

# Natural disaster risk assessment and risk management

[Business](#), [Risk Management](#)



Disasters have occurred in the world over for many years. They have occurred both in MDCs and LDCs. These disasters have either been caused by human forces or natural forces or interaction of both natural and human forces. When they occur they cause serious challenges and consequences to the economies of affected areas or countries. It's estimated that the world loses over 750 billion dollars annually as a result of disaster. In most cases, the phenomenon that triggers disasters is beyond human control. In general the losses that causes natural disasters are largely a function of human factors which are human decisions, human actions and human choices or sometimes lack of these.

Before I go into specifying a specific human disaster threat, it is important to exactly know what a disaster is or what it means. A disaster means misfortunes or calamities. It can also be termed as an incident of great harm and distress. It's a serious disruption of functions of society causing widespread human, material or environmental losses that exceed the ability of the affected society to cope using its own resources.

In this case, I am going to specifically dwell on earthquake as a natural disaster and its threats. Earthquake is a tremor caused by the disturbance of the earth surface. When it happens it causes great destruction economically, socially and even psychologically to the people living around. Because earthquakes are natural disasters, human have no control over them and this can explain why naturally occurring disasters have serious impact on human society. They only leave human beings with the option of reducing their impacts when they occur.

As I have mentioned before, disaster is a result of human force, natural force or a combination of both; management for these disasters have been put in place. Disaster management simply is a body of policy and administrative decisions and operational activities which pertain to various stages of a disaster at all levels. So disaster management body has to come up with personnel and facilities dealing with earthquakes. The personnel includes both the administrative, individuals and community actions who try to minimize loss of lives or/and damage of facilities. This they do through disaster preparedness includes efforts for effective rescue of people involved in the earthquake disaster, relief and also rehabilitation and reconstruction of destroyed materials like buildings.

The administration, individuals and community also engage in disaster mitigation which encompasses all measures to reduce the impact the earthquake disaster phenomenon by improving the community's ability to withstand the impact of the earthquake. This they do through the prevention, preparedness and real response of earthquake disaster during or after which includes relief, rehabilitation and reconstruction.

Earthquake disaster will definitely leave behind vulnerable people who are prone to it again in case it occurs again. To be vulnerable is to live with a likelihood that one will suffer from hazardous events. In the society, some people are more vulnerable than others.

The nearness to hazardous places the more the consequence one will face. Earlier, earthquake disasters have established that natural hazards are a

cause of vulnerability to disasters. People who live or work in certain areas are prone to disasters that may occur to such areas. This means that humans living or working in certain areas make themselves vulnerable to earthquakes disaster, for example if they live in areas of volcanic activities then they are prone to earthquakes or earth movements respectively.

Vulnerability is simply reduced to zero by people not living in affected areas.

Scientists, technologists and engineers have attempted to predict hazardous events and development of technologies that can enable human structures to withstand earthquakes. The assumption has been that events are acts of nature that cannot be prevented but rather there are possibilities of reducing their consequences. As a result of this, technologies and materials for building and construction for example have been developed so that they can withstand earthquakes or earth movements.

In spite of many games in the scientific and technological process to control vulnerability to earthquake disasters people continue to be injured, die and loss of property. One reason for this is because many earthquake disasters predictions and other mitigativetechnologyare costly and individuals and communities are either unwilling or unable to afford them. The costs tend to set criteria for deciding on what mitigation methods to use under various circumstances. So according to this view, although vulnerability is a cost, vulnerability reduction is itself costly.

As I mentioned before, disaster does not choose specific people and the nearer one gets to it or lives near it the more vulnerable he or she becomes.

Earthquakes disasters do not choose the poor or the rich but it affects anyone or everyone. So earthquake or earth movement disasters impose a varied number of consequences on the humans, animals, physical and environmental aspects. These consequences can be in view of the time period of a disaster that is either short term, mid term or long term.

To UNECLAC, effects of disasters are short term consequences of disaster that comprise of direct damage,, indirect damages and secondary effect. Impacts comprise of economic, social, psychological and environmental impacts. These are mainly long term consequences of disasters. The worst case scenario that determines the degree of risk is whereby disaster occurs because people who are vulnerable simply do not know when the disaster may occur, what protection measures to take and these coupled with negative attitudes towards use of certain measures.

This increases human suffering from disastrous situation. A good example here is a case where by simple earth tremors or movements occur frequently leaving people with a normal assumption that such have been happening and that have never had effect on them. This will definitely make everyone to take such scenarios for granted not knowing that one day the tremor can turn out to be an earthquake. When it turns to be earthquake, it will find everyone unaware and hence will end up affecting the majority.

The fact that disaster can happen anywhere and anytime, everyone should be prepared. Earthquakes disasters are categorized as either simple, Meagre or complex. What one society can look at as a simple earthquake disaster

can be perceived as complex earthquake disaster by another society. Some disasters are also seen as rapid while others seen as slow.

I may say that most earthquakes disasters can be considered as initially slow or creeping because mostly they begin as earth movement or tremors before ending up as earthquakes which are considered to being rapid. Earthquakes are as a result of natural forces or an interaction of human and natural hence they are beyond human control thus the society should be prepared on how they can be mitigated however much costly it may be.

People should also be prepared because of the damages the earth quakes cause whether partial or complete destructions of physical infrastructure like buildings, people, communication networks, machineries, etc. They can be indirect damages that the damage to the flow of goods and services that can neither be produced nor distributed when a disaster occurs. Indirect damages are of four folds namely; increased population costs, increased damages, loss of corporate incomes and unexpected expenditures.

In conclusion, earthquake disasters neither belong to the rich or poor but to everyone. This means it can affect everyone as long as one lives on the earth's surface.

## References

- [www. redcross. com](http://www.redcross.com)