

Welcome
To the presentation on

**Understanding the Issues Involved in
Human Adaptation to Landslide Risks:
Case Studies from Chittagong and Cox's
Bazar City, Bangladesh**

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Background of the Research

1. Chittagong and Cox's Bazar cities are highly **vulnerable to landslide hazard**, with an **increasing trend of frequency and damage**.
 2. The major recent landslide events were related to **extreme rainfall intensities having short period of time**.
 3. All the major landslide events occurred as a **much higher rainfall amount compared to the monthly average**.
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Background of the Research

In total, **197 landslides** were recorded in these two cities

Date	Location	Rainfall Sequence (Cumulated Rainfall)	Consequences
13 August 1999	Gopaipur, Kotwali Thana, Chittagong	435 mm – 12 days 2 – 13 Aug 1999	10 people killed
24 June 2000	Chittagong University Campus	108 mm – 8 days 17 – 24 June 2000	13 people killed and 20 injured
29 June 2003	Patiya, Chittagong	658 mm – 10 days 20 – 29 June 2003	4 people killed
3 August 2005	Nizam Road Housing Society of the port city's Panchlaish area	25 mm – 2 days 2-3 August 2005	2 people killed and 12 injured
11 June 2007	Mati Jharna Colony of Lalkhan Bazar, Chittagong	610 mm – 8 days 4 – 11 June 2007	128 people killed and 100 injured
10 September 2007	Nabi Nagar in Chittagong	452 mm – 7 days 4 – 10 Sept 2007	2 people killed
18 august 2008	Matijharna in Chittagong	454 mm – 11 days 8 – 18 August 2008	11 people killed and 25 injured
26 June 2012	Chittagong (Lebubagan area and Foy's lake surroundings)	889 mm – 8 days 19 – 26 June 2012	90 people killed and 150 injured

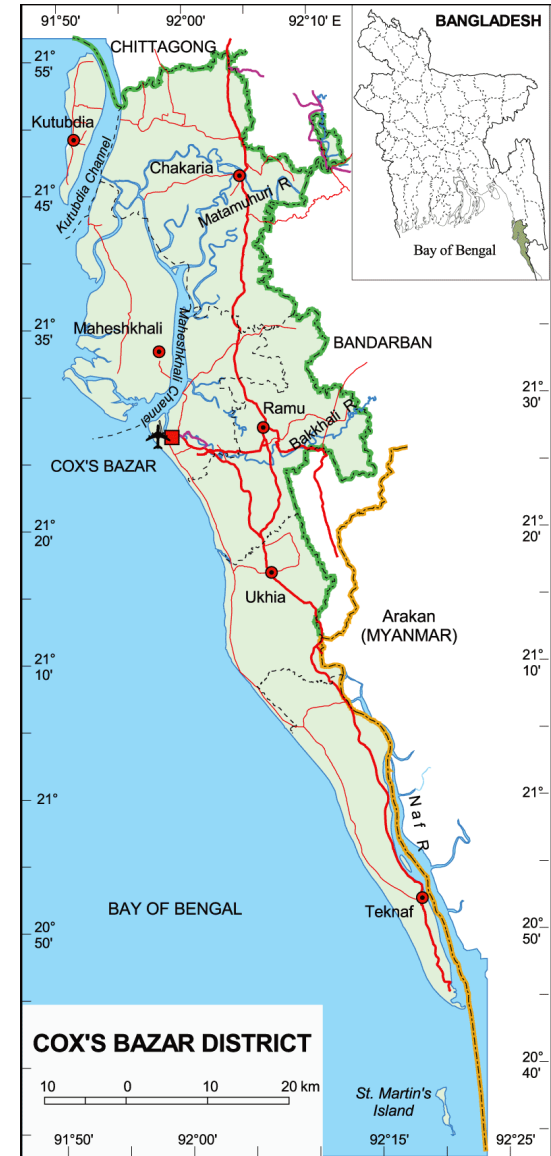
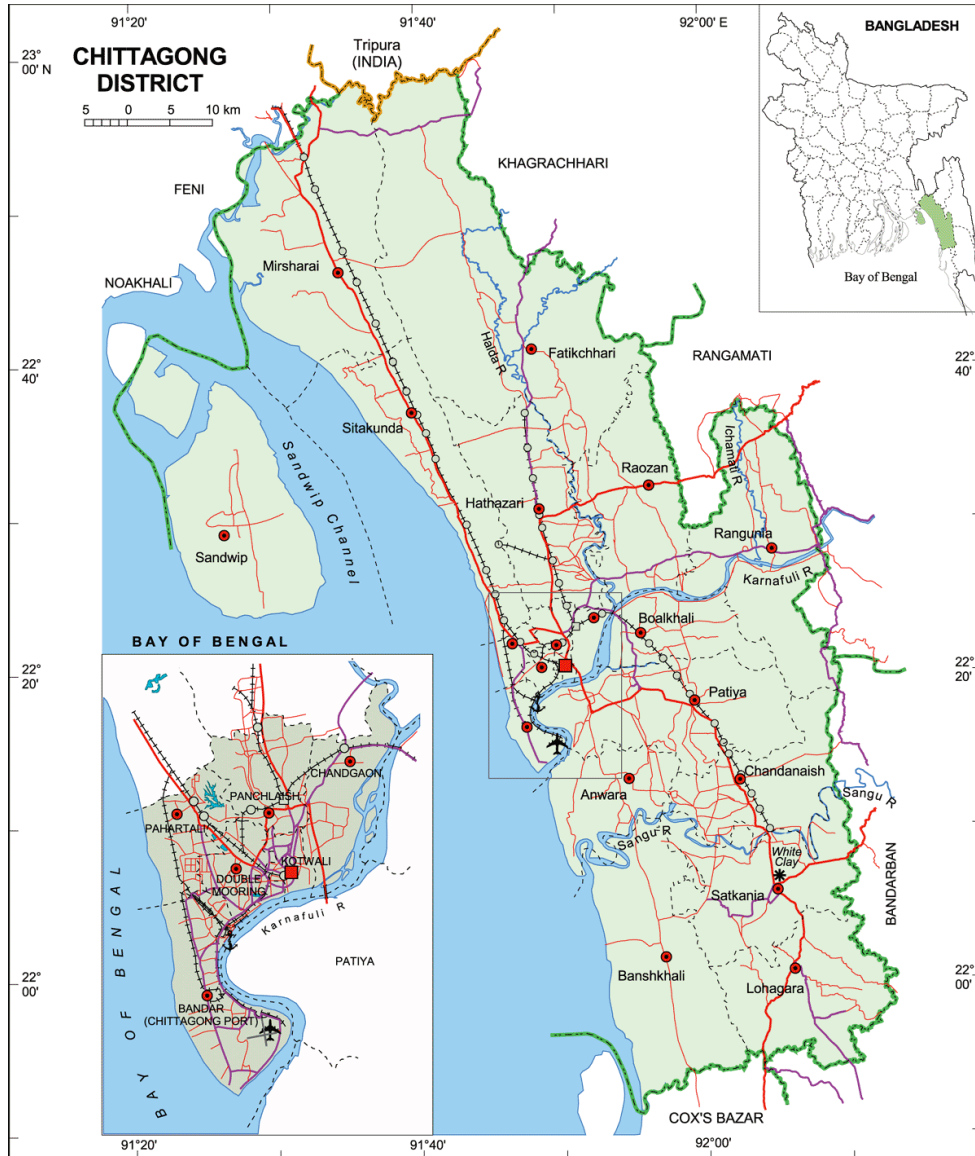
Aim of the Research

As noted by Alexander (2005), **much is now known about the physics of landslide hazards**, but **landslide vulnerability remains a more elusive concept**, dependent upon seemingly nebulous patterns of decision-making, response and behaviour.

Therefore, **this research places the people who experience landslides at the centre.**

The aim of this research is to understand human adaptation to landslide risks under the condition of rapid urbanization in fast growing cities of a developing country

Study Area



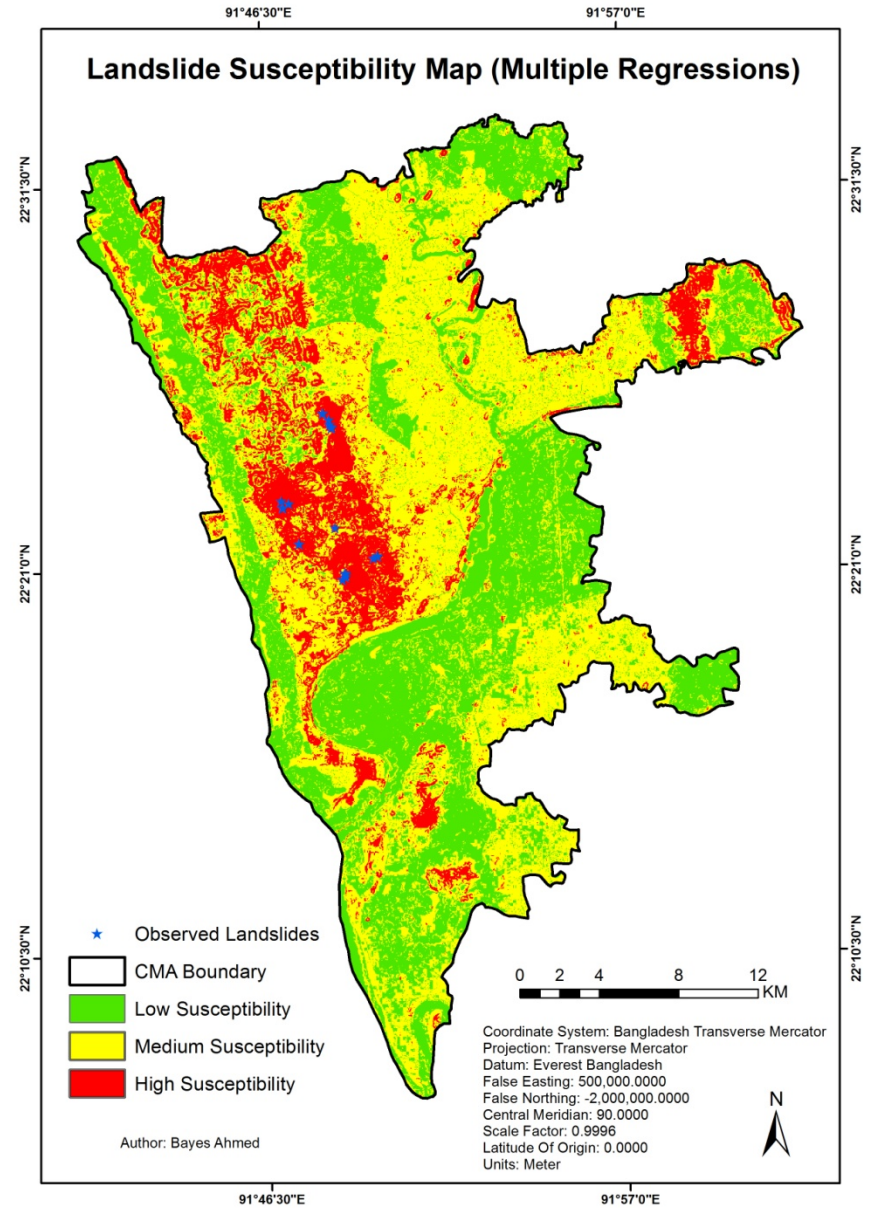
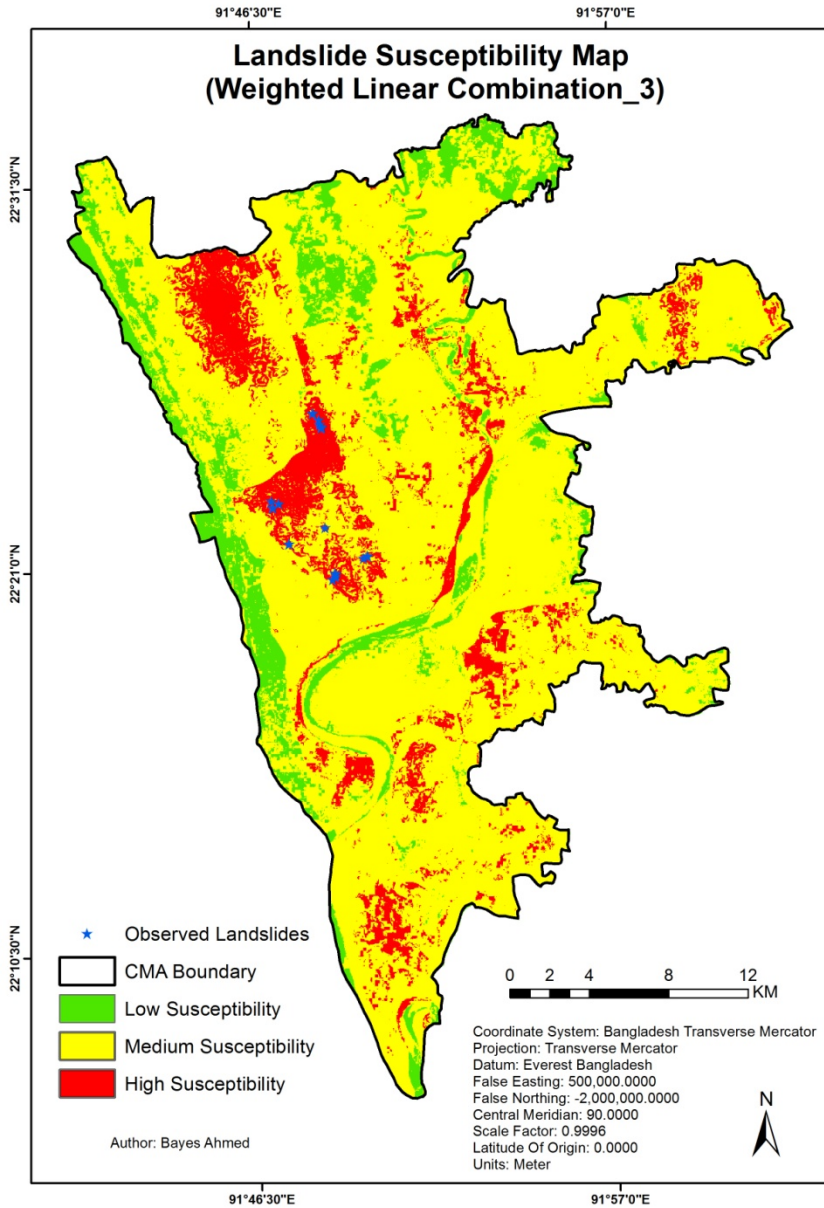
Source: *Banglapedia, National Encyclopaedia of Bangladesh, 2014*

Study Area Profile



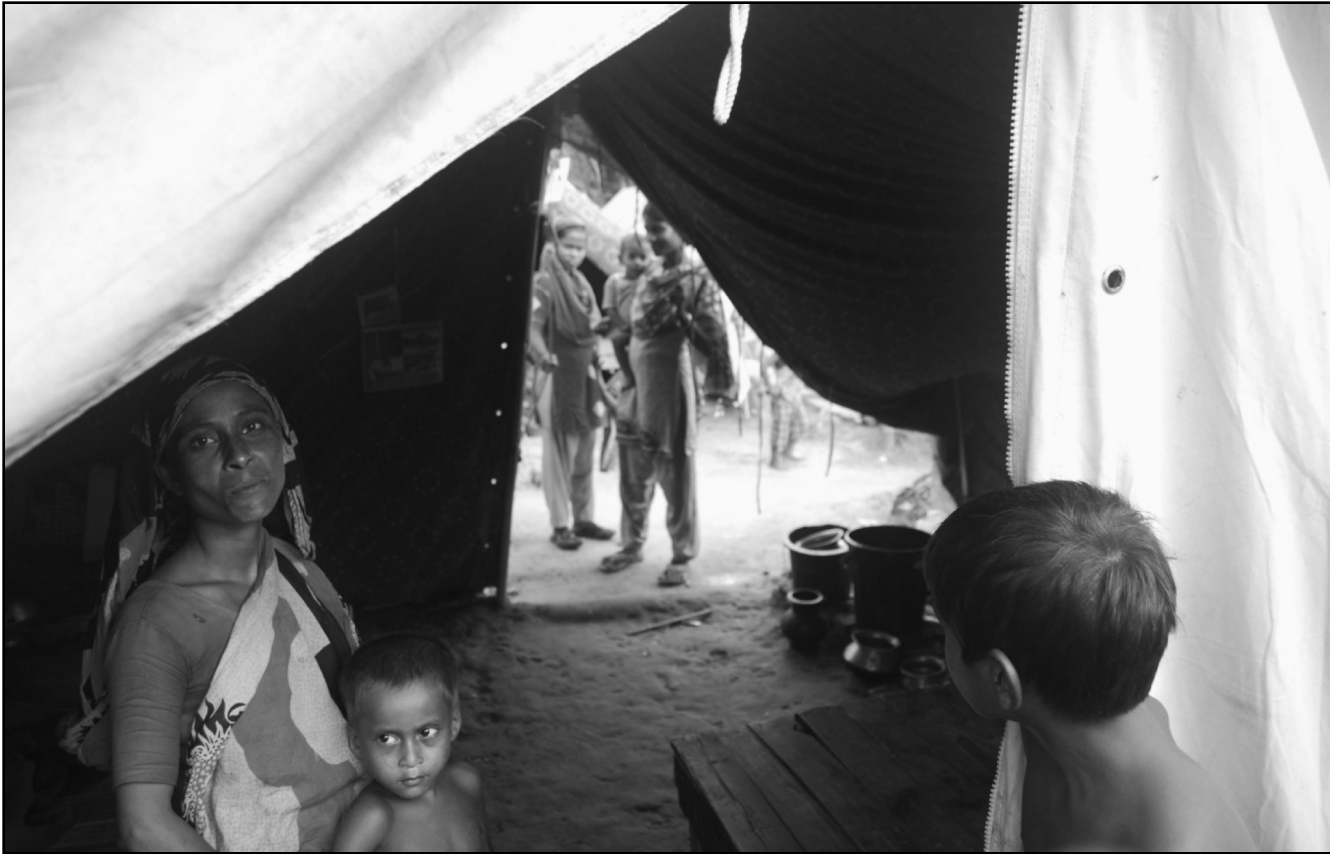
Risky Residential Zones

Landslide Susceptibility Mapping



Field Survey Technique

- a) **Questionnaire survey** (three different groups)
 - b) Community based **focus group discussion** and preparing landslide inventory
 - c) **Participatory planning techniques** (social mapping, resource mapping, trend analysis, cause-effect diagram and SWOT analysis) to prepare landslide vulnerability maps
 - d) **Comparing** the community prepared vulnerability maps with the scientifically modelled landslide **maps**
 - e) **Expert opinion survey**
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Thank You All
