Disaster Trends

- Development and relief agencies have long recognized the important role played by data and information in mitigating the impacts of disasters on vulnerable populations.
- Systematic collection and analysis of these data provides <u>invaluable information to</u> governments and agencies in charge of relief and recovery activities.
- It also aids the <u>integration of health components</u> in development and poverty alleviation programs.
- Lack of <u>international consensus regarding</u> best practices for collecting these data.
- Together with the <u>complexity of collecting reliable information</u>, there remains huge variability in definitions, methodologies, tools and sourcing.
- Centre for Research on the Epidemiology of Disasters (CRED) has a <u>long history of</u> standardized data compilation, validation and analysis.
- It provides free and open access to its data through its website. One of CRED's core data products is the Emergency Events Database (EM-DAT) the International Disaster Database.
- EM-DAT provides an <u>objective basis for vulnerability assessment</u> and rational decision-making in disaster situations. For example, it helps <u>policymakers identify disaster types that are most common in a given country</u> and have had significant historical impacts on specific human populations.
- In addition to providing information on the human impact of disasters, such as the number of people killed, injured or affected, EM-DAT provides disaster-related economic damage estimates and disaster-specific international aid contributions.
- As per (National Disaster Management Authority NDMA report, about <u>58.6% land</u> area of India is vulnerable to earthquakes of moderate to very high intensity; about 12% of land (over 40 million Ha) is prone to floods and river erosion; <u>5700 km of coastline</u> out of 7516-km-long coast line is prone to cyclones, windstorm surges, and tsunamis; <u>68% of cultivable area is vulnerable to drought</u>; and hilly areas are at risk from landslides and avalanches.

Data Analysis and Collection for the Trends

- ➤ Administrative boundary of India and State/UT from Survey of India, Dehradun
- District administrative boundary from Census of India (2001)
- Earthquake hazard zone map from Bureau of Indian Standards
- Faults and thrusts map from Geological Survey of India (2000)
- ➤ Information on volcano and tsunami from Geological Survey of India
- > Epicenters of earthquakes occurred since 1505 from India Meteorological

 Department
- ➤ Wind/cyclone hazard zone map from Bureau of India Standards
- Wind speed data from India Meteorological Department
- Surge height data from India Metrological Department
- ➤ Rainfall data from India Meteorological Department
- > Flood hazard map from Central Water Commission
- ➤ River map from Central Water Commission
- Census housing data 2001 from Census of India
- ➤ Landslide hazard zone maps from BMTPC (Building Materials and Technology Promotion Council)