

Disaster Risks in Bangladesh

*HPM/CTA Meeting, Fukuoka, Japan
13 November 2015*

UN-Habitat Bangladesh

Bangladesh

Area: 154,000 sq. km.
Population: Over 150 million
Urban population: 30%
Urban Poor: 30%
City Corporations: 8
Municipalities: 315
Urban growth 4%
Urbanization: Unplanned
Contribution to GDP 65%
Dhaka Population: 20 Mill



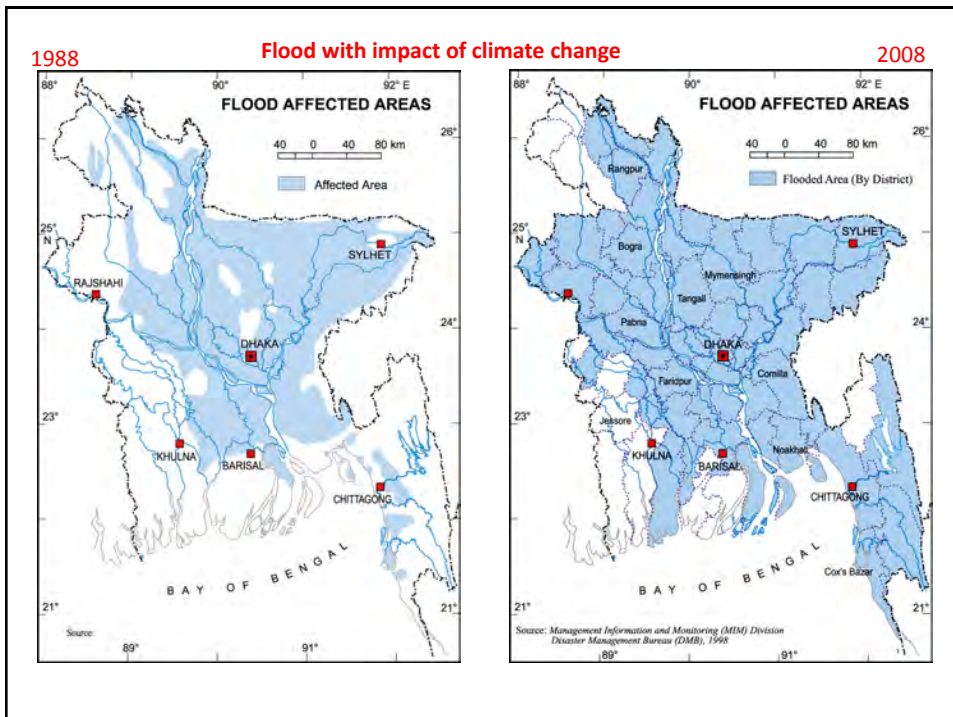
Incidences of Disaster

Regular incidences :

- Cyclones in Coastal belt: CIDR
- Flood in North and Eastern Regions
- River Erosion
- Landslides in Chittagong
- Tidal surge of Sea Water in Costal Belt
- Extreme salinity in underground water table in the south
- Drying up of underground water table in Northern part
- Arsenic contamination

Potential Risks:

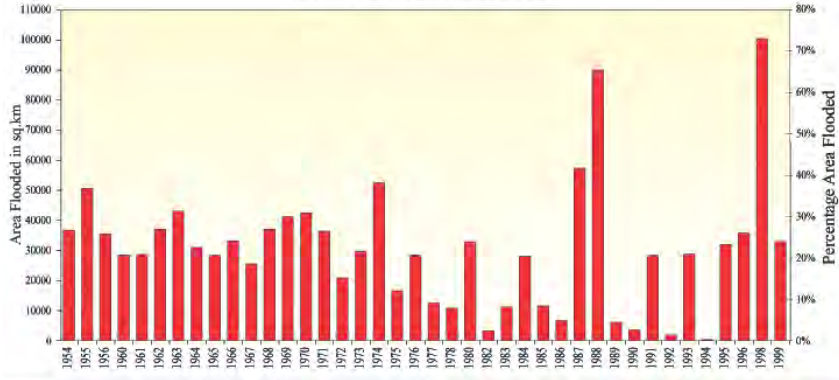
- Earthquake areas: North , East and central parts



50 years flood scenario in Bangladesh:

- 1954 to 1974, 30% to 40% area used to be flooded,
- 1974 and on wards, india started to operate several water gate on three river systems
- 1988 & 1998 flood, due to globalisation effect on global environment

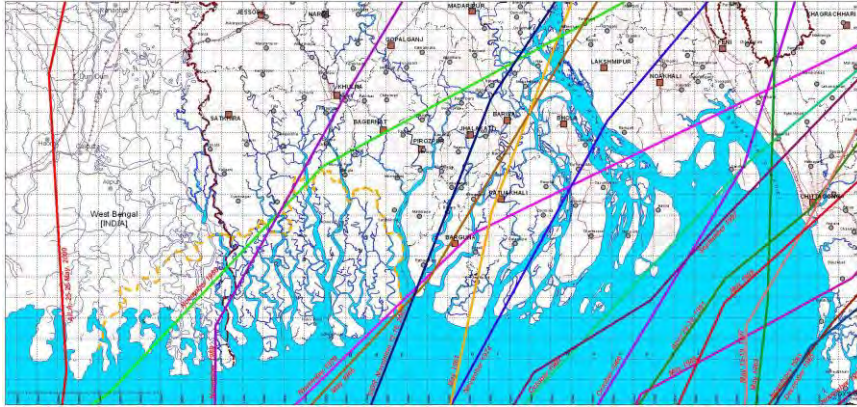
Intensity of floods, 1954-1999



Flood in 2008



Major Cyclones in Bangladesh (1960-2009)



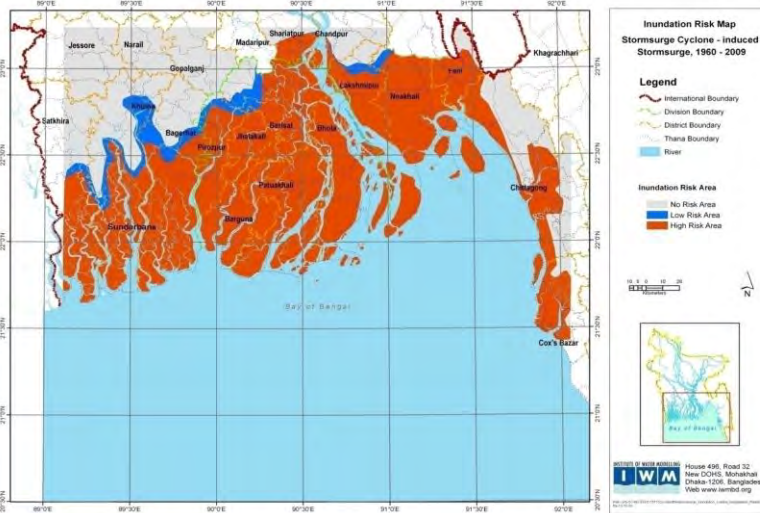
- Risk spans the entire coastline.
- Damage from the most recent major cyclone SIDR in 2007 is more than \$1.7 billion.

Cyclone SIDR

- Number of Death: 3,406
 - Number of Injury: 55,282
- Estimated Total damage including indirect loss: \$1.67 billion
- Housing damage & loss: \$839 million (50%)
 - Agricultural damage & loss: \$438 million (26%)

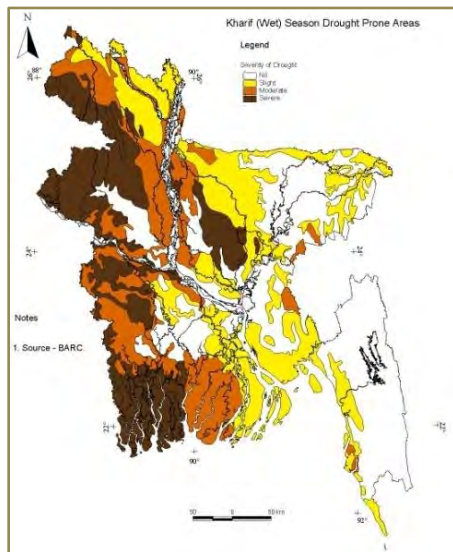


Storm Surge Inundation Area (



- Bay of Bengal model based on MIKE 21 Hydrodynamic modeling system has been used.

Drought Prone Area of Bangladesh



Seismic Zoning Map of Bangladesh

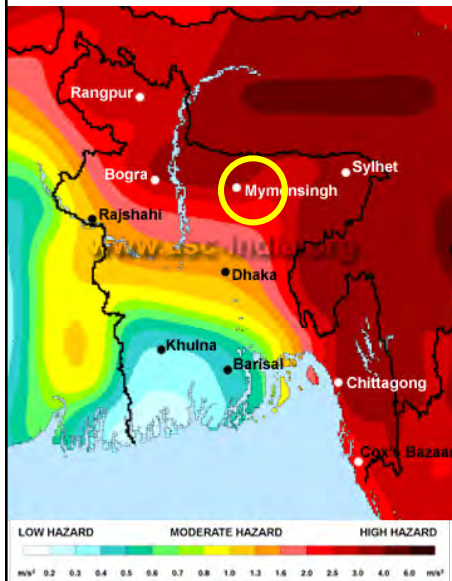


5/21/2015

NCDP,B_Urban Development
Directorate (UDD),MoHPW-Taf

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Earthquake Risks/Hazards



5/21/2015

Generalized tectonic map and fault lines in Bangladesh

NCDBP, Urban Development
Directorate (DDU), MoUPW, Govt.

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Disaster risk resilience

- Department of Disaster Management
- National Disaster Management Plan
- Volunteers identified in the costal regions.
- Early warning system for Cyclone
- Use of mobile technology, cyclone shelters, preservation of dry food and water
- Training of volunteers to mitigate disaster Risks against Cyclone education, capacity

What to Do?

1. **Policy reform** for mainstreaming DRR in urban planning
2. **Capacity Building** of Local Government and communities on DRR Management
3. Conduct **Research** on identifying potential hazards, especially on earthquake
4. Capacity building on **Resilience and Risk Assessment**
5. **Technical Support and Equipment** to strengthen rescue capacity
6. **Climate resilient Urban planning** in Coastal areas
7. **Protection** against Flood and Erosion
8. **Treatment of water** to remove arsenic, salinity, iron

Thank you.