The dominant hazards in Bangladesh coastal area are cyclonic storm surge, fluvio-tidal flood, salinity intrusion and river bank erosion.

Multi-hazard map is prepared using the dominant hazards and risk map is prepared using IPCC AR3 approach. Vulnerability indicators are selected based on literature review and expert opinion.

A particular area might be in a high hazard zone but depending on its vulnerability conditions it might not be at high risk.

Vulnerability is the function of exposure, sensitivity and adaptive capacity. So a particular area might be at risk if it has high hazards, exposure or sensitivity; but high adaptive capacity will reduce risk of that area.

**Introduction**

**Methodology**

Exposure (E)
- Population Density
- Water Supply
- Number of Household

Adaptive Capacity (AC)
- Road Density
- Literacy Rate
- Cropping Intensity
- Cyclone Shelter
- Polder
- Land Accretion

Multi-hazard = ∑Hazards

Major hazards
- Storm surge
- Flood
- Erosion
- Salinization

Risk = Probability * Hazard * Vulnerability

Vulnerability = ∫ (E, S, AC)

**Risk Map**

**Conclusion**

- Mirsharai upazila of Chittagong district is in high hazard zone but not in the high risk zone. Increasing adaptive capacity reduces its vulnerability.
- Risk, not the hazard, is the key determinant expressing perception of comfort and security for a community.
- For adaptation planning, risk map should be considered. Hazard map will be misleading in this context.

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