

Wel-come to the presentation on

**DISASTER VULNERABILITIES IN
URBAN AREAS**

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Hazard and Disaster-Concept & Definiton

Hazard

Hazard:(natural/environmental and man-made/anthropogenic)

A perceived event which threatens the life or the well being of an organism, especially man.

Disaster

Disaster:(natural/environmental and man-made/anthropogenic)

A catastrophe or a disaster is the realization of a hazard.

Cont...

Hazard is an event or occurrence that has the potential for causing injuries to life and damaging property and the environment

Disaster A serious disruption of the functioning of a community causing widespread human, material or environmental losses which exceed the ability of the affected community to cope using its own resources.

UNISDR Terminology on Disaster Risk Reduction (2009)



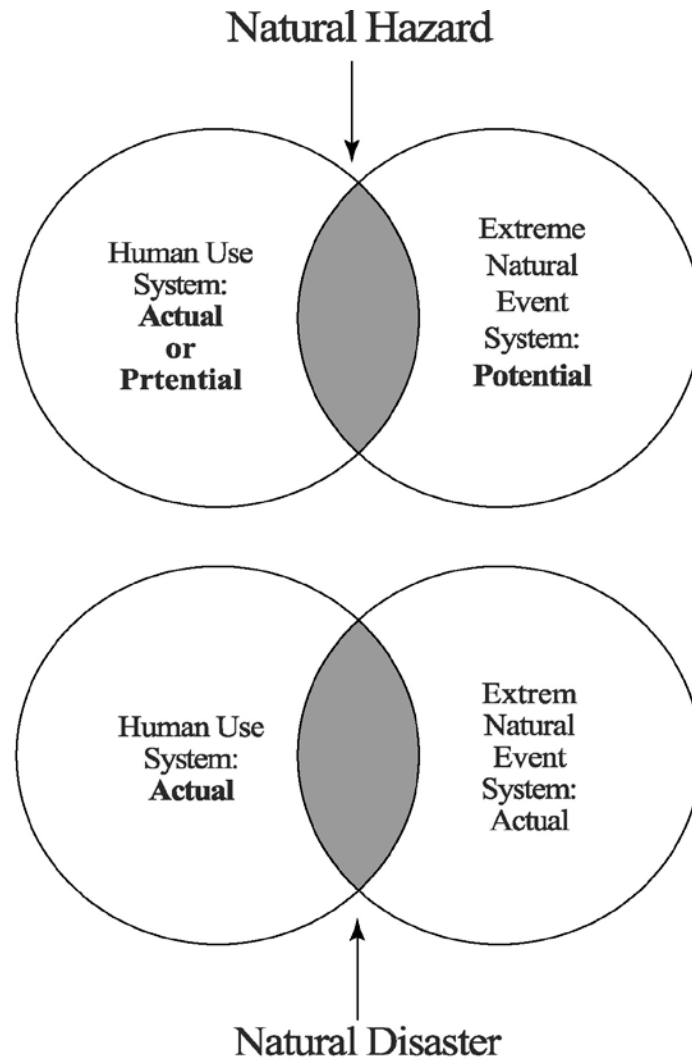


FIGURE 1.1. Natural hazards and natural disasters. In both cases, the overlap between human and physical systems is of concern; their difference relates to potential versus actual occurrences. Hazards represent potential events while disasters result from actual events

HAZARD IN THE ENVIRONMENT

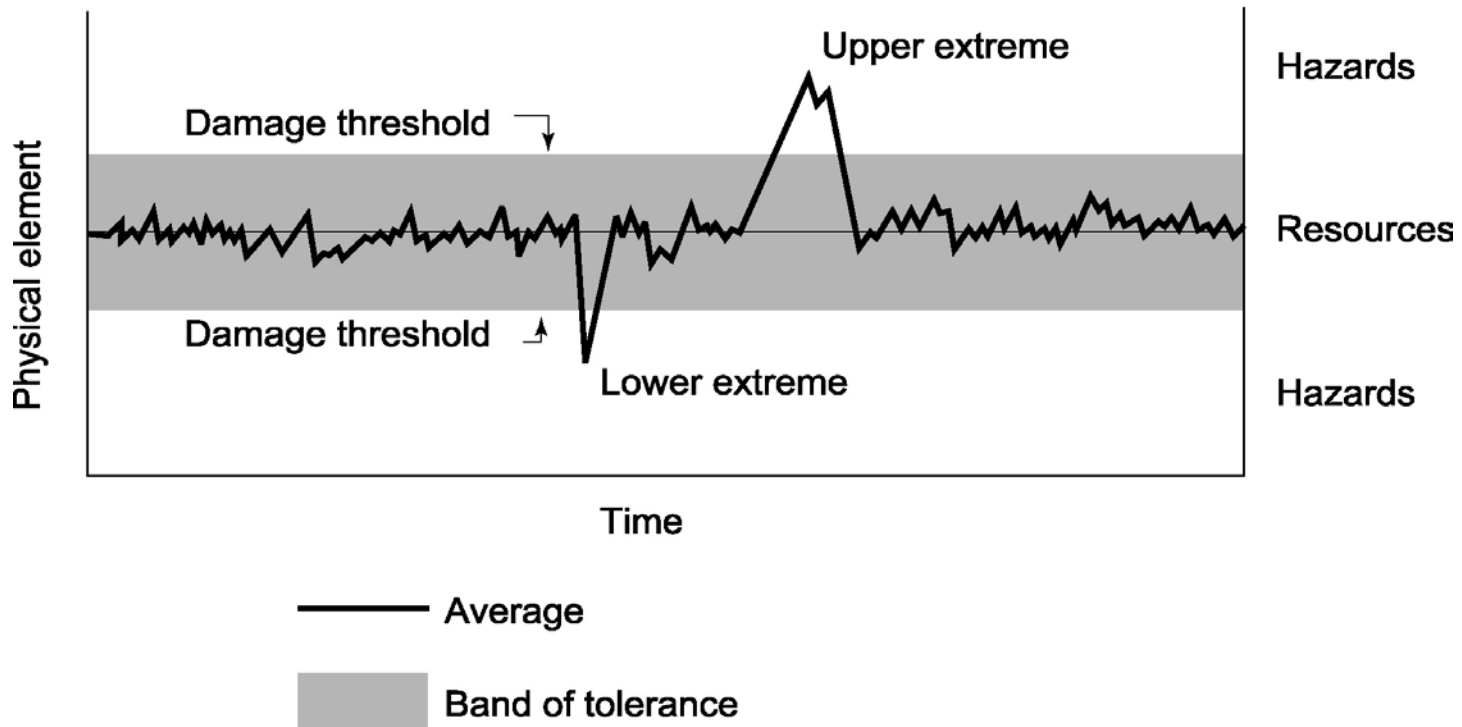


Figure 1.3 Sensitivity to environmental hazard expressed as a function of the variability of geophysical elements and the degree of socio-economic tolerance. Within the band of tolerance, events are perceived as resources; beyond the damage thresholds they are perceived as hazards.

Introduction of Urbanization

- The world is gradually becoming urban. The world cities take up just **two** percent of the earth surface. According to UN projections, the urban population in Asia is expected to become nearly **double** for next decade and the percentage of the people living in urban areas in Bangladesh will be **41.4** against the current figure of **28** percent. Over **44** million people or **28** percent of the country's population now live in the urban areas. The rate was only **15 percent in 1981 and 23 percent in 2001.**



Earth quake



Floods in urban



Traffic Jam



Firing



Building collapse

Rank	Megacity	Country	Continent	Population
1	Tokyo	Japan	Asia	34,800,000
2	Guangzhou	China	Asia	31,700,000
3	Shanghai	China	Asia	28,900,000
4	Jakarta	Indonesia	Asia	26,400,000
5	Seoul	South Korea	Asia	25,800,000
6	Delhi	India	Asia	24,000,000
7	Mexico City	Mexico	North America	23,800,000
8	Karachi	Pakistan	Asia	22,700,000
9	Manila	Philippines	Asia	22,200,000
10	New York City	United States	North America	21,600,000
11	São Paulo	Brazil	South America	21,500,000
12	Mumbai	India	Asia	21,400,000
13	London	United Kingdom	Europe	21,000,000
14	Beijing	China	Asia	20,000,000
15	Los Angeles	United States	North America	17,200,000
16	Osaka	Japan	Asia	16,800,000
17	Moscow	Russia	Europe	16,500,000
18	Dhaka	Bangladesh	Asia	16,300,000
19	Cairo	Egypt	Africa	16,100,000
20	Kolkata	India	Asia	16,000,000
21	Buenos Aires	Argentina	South America	14,500,000
21	Bangkok	Thailand	Asia	14,500,000
23	Istanbul	Turkey	Europe/Asia	13,800,000
24	Lagos	Nigeria	Africa	13,200,000
25	Tehran	Iran	Asia	13,200,000
26	Rio de Janeiro	Brazil	South America	12,900,000
27	Shenzhen	China	Asia	11,700,000
28	Paris	France	Europe	10,700,000
29	Tianjin	China	Asia	10,600,000

Mega City

- A **megacity** is usually defined as a metropolitan area with a total population in excess of ten million people.
- Challenges
 - Slums
 - Crime and terrorism
 - Homelessness
 - Traffic congestion
 - Urban sprawl(collapse)
 - Gentrification
 - Environmental problems
 - Air pollution



History of Dhaka Mega City(Area and Population)

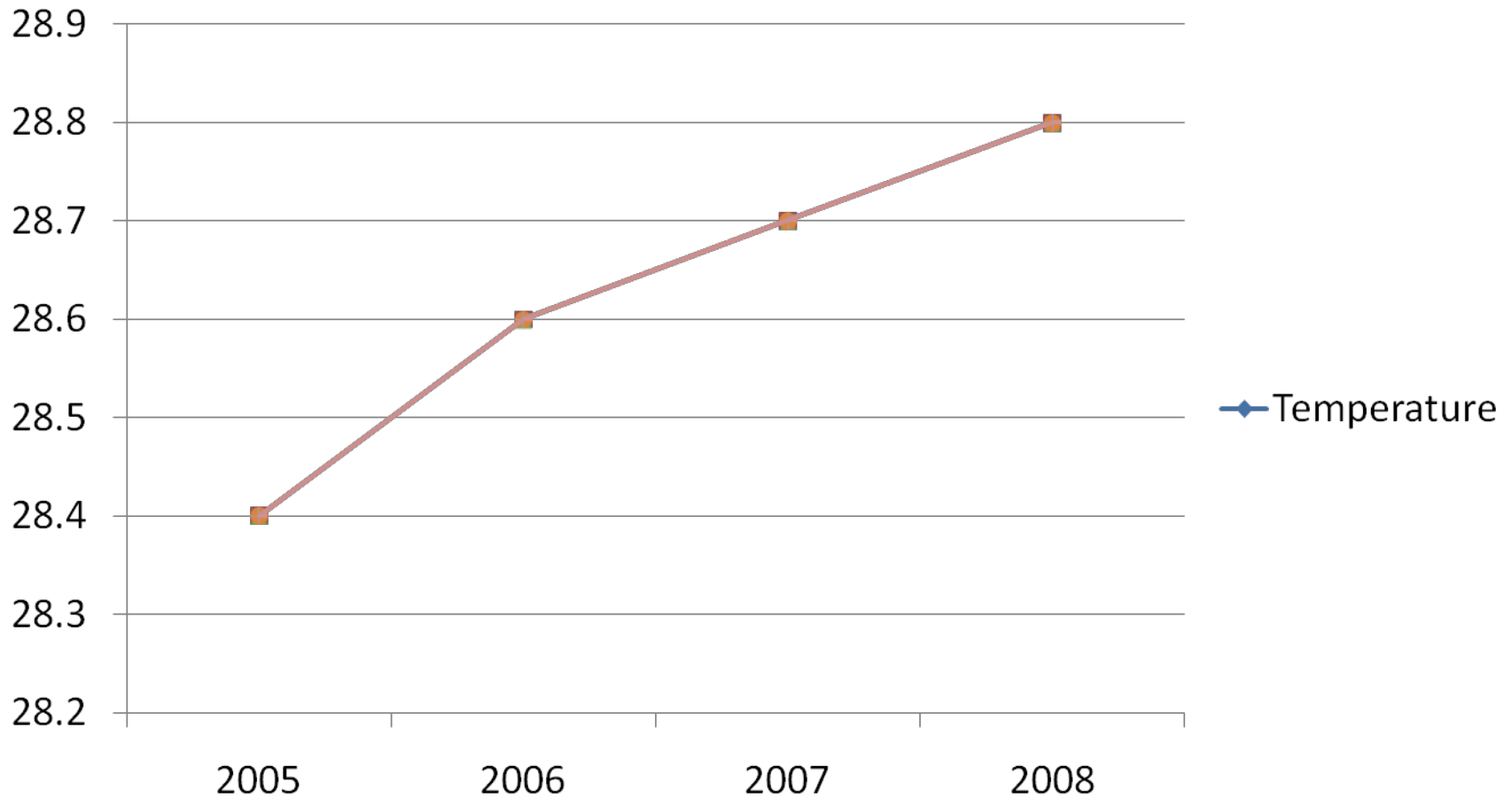
Year	Area(sq. km)	Population	%Increase of population Over the year	Density(Per sq. km)
1961	124.45	0.7	74.76	5775.54
1974	335.79	2.0	187.76	6159.66
1981	509.62	3.4	66.32	6750.41
1991	1352.82	6.8	98.95	5059.16
2001	1352.82	10.7	56.51	7918.43
2010	1352.82	14.0	30.84	10348
2015	1352.82	16.0	14.28	11827

Climate Change Impact

- Temperature Change
- Precipitation Change(Erratic rainfall)
- Sea level rise(2m-13m)
- Extreme events(cyclone...)

Trend of average yearly temperature-

Source: CDMP



Dhaka Mega City-Key Concern

- High rate of population growth
- Migration from rural
- Highest level of illiteracy
- Informal settlement and employment in informal sector(above 60%)
- Dhaka is a city of extreme poverty
- Rich and poor gap
- Energy consumption
- Solid waste management
- Sewage and drainage management
- Surface and ground water problems

Cont...

- Sewage and drainage management
- Surface and ground water problems
- Traffic congestion
- Climate change and climate variability

Thanks for patience hearing