

# CEREBELLA

COMMUNITY ENGAGEMENT FOR RISK EROSION IN BANGLADESH TO ENHANCE LIFELONG ADVANTAGE

CEREBELLA is an 'International Strategic Partnerships in Research and Education' (INSPIRE) Project funded by the British Council for the benefit of the Higher Education Sector in Bangladesh and the UK.

CEREBELLA aims at creating a long-term sustainable and strategic partnership between Patuakhali Science and Technology University (PSTU), Bangladesh and Centre for Disaster Resilience, School of the Built Environment, University of Salford, UK to share skills, knowledge and experience on climate change and disaster management academic learning and research.

Bangladesh has been identified as a country that is more vulnerable to climate change and subsequent natural disasters. Dense population and poverty has reduced the adaptability of Bangladesh in disastrous situations thus further increasing severity of disasters. Lack of education and research on disaster risk reduction and climate change adaptation affects socio-economic conditions in Bangladesh. Losses created by disasters and climate change in Bangladesh highlight the importance of making communities resilient against them.



## Objectives of CEREBELLA

- Carryout hazard, vulnerability, risk analysis and develop risk response strategies for disaster risk reduction and climate change adaptation with the engagement of community and local authority of Patuakhali, Bangladesh
- Make recommendations for urban safety planning based on disaster risk and climate change impacts of Patuakhali, Bangladesh
- Update and develop undergraduate/postgraduate curriculum on disaster risk reduction and climate change adaptation
- Facilitate staff exchange and training programmes to enhance capacity of partner institutions to develop knowledge, competencies and international research skills

## Community Engagement for Disaster Risk Reduction

CEREBELLA promotes the UN disaster resilient city concept by getting the involvement of communities in designing and engaging in disaster risk reduction (DRR) and climate change adaption activities to develop a strong local information base on hazards, vulnerability and risk of community.

## Community perceptions

- Communities viewed cyclones and storm surges, river and coastal erosion, and flooding as key hazards affecting them. Salinity was identified as a persistent concern.
- Key vulnerability factors for cyclones included Lack of sufficient cyclone shelters, Vulnerability of females, children and older people, and excessive love of/devotion to property and animals. For flooding, these included Unique geographical location and topography, Lack of information about flood risks, and changing climatic conditions.
- Existing risk reduction strategies mentioned included cyclone shelters, river and coastal embankments, early warning systems and disaster education activities.
- However, a number of concerns were raised regarding these risk reduction strategies. For example, concerns were raised about availability of cyclone shelters and their usability. Multi-purpose cyclone shelters built considering the requirements of local communities were requested, where the communities can use the shelter for alternative purposes, and also be familiar with the setting of the cyclone shelters and aid maintenance.
- Focus group discussions with policy makers revealed how some of the community concerns are being addressed. Issues raised by local residents were largely acknowledged, validating the findings of community engagement work.

Community engagement process of CEREBELLA project comprise of;

- **Interviews with residents** in highly vulnerable and disaster affected communities in Patuakhali region - To identify hazards, risk and vulnerability factors, and impacts of recent disasters
- **Focus group discussions with local community leaders** - To identify existing risk reduction strategies, community perceptions and requirements,
- **Focus group discussions with policy makers** - To convey findings of local community engagement work and obtain feedback on community concerns

## Recommendations and Further Work

Key concerns identified during consultations with local communities were largely confirmed in focus group discussions with local policy makers. Among others, in addressing the key issues raised regarding cyclone shelters and disaster education, CEREBELLA project seeks to make recommendations towards;

### Guidelines for cyclone shelters

Concerns identified in relation to cyclone shelters included year-round usability, maintenance, access routes and location. Need for locating cyclone shelters in a less vulnerable location within the community after a proper risk assessment, and creating safe access routes were also recommended. In this regard, it is recommended to develop a comprehensive set of guidelines for construction of cyclone shelters.

### Enhancing disaster awareness of school children

Lack of knowledge and training on disaster preparedness, response and what to be done in the event of a disaster among rural communities emerged as a primary factor affecting their increased vulnerability. Providing necessary education on disaster risk and response to school children was identified as a viable, sustainable solution, where the knowledge will be taken forward to the future and also to community at large via the school children.



Lead Institution - University of Salford, UK

Project team:

Professor Dilanthi Amaratunga (Project Manager, CEREBELLA)  
Centre for Disaster Resilience, School of the Built Environment

Dr. Udayangani Kulatunga  
Dr. Richard Haigh  
David Baldry  
Gayan Wedawatta

University of  
**Salford**  
MANCHESTER

Partner Institution - Patuakhali Science and Technology University, Bangladesh

Professor A.K.M. Mostafa Zaman (Team Leader, Bangladesh)  
Department of Environmental Science and Disaster Management

Assistant Prof. Ahmed Parvez  
Assistant Prof. Abdul Ahad  
Raman Biswas  
Md. Nurul Amin  
Md. Shamsuzzoha

