

NATURAL DISASTERS

INDEX

- WHAT ARE NATURAL DISASTERS
- TYPES OF NATURAL DISASTERS
- TORNADOES AND SEVERE STORMS
- SAFETY MEASURES DURING TORNADOES
- HURRICANES AND TROPICAL STORMS
- SAFETY MEASURES DURING HURRICANES
- FLOODS
- SAFETY MEASURES DURING FLOODS
- WILDFIRES
- SAFETY MEASURES DURING WILDFIRES
- EARTHQUAKES
- SAFETY MEASURES DURING EARTHQUAKES
- DROUGHT
- SAFETY MEASURES DURING DROUGHT
- LANDSLIDES
- SAFETY MEASURES DURING LANDSLIDES

WHAT ARE NATURAL DISASTERS

- A natural disaster is a major adverse event resulting from natural processes of the Earth.
- A natural disaster is characterized by the abnormal intensity of a natural agent (flood, mudslide, earthquake, avalanche, drought) when the usual measures to be taken to prevent this damage were not able to prevent their emergence or were not able to be taken

TYPES OF NATURAL DISASTERS

- Tornadoes and Severe Storms
- Hurricanes and Tropical Storms
- Floods
- Wildfires
- Earthquakes
- Drought

TORNADOES AND SEVERE STORMS

- Tornadoes are outgrowths of powerful thunderstorms that appear as rotating, funnel-shaped clouds. They extend from a thunderstorm to the ground with violent winds that average 30 miles per hour.
- Tornadoes are outgrowths of powerful thunderstorms that appear as rotating, funnel-shaped clouds. They extend from a thunderstorm to the



SAFETY MEASURES DURING TORNADOES

- If you can safely get to a sturdy building, then do so immediately.
- Go to a safe room, basement, or storm cellar.
- If you are in a building with no basement, then get to a small interior room on the lowest level.
- Stay away from windows, doors, and outside walls.
- Do not get under an overpass or bridge. You're safer in a low, flat location.
- Watch out for flying debris that can cause injury or death.
- Use your arms to protect your head and neck.

HURRICANES AND TROPICAL STORMS

- A tropical cyclone is a rapidly rotating storm system characterized by a low-pressure center, a closed low-level atmospheric circulation, strong winds, and a spiral arrangement of thunderstorms that produce heavy rain or squalls
- Hurricanes are types of tropical storms that form in the southern Atlantic Ocean, Caribbean Sea, Gulf of Mexico, and eastern Pacific Ocean. Hurricanes affect millions of people who live along the Atlantic and Gulf of Mexico coasts each year



SAFETY MEASURES DURING HURRICANES

- Stay inside and away from windows, skylights, and glass doors. Find a safe area in your home (an interior room like a closet or bathroom on the lower level).
- If flooding threatens your home, turn off electricity at the main breaker.
- If you lose power, turn off major appliances such as the air conditioner and water heater to reduce damage.
- Do not use electrical appliances, including your computer.
- Do not go outside.

FLOODS

- A flood is an overflow of water that submerges land that is usually dry
- Flooding may occur as an overflow of water from water bodies, such as a river, lake, or ocean, in which the water overtops or breaks levees, resulting in some of that water escaping its usual boundaries, or it may occur due to an accumulation of



SAFETY MEASURES DURING FLOODS

- Find safe shelter if you are under a flood warning
- Do not walk, swim or drive through flood waters. Turn Around, Don't Drown!
- Stay off of bridges over fast-moving water.
- Evacuate if told to do so.
- Move to higher ground or a higher floor.

WILDFIRES

- A wildfire, wild-land fire or rural fire is an unplanned, unwanted, uncontrolled fire in an area of combustible vegetation starting in rural areas.
- Depending on the type of vegetation present, a wildfire can also be classified more specifically as a forest fire, bushfire, desert fire, grass fire, hill fire, peat fire, prairie fire, vegetation fire, or veld fire.



SAFETY MEASURES DURING WILDFIRES

- If you have a ladder, prop it against the house so you and firefighters have access to roof.
- If hoses and adequate water are available set them up. Fill buckets with water.
- Remove combustible material from the area surrounding the house (lawn chairs, tables, etc.).
- Turn a light on in each room for visibility in case of smoke.
- Move upholstered furniture away from windows and sliding glass doors.
- Turn off air conditioning/air circulation systems
- Detach electrical garage doors. Back in your car and leave the keys in the ignition.

EARTHQUAKES

- An earthquake is the shaking of the surface of the Earth resulting from a sudden release of energy in the Earth's lithosphere that creates seismic waves.
- Earthquakes can range in size from those that are so weak that they cannot be felt to those violent enough to propel objects and people into the air, and wreak destruction across entire cities.



SAFETY MEASURES DURING EARTHQUAKE

- Stay inside.
- Drop under heavy furniture such as a table, desk, bed or any solid furniture.
- Cover your head and torso to prevent being hit by falling objects.
- Hold onto the object that you are under so that you remain covered.
- If you can't get under something strong, or if you are in a hallway, flatten yourself or crouch against an interior wall.
- Stay away from windows, and shelves with heavy objects.
- If you are in a wheelchair, lock the wheels and protect the back of your head and neck.

DROUGHT

- A drought is an event of prolonged shortages in the water supply, whether atmospheric surface water or ground water. A drought can last for months or years, or may be declared after as few as 15 days.
- It can have a substantial impact on ecosystem and agriculture of the affected region and harm to the local economy.
- Annual dry seasons in the tropics significantly increase the chances of a drought developing and subsequent bush fire



SAFETY MEASURES DURING DROUGHT

- Never pour water down the drain when there may be another use for it. For example, use it to water your indoor plants or garden.
- Fix dripping faucets by replacing washers.
- Check all plumbing for leaks and have any leaks repaired by a plumber.
- Retrofit all household faucets by installing aerators with flow restrictors.
- Install an instant hot water heater on your sink.
- Insulate your water pipes to reduce heat loss and prevent them from breaking.
- Install a water-softening system only when the minerals in the water would damage your pipes.

LANDSLIDES

- A landslide is defined as the movement of a mass of rock, debris, or earth down a slope. Landslides are a type of “mass wasting,” which denotes any down-slope movement of soil and rock under the direct influence of gravity.



SAFETY MEASURES DURING LANDSLIDES

- Stay alert and awake.
- If you are in areas susceptible to landslides and debris flows, consider leaving if it is safe to do so.
- Listen for any unusual sounds that might indicate moving debris, such as trees cracking or boulders knocking together.
- If you are near a stream or channel, be alert for any sudden increase or decrease in water flow and for a change from clear to muddy water

**MAN-MADE DISASTERS, HAZARD &
VULNERABILITY PROFILE AND
ECOLOGICAL FRAGILE**

WHAT ARE THE MAN MADE DISASTERS?

- A man-made disasters is a resulting from human intend, negligence, or error
- Disasters can be man-made where the cause is intentional or unintentional. All kind of disasters leads to loss of human life, suffering and long term national as well as personal economical loss.

Reason for man-made disasters

There are multiple factors that may relate to man-made disaster.

- Ignorance
- Carelessness
- Illiteracy
- Unawareness
- Chemical
- Weapons

TYPES OF MAN-MADE DISASTERS:

NUCLEAR ACCIDENT

- Accident occurs due to its force from nuclear reaction of fusion & fission.
- It is of two types fission & fusion reactions. Atomic bombs are fission reaction whereas hydrogen bombs are fusion reaction.
- Accident occurs it is often as a result of intent and the end results are even more catastrophic with a large number of those involved losing their lives.
- EGS.- ww2 nuclear attack. Chernobyl reactor

CHEMICAL DISASTER

- Caused by the excessive and misuse of chemicals in industries are called as.
- The irresponsible handling of dangerous chemicals can cause widespread devastation.
- The impact of chemical accident can be badly for both human being and environment as well.
- EGS:- Bhopal chemical disaster

EPIDEMI C

- Occurs when disease attacks a large no of people at one time.
- It spreads at rapid rate among the human population
- Most disease are spread s after natural disaster
- EGS:- COVID-19, Spanish flu

PRECAUTIONS FOR MAN- MADE DISASTERS

FOR NUCLEAR ACCIDENTS

- Common indicator for this diseases are vomiting, dizziness etc.,
- Don't look at the fire as it cause instant blindness
- Close all the doors and windows as the radioactive does not penetrate the solid structure
- Cover all the food and water and listen to the government instruction

FOR CHEMICAL DISASTER

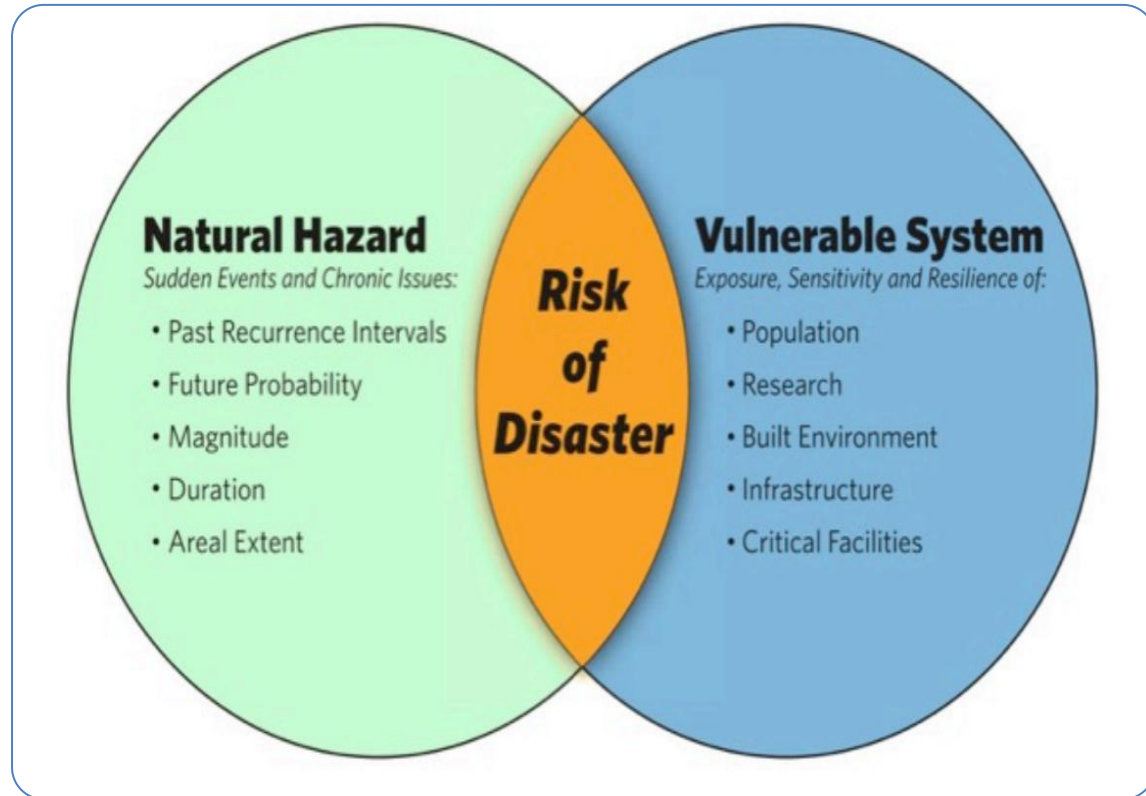
- Industries using harmful and powerful chemical should be located far from resident area
- There should be survey to keep checking on their systems
- Government and company should formulate an emergency plan incase of an accident
- Pollution level should be checked

FOR EPIDEMIC

- Ensure safe drinking water and sanitise work space and home
- Healthcare worker should be trained
- Take all short of precaution as per the dieses behaviour
- A surveillence should be establish to detect the outbreak

HAZARD AND VULNERABILITY PROFILE OF INDIA

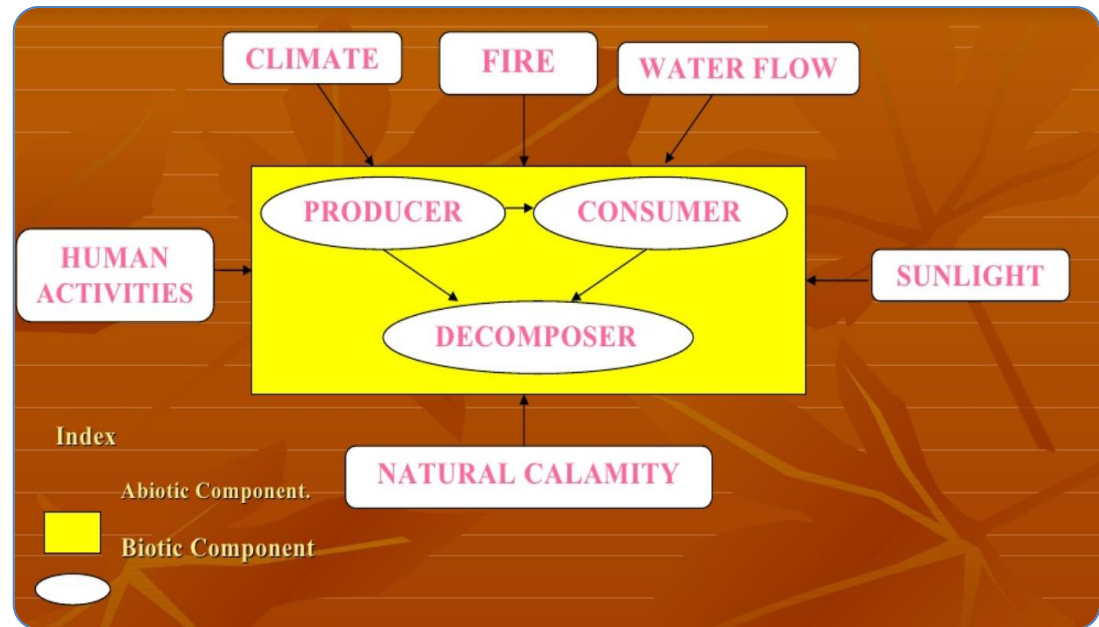
HOW HAZAED MEETS VULNERABILITY



VULNERABILITY OF INDIA

- India has been vulnerable, in varying degrees, to a large number of natural, as well as, human-made disasters on account of its unique geo-climatic and socioeconomic conditions. It is highly vulnerable to floods, droughts, cyclones, earthquakes, landslides, avalanches and forest fires. Out of 36 states and union territories in the country, 27 of them are disaster prone. Almost 58.6 per cent of the landmass is prone to earthquakes of moderate to very high intensity; over 40 million hectares (12 per cent of land) are prone to floods and river erosion; of the 7,516 km long coastline, close to 5,700 km is prone to cyclones and tsunamis; 68 per cent of the cultivable area is vulnerable to drought and hilly areas are at risk from landslides and avalanches.

ECOLOGICAL FRAGILE



FRAGILE ECOSYSTEM

Fragile ecosystem is an ecosystem which is so heavily impacted by the 'un-natural' events that it changes in unexpected way or un desirable ways leading into condition that are often termed as natural catastrophe.

The fragile ecosystem also know as the price paid by the humans for incessant development done at the cost of natural destruction.

THE CAUSES AFFECTING THE FRAGILE ECOSYSTEM

- Growing population
- Intensive industrialisation
- Unplanned urbanisation
- Intensive agriculture
- Extensive exploitation of resources
- Unscientific resource use

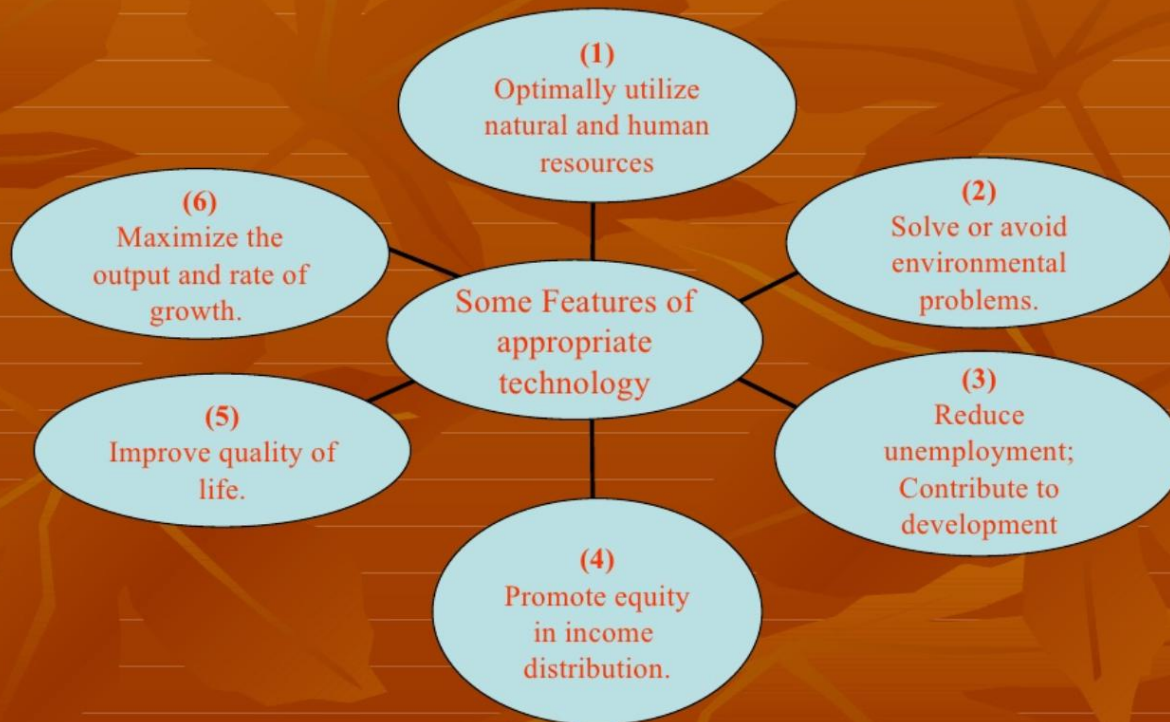
IMPACT OF UNDUE INTERFER ANCE ARE

- Lowering the water table
- Pollution
- Decline in the availability of the resource
- High price rise
- Frequent occurring of disasters
- poverty

WHAT NEEDS TO BE DONE?

- Practicing the rain harvesting method
- Adopt soil and moisture conservation measure
- Review on going scheme and program
- Create mass awareness

Practicing Sustainable Development-



THE END