

DISASTERS

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DEFINITIONS OF DISASTER

- “A disaster can be defined as any occurrence that cause damage, ecological disruption, loss of human life, deterioration of health and health services on a scale, sufficient to warrant an extraordinary response from outside the affected community or area”.

(W.H.O.)

- “A disaster can be defined as an occurrence either nature or manmade that causes human suffering and creates human needs that victims cannot alleviate without assistance”.

American Red Cross (ARC)

TYPES OF DISASTER

Natural Disasters

Meteorological

Topographical

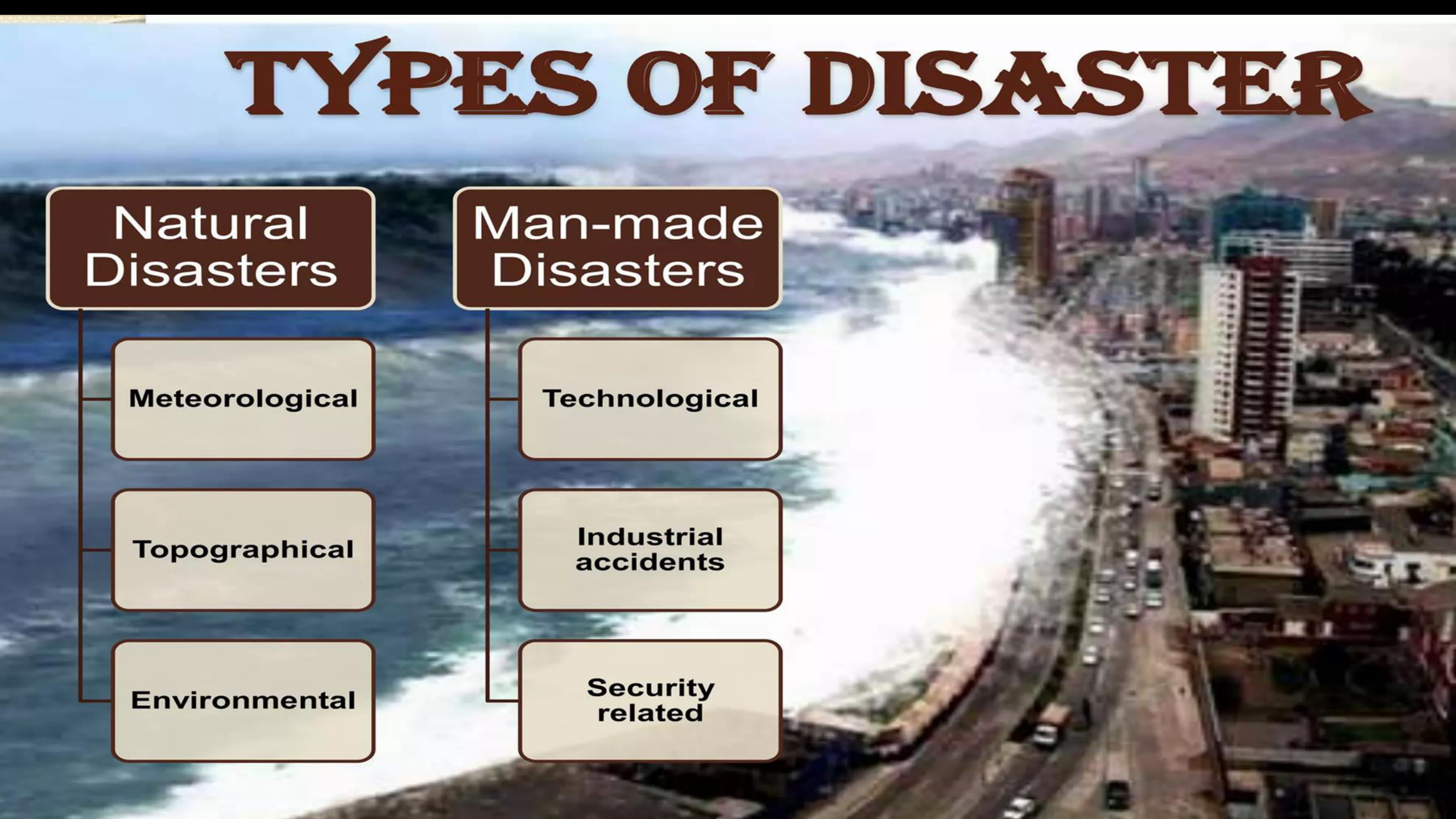
Environmental

Man-made Disasters

Technological

Industrial accidents

Security related



TYPES OF DISASTER

On the basis of origin disasters are classified as

1. NATURAL DISASTERS
2. MAN MADE DISASTERS

on the basis of severity

1. Minor disasters
2. Major disasters

METEOROLOGICAL

Violent, sudden and destructive change to the environment related to, produced by, or affecting the earth's atmosphere especially the weather-forming processes.

TOPOGRAPHICAL

The disasters that take place due to changes in the arrangement of natural and artificial physical features of a region are called topographical disasters.

- These include internal earth processes
- These are tectonic in origin
- These include earth quakes , volcanic eruptions
- External processes are mass movements as landslides,rockslides,rock falls

ENVIRONMENTAL DISASTER

- An environmental disaster is an incident which takes place due to naturally or human actions, results in a harmful impact upon the natural environment. Such as wild fire

CLASSIFICATION Of NATURAL DISASTERS

Natural disasters can be

1. land based (e.g., earthquakes)
2. water based (e.g., river floods)
3. Atmospheric (e.g., tornadoes)
 1. Biological (e.g., pandemics)
 2. Extraterrestrial based (e.g., comet strikes)
 3. Any combination of these (e.g., undersea earthquake and tsunami).

Natural Disasters:

Earthquake: An earthquake is the result of a sudden release of energy in Earth's crust that creates seismic waves, seismic activity of an area refers to the frequency, type & size of earthquakes experienced over a period of time & are measured using seismometers.

At the Earth's surface, earthquakes manifest themselves by shaking & sometimes displacement of the ground.



Natural Disasters:

Flood:

A flood is an overflow of water that submerges land, may occur as an overflow of water from water bodies, such as a river or lake, in which the water overtops, resulting in some of that water escaping it's usual boundaries or it may occur due to accumulation of rainwater on saturated ground in an areal flood. Floods often cause damage to livelihood & structures.







Natural Disasters:

Landslide:

A landslide is a geological phenomenon that includes a wide range of ground movements, such as rock falls, deep failure of slopes & shallow debris flows. Landslides can occur in offshore, coastal & onshore environments. Although the action of gravity is the primary driving force for a landslide to occur, a landslide often requires a trigger before being initiated.







Natural Disasters:

Avalanche:

An avalanche is a rapid flow of snow down a sloping surface. Avalanche is typically triggered in a starting zone from a mechanical failure in the snowpack (slab avalanche) after initiation, avalanches usually accelerate rapidly & grow in mass & volume as they collect more snow.





Natural Disasters:

Cyclone:

A cyclone is an area of closed, circular fluid motion rotating in the same direction as the Earth. This is usually characterized by inward circular winds that rotate anti-clockwise in the Northern Hemisphere & clockwise in the Southern Hemisphere of the Earth.

Most large-scale cyclonic circulations are centered on areas of low atmospheric pressure.







Natural Disasters:

Tsunami:

A Tsunami also known as seismic sea wave, it is a series of water waves caused by displacement of a large volume of a body of water, generally an ocean or a large lake. Tsunami waves do not resemble normal sea waves as their wavelength is longer. Rather than appearing as a breaking wave.

A tsunami may initially resembles a rapidly rising tide & for this reason tsunamis are often referred to as tidal waves.



Natural Disasters:

Heat Wave:

A heat wave is a prolonged period of excessively hot weather accompanied by high humidity, especially in oceanic climate countries, a heat wave is measured relative to the usual weather in the area & relative to normal temperatures for the season, heat wave is considered extreme weather & a danger because heat & sunlight may damage the Human body.







Natural Disasters:

Drought:

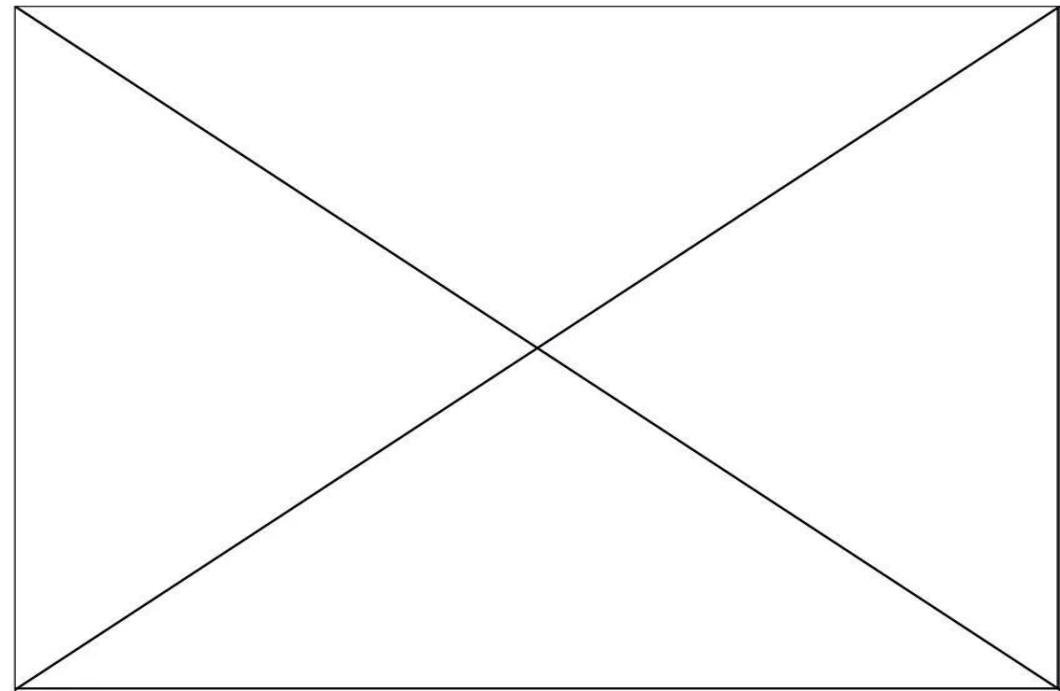
Drought is an extended period when a region receives a deficiency in its water supply, whether atmospheric, surface or ground water. A drought can last for months or years, or may be declared after as few as 15 days, this occurs when a region receives consistently below average precipitation. A Drought can have a substantial impact on the ecosystem & agriculture of the affected region.



Human-Made Disasters:

Disasters having elements of human intent, negligence, error, failure of human-made systems.

Such events result in huge losses of life & property along with damage to people's mental, physical & social well-being.



TYPES OF HUMAN MADE DISASTERS

- AVIATION DISASTER
- ARSON DISASTER
- CBRN POWER OUTAGE
- PUBLIC RELATION CRISIS
- RADIATION CONTAMINATION
- SPACE DISASTER
- TERRORISM
- WAR
- ACCIDENTS



Caution
Dangerous
chemicals



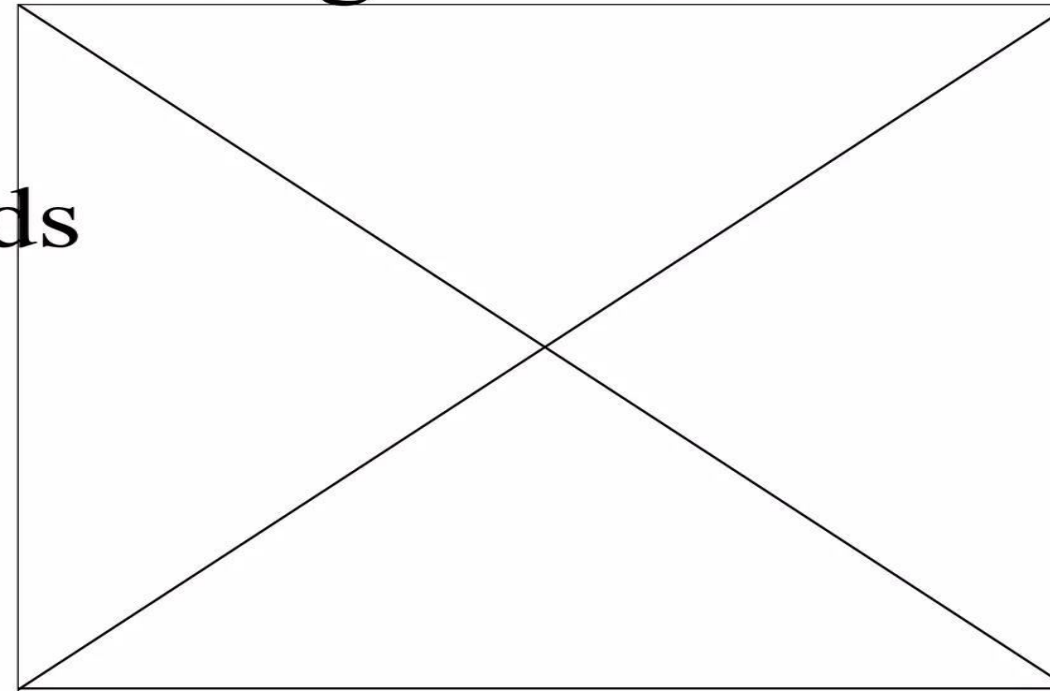
Human-Made Disasters:



Nuclear Disaster:

A Nuclear Radiation Disaster is an event that leads to significant consequences to people, the environment or the facility such as lethal effects to individuals both living & unborn.

Excessive radioactivity release to the environment leads to unstable environment, deadly effects on all living organisms(including plants).





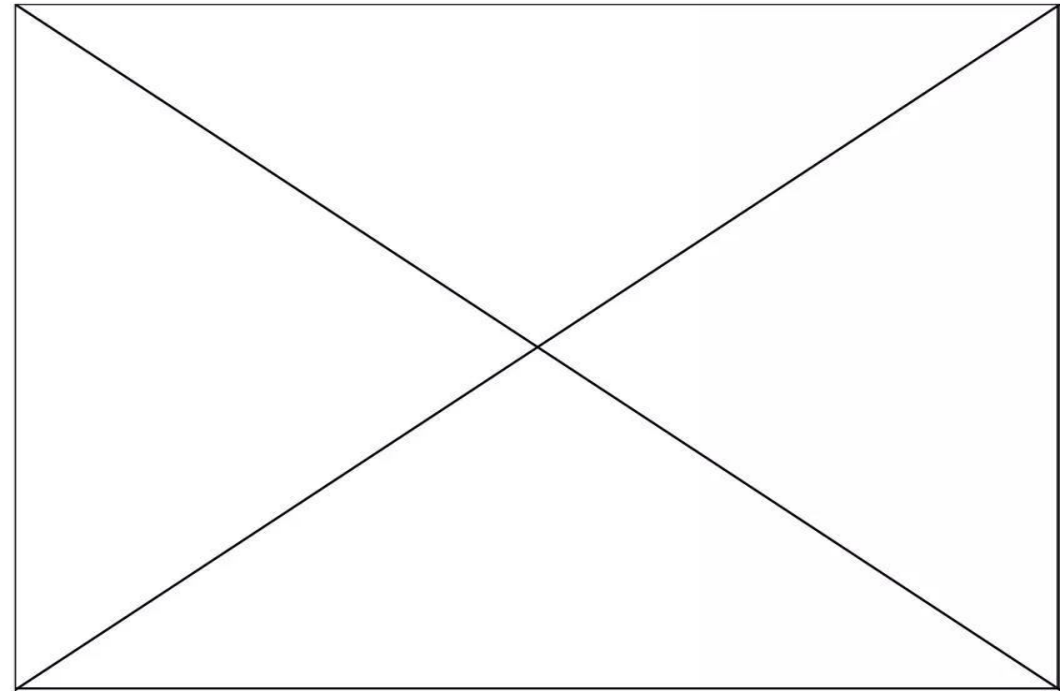
Human-Made Disasters:



Chemical Disaster:

A Chemical Disaster is the unintentional release of hazardous substances which could harm Human health or the environment, these occur under certain circumstances such as fires, explosions, leakages or releases of toxic materials.

Such events leads to illness, injury, disability or death, such events may occur where toxic materials are stored, transported or used.







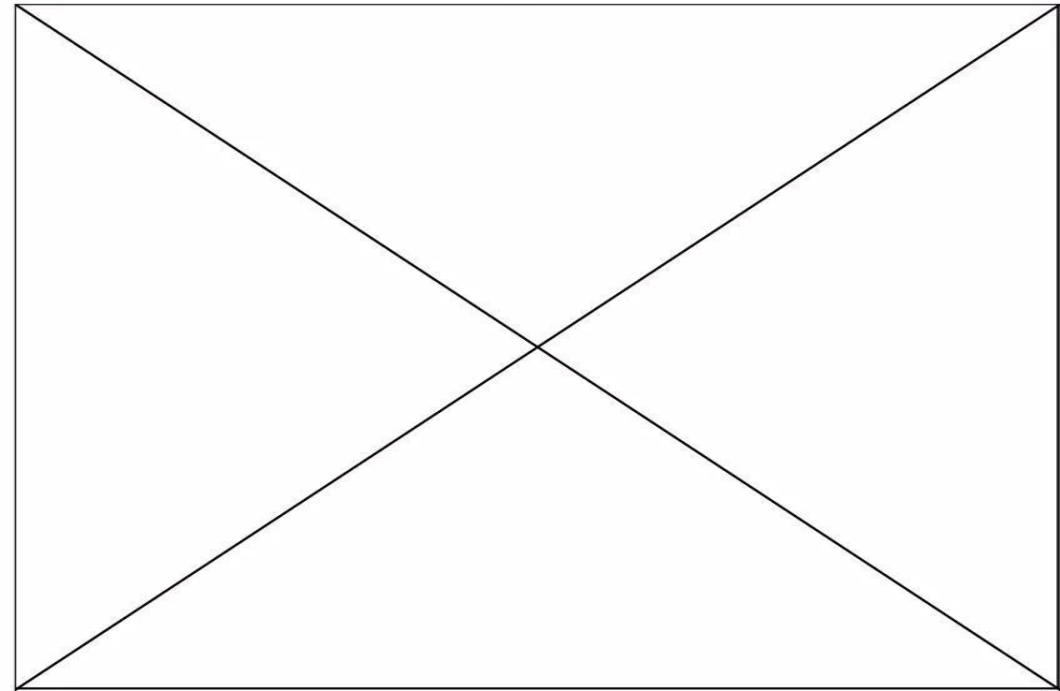
Human-Made Disasters:



Biological Disaster:

Biological Disasters are also known as biohazards, these refers to biological substances that pose a threat to the health of living organisms, primarily that of humans. Such events may include

medical waste or samples of micro-organisms, viruses or toxins that may affect or alter human health & other living organisms as well.



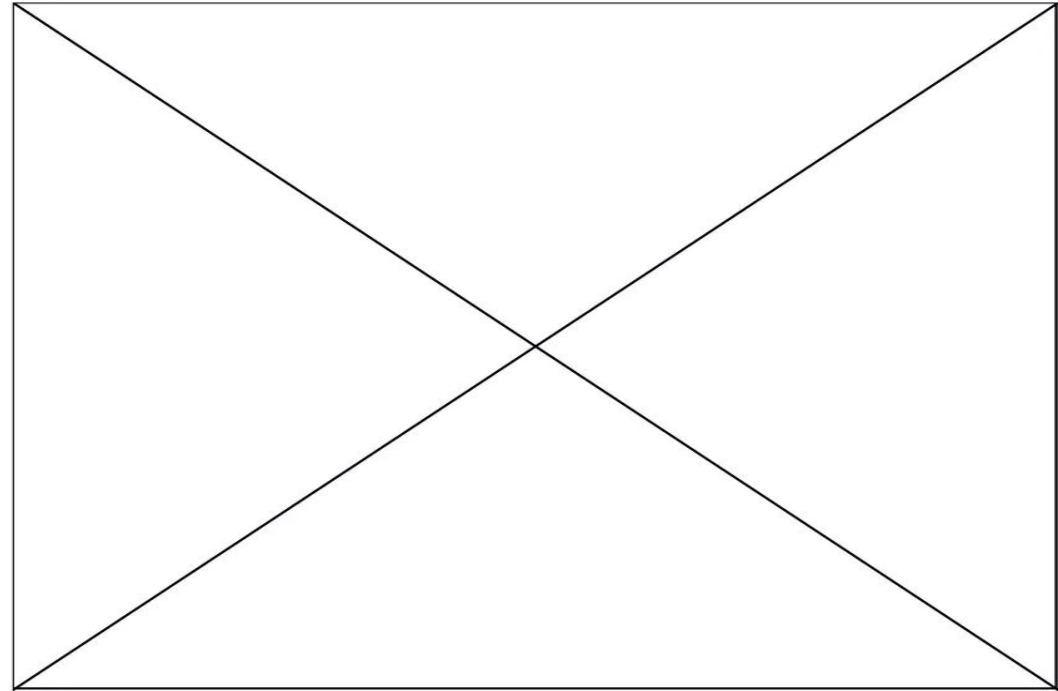


Human-Made Disasters:

Accidental Disaster:

An Accidental Disaster is an unforeseen & unplanned event or circumstance, often with lack of intention or necessity.

It usually implies a generally negative outcome which might have been avoided or prevented if the circumstances leading up to the accident had been recognized & acted upon prior to its occurrence.





HL7742

ASAANA AIRLINE

FLY INTO ASIANA GROUP



TERRORISM

- Violent action targeting civilians exclusively
- Use /threatened use of violence for the purpose of creating fear in order to achieve a political, religious or ideological goal

PHASES OF DISASTER

Pre-impact
phase



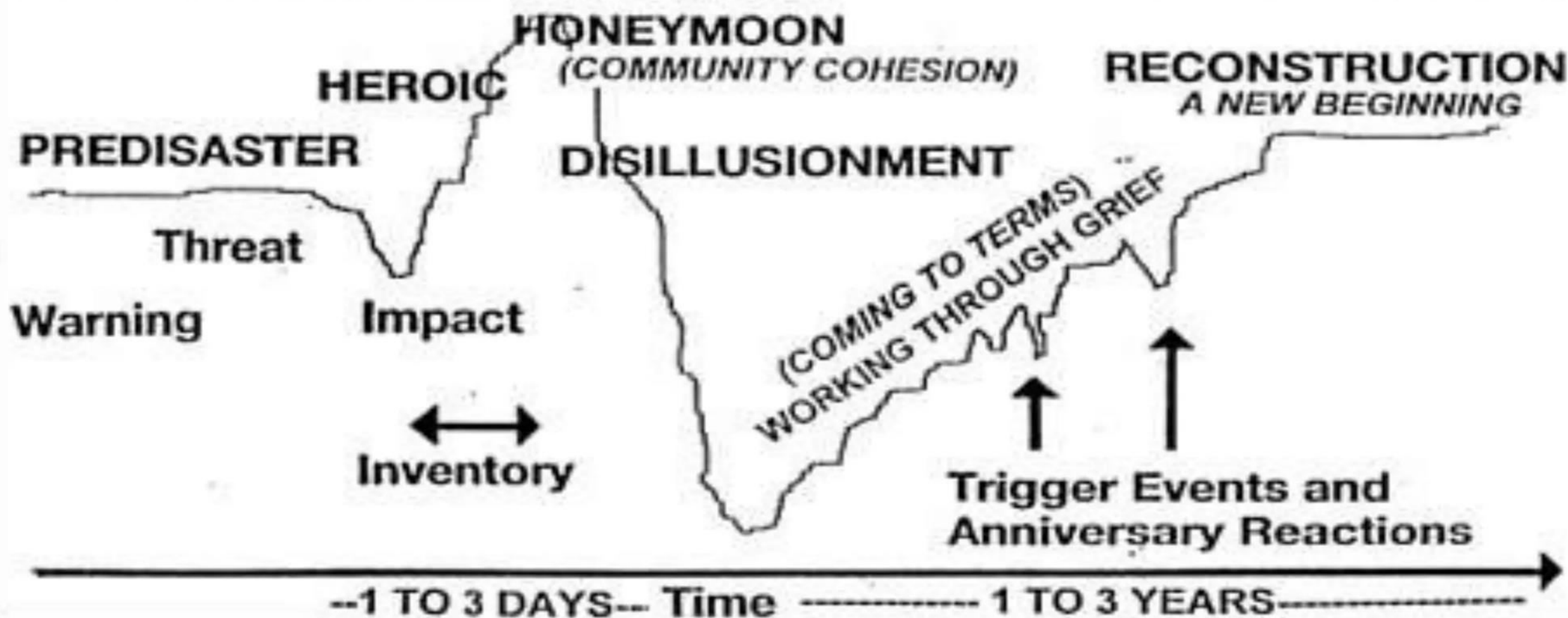
Impact
phase



Post-impact
phase



Phases of Disaster



NEXT PRESENTATION