NATURAL HAZARDS AND DISASTERS IN SRI LANKA

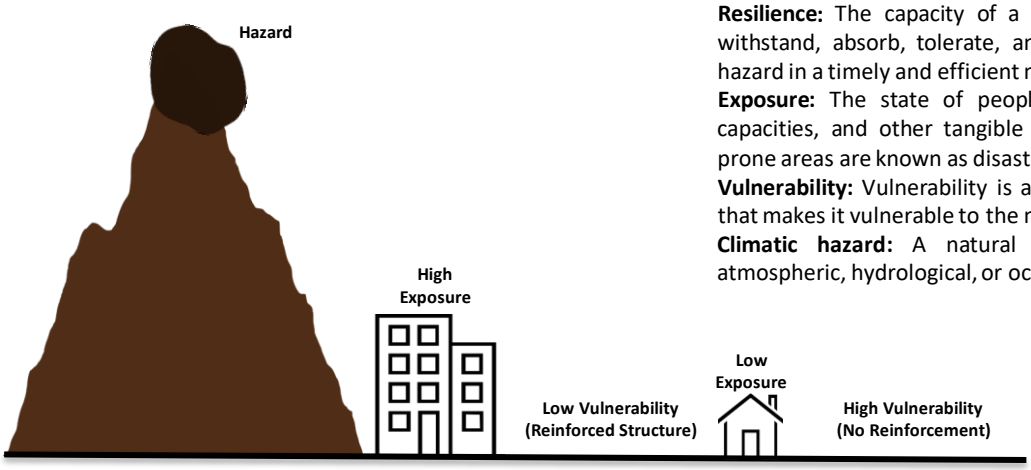
British High Commission Colombo

Disaster Services

What is this factsheet?

- *Terminology and description of Hazard disaster*
- *Types of disasters*
- *Climatic hazards and it's spatial variability*
- *How we van use climatic seasonality and spatial variability can be use to interpret hazard seasonality and spatial variability*
- *Introduction to disaster risk management*

"A disaster occurs when vulnerable people, environment and properties are exposed to a hazard."



Graphical representation of Hazard, Vulnerability, Exposure and Disaster

True or False

- Are hazards and disasters same?
- Are the rich less vulnerable?
- Can vulnerability be man made?
- Can disasters be minimized?
- In Sri Lanka are most of disasters natural?
- In Sri Lanka are most disasters related to climate?

Terminology

Disaster: A accident, mishap, calamity, or grave event that causes significant loss of life or human sufferers, property damage and destruction, or environmental damage.
Hazard: An occurrence that has the potential to result in death, injury, or other negative health consequences, as well as property harm, social and economic disruption, and environmental degradation.
Resilience: The capacity of a device, population, or society to withstand, absorb, tolerate, and recover from the impact of a hazard in a timely and efficient manner is referred to as resilience.
Exposure: The state of people, facilities, housing, production capacities, and other tangible human assets located in hazard-prone areas are known as disaster exposure.
Vulnerability: Vulnerability is a property of a device or an asset that makes it vulnerable to the negative consequences of a threat.
Climatic hazard: A natural hazard that is caused by an atmospheric, hydrological, or oceanographic phenomenon.

Man-Made and Natural Disasters

Man-made disasters: caused by acts of man.
Arson, Riots, Chemical explosions
Natural disasters: result from natural processes.
Cyclone, Landslides, Floods

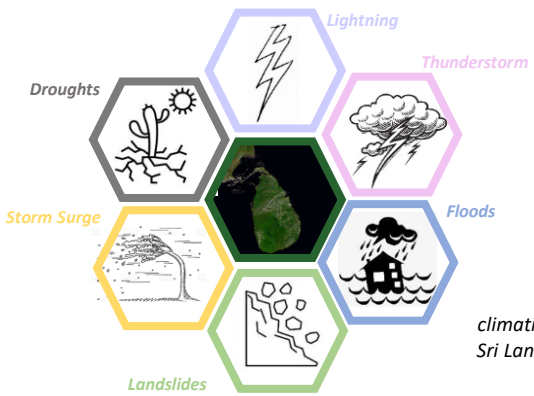
Every natural hazard need not to be a disaster. The impact of natural hazards can be reduced or enhanced by human.
There are three types of Natural hazards,

- Climatic hazards – Floods, Landslides, Drought
- Geophysical hazards – Volcanic eruption, Tsunami
- Epidemic hazards – Dengue, Malaria

Hazard and Climate

Droughts, Floods, Landslides, Cyclones/Storms, Lightning, Wind Gusts, and Heavy Rainfall are the most common in Sri Lanka usually cause the most damage (apart from the tsunami of 2004).

Climatic Hazards



climatic hazards in Sri Lanka

Majority of hazard are climate related. The most common in drought. Highest number of fatality floods and landslides. However some years cyclone and storms can be large fatality and economy losses. Lightning, storm surges are other hazards which need to be managed.

Seasonality

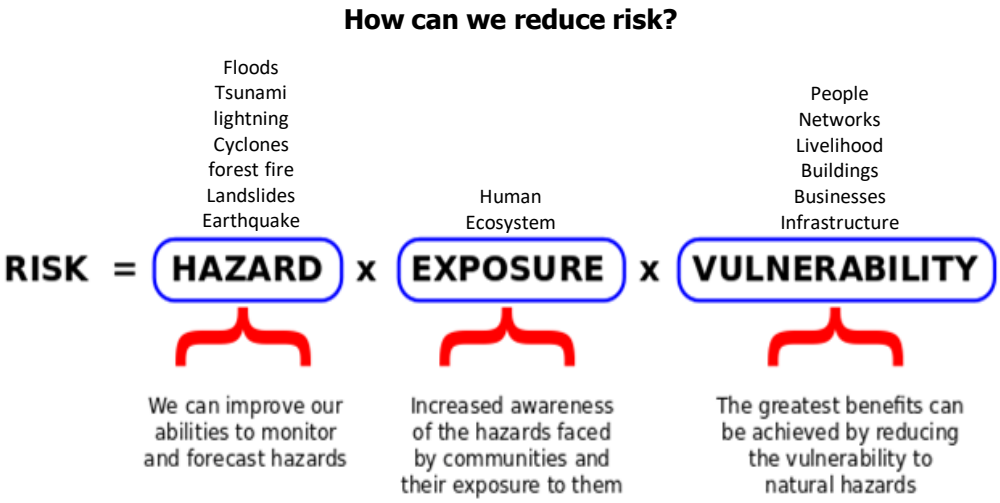
The state or quality of being dependent on the seasons. Seasonal refers to any predictable pattern that returns or repeats over a one-year period. Climate has seasonality and it drives to hazards The occurrence of climatic hazard is influenced by the seasonal climatic characteristics of the specific area.

Spatial Variability of Climatic Hazards

There is spatial variability in climate which drives spatial variability in hazards. In addition geographic features such as steep mountain slopes, poor land use, bad drainage cause floods and landslides, can lead to disasters

Disaster Risk Management

The risk of disasters can be managed; the risk of hazards can be mitigated; the vulnerability and exposure can be reduced and resilience enhanced through disaster preparedness. if disasters occur, then the impacts can be reduced and recovery can be speeded. In general information on hazards and early warning can help motivate and risk reduction.



Disaster Risk. Hazard, exposure and vulnerability are all important parts of the risk calculation.

Conclusion

Developing literacy around disasters is useful to all as we and those around face these. This flyer and accompanying poster and brochure provides information on the basic concepts related to disasters. Terminological understanding is needed to overcome some of the misunderstanding. Disasters are better prevented or the risks reduced than managed after the fact. Such preparedness, support mechanisms and community action is what has helped people to get through the man-made and natural disasters they face. Advances in disaster preparedness, risk management and early warning is not adequate approaching two decades of investments after the Tsunami across equatorial Asia. Unfortunately, there is a perverse incentive system - finances for the disaster establishment and industry is greater when there are more and more disasters

About FECT and Disaster Services:

We started research and development in climate and environmental analysis with projects from 2000. Our work is oriented towards risk management in water resources, disasters, agriculture, energy, environment and public health sectors. We collaborate with government institutions, research institutes and universities. We are chartered as a non-profit organization develop capacity widely.