Tropical cyclones

Causal phenomena	Mixture of heat and ,moisture forms a low pressure center over oceans in tropical latitudes where water temperatures are over 26 degrees C. Wind currents spin and organize around deepening low pressure over accelerating toward the center and moving along track pushed by trade winds. Depression becomes a tropical cyclone when winds reach gale force or 117 km per hour
General characteristics and effects	When the cyclone strikes land, high winds, exceptional rainfall and storm surges cause damage with secondary flooding and landslides.
Predictability	Tropical cyclones can be tracked from their development but accurate landfall forecasts are usually possible only a few hours before as unpredictable changes in course can occur.
Factors contributing to vulnerability	Poverty, location of settlements on marginal lands; settlements located in low lying coastal areas (direct impact) Settlements in adjacent areas (heavy rains, floods) Poor communications or warning systems Lightweight structures, older construction, poor quality masonry Infrastructural elements, fishing boats and maritime industries
Typical adverse effects	*Physical damage*–Structures lost and damaged by wing force, flooding, storm surge and landslides. *Casualties and public health*–May be caused by flying debris, or flooding. Contamination of water supplies may lead to viral outbreaks and malaria. *Water supplies*–Ground water may be contaminated by flood waters. *Crops and food supplies*–High winds and rains can ruin standing crops, tree plantations and food stocks. *Communications and logistics*–Severe disruption is possible as wind brings down telephone lines, antennas and satellite disks. Transport may be curtailed.
Possible risk reduction measures	Risk assessment and hazard mapping Land use control and flood plain management Reduction of structural vulnerability Improvement of vegetation cover
Specific preparedness measures	Public warning systems Evacuation plans Training and community participation
Typical post-disaster needs	Evacuation and emergency shelter; search and rescue; medical assistance; water purification; reestablish logistical and communication networks; disaster assessment; provision of seeds for planting.
Impact assessment tools	Damage assessment forms, aerial surveys