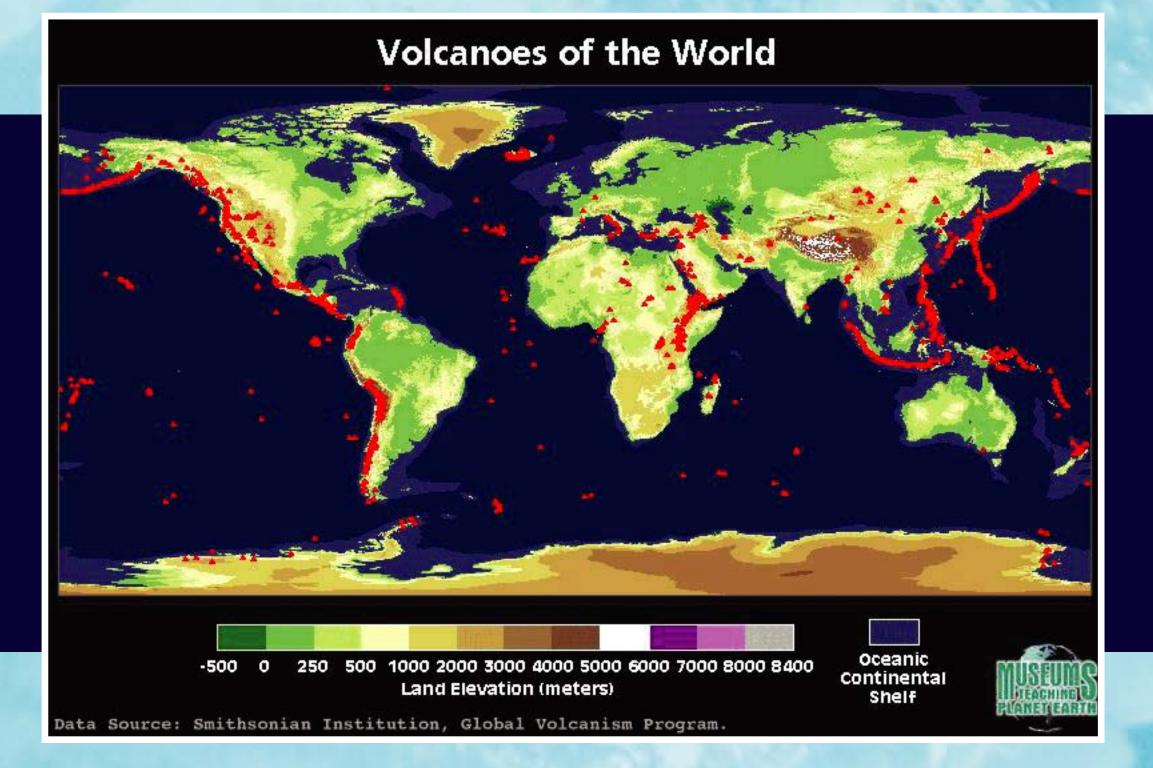
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The earthquakes are unpredictable phenomena, however, there are methods to estimate the probability that such events may occur in a particular area. Additionally, scientific research has developed a series of tools based on historical data.

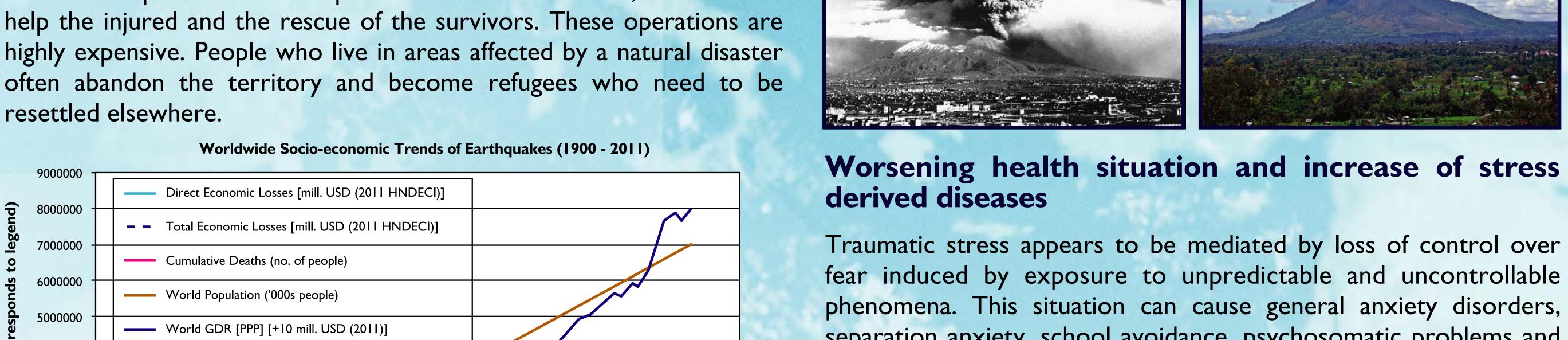




Disastrous events caused by earthquakes and volcanic eruptions affect the areas hit with long term effects, disrupt economies and change the landform. Depending on modern life such disasters cost much more than in past in human losses and economic resources.

# Main social and economic effects caused by natural disasters

Volcanic eruptions and earthquakes cause human losses, the need to help the injured and the rescue of the survivors. These operations are highly expensive. People who live in areas affected by a natural disaster often abandon the territory and become refugees who need to be



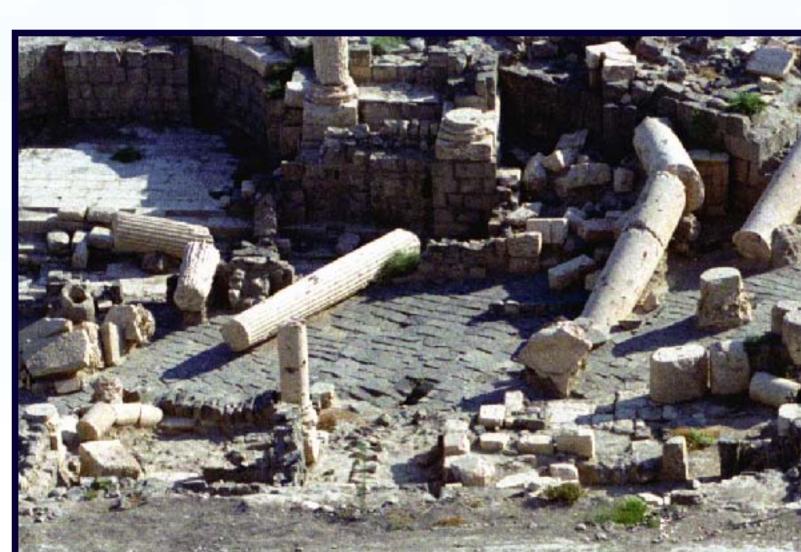
1000000 Year CATDAT Damaging Earthquake Yearly Total Economic Losses (2011 HNDECI Adjusted) 700000 600000 500000 400000 300000 200000

# Population burden after natural disaster

4000000

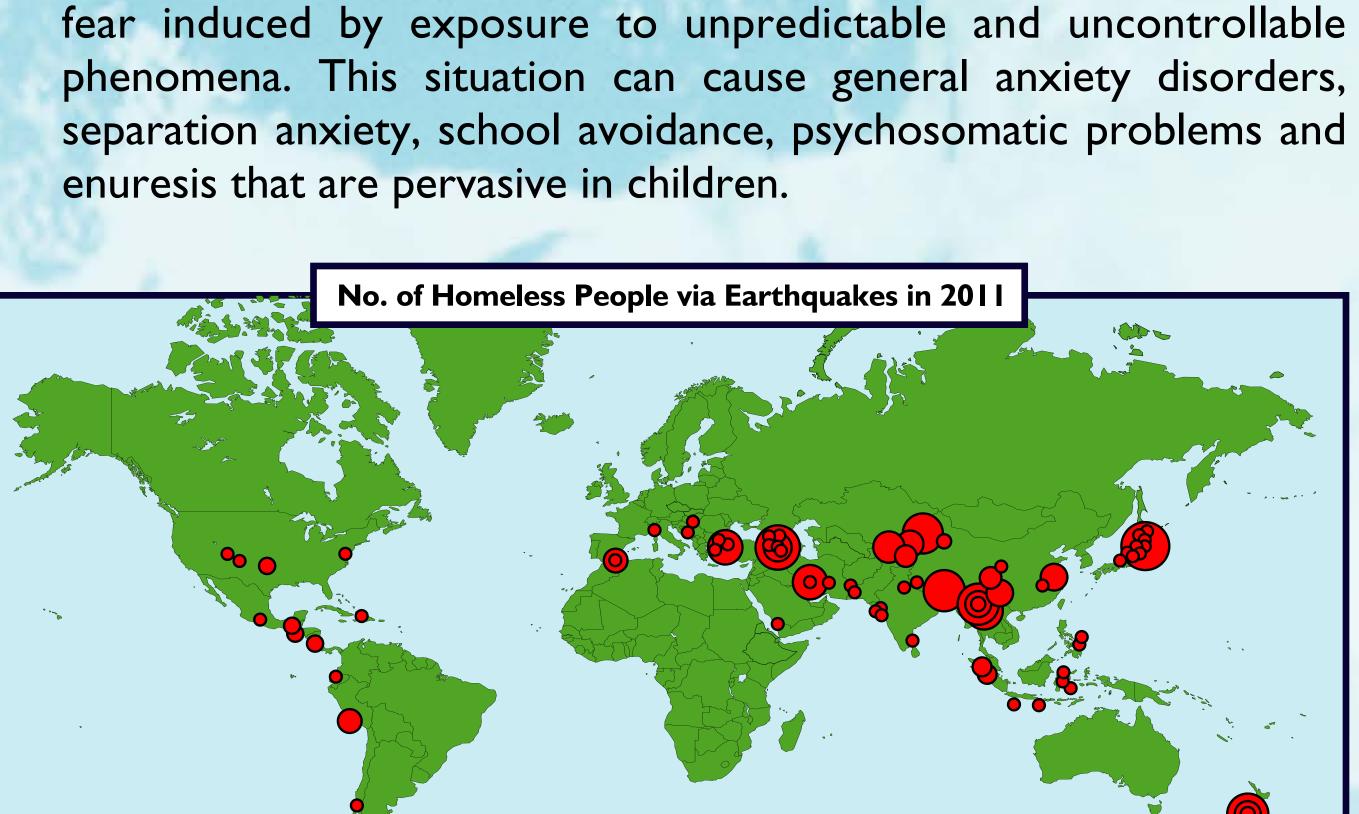
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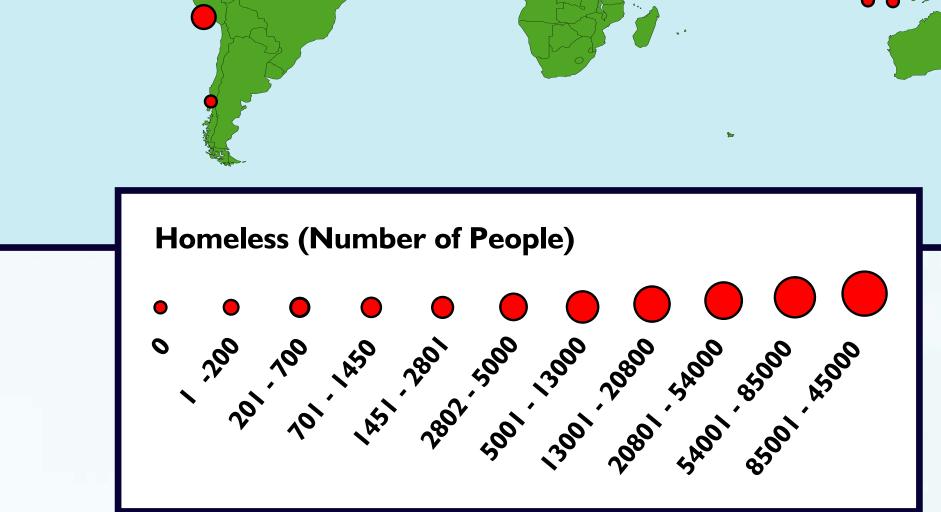
Natural disasters cause immediate effects and moreover they affect the poorest sections of the population who find it more difficult to recover. Women are the most affected especially at the developing or third countries; when they do not lose their lives they are the ones who have to carry the burden of the aftermath: changes in the ecosystem forces them to add further work to an already heavy situation in order to find water and food for their families. In the last 20 years, 90% of victims of natural disasters live in Africa and Asia.



### Effects in past and modern times

The last French destructive earthquake which claimed many lives, took place in southeastern France in 1909 with magnitude at about 6 Richter. This earthquake killed 46 and hurt 250 people, and have let important material damage. A French government report reveals that if this earthquake would have happened in 1982, the effects would have been 10 times more serious because this area is now more crowded than at the beginning of the XXth century.





## Loss of dwellings, infrastructure and historical buildings

One of the main consequences is the loss of homes and the need to rebuild them. As well as being a considerable expense for governments by diverting resources from other activities, it also implies the closing down of economic activities and the deserting of whole areas.

Additionally, the loss of cultural heritage causes the disruption of the identity of a social group. Under an economic point of view, the loss of works of art represents a serious damage to tourism and economy in general.



