

Disaster management

What is vulnerability?

Vulnerability may be defined as “The extent to which a community, structure, services or geographic area is likely to be damaged or disrupted by the impact of particular hazard, on account of their nature, construction and proximity to hazardous terrains or a disaster prone area.”

- Poor design and construction of buildings,
- Inadequate protection of assets,
- Lack of public information and awareness,
- limited official recognition of risks and preparedness measures, and
- disregard for wise environmental management.

Vulnerabilities can be categorized into physical and social, economic, environment vulnerability.

Physical Vulnerability: It includes damaged or destroyed by natural hazard such as earthquakes or floods. It is based on the physical condition of people and elements at risk, such as buildings, infrastructure etc.; and their proximity, location and nature of the hazard. It also relates to the technical capability of building and structures to resist the forces acting upon them during a hazard event.

Economic vulnerability: the potential impacts of hazards on economic assets and processes (i.e. business interruption, secondary effects such as increased poverty and job loss) Vulnerability of different economic sectors,

Social vulnerability: the potential impacts of events on groups such as the poor, single parent households, pregnant or lactating women, the handicapped, children, and elderly; consider public awareness of risk, ability of groups to self-cope with catastrophes, and status of institutional structures designed to help them cope.

Environmental vulnerability: the potential impacts of events on the environment. Natural resource depletion and resource degradation are key aspects of environmental vulnerability.

Example: Wetlands, such as the Caroni Swamp, are sensitive to increasing salinity from sea water, and pollution from stormwater runoff containing agricultural chemicals, eroded soils, etc.

Capacity: A combination of all strength and resources available within a community or organization that can reduce the level of risk, or the effect of a disaster”.

Capacity may include physical, institutional, social or economic means as well as skilled personal or collective attributes such as leadership and management. Capacity may also be described as capability” (UN-ISDR, 2004)

Some examples of capacity are:

- Permanent houses;
- Ownership of land;
- Adequate food and income sources;
- Family and community support in times of crisis;
- Local knowledge
- Good leadership & management.



DISASTER MANAGEMENT CYCLE

Mitigation:

Preventing future emergencies or minimizing their effects

1. Includes any activities that prevent an emergency, reduce the chance of an emergency happening, or reduce the damaging effects of unavoidable emergencies.
2. Buying flood and fire insurance for your home is a mitigation activity.
3. Mitigation activities take place before and after emergencies.

Preparedness:

Preparing to handle an emergency

1. Includes plans or preparations made to save lives and to help response and rescue operations.
2. Evacuation plans and stocking food and water are both examples of preparedness.
3. Preparedness activities take place before an emergency occurs.

Response:

Responding safely to an emergency

1. Includes actions taken to save lives and prevent further property damage in an emergency situation. Response is putting your preparedness plans into action.
2. Seeking shelter from a tornado or turning off gas valves in an earthquake are both response activities.
3. Response activities take place during an emergency.

Recovery:

Recovering from an emergency

1. Includes actions taken to return to a normal or an even safer situation following an emergency.
2. Recovery includes getting financial assistance to help pay for the repairs.
3. Recovery activities take place after an emergency.

