

## Inspiring a Better Urban Future: Practical Nature based Solutions Case Studies

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Prof. Mahua Mukherjee is a Professor and Head at the Department of Architecture and Planning, IIT Roorkee, and former Head of the Centre of Excellence in Disaster Mitigation and Management. A Fulbright Postdoctoral Fellow from Penn State University, she has over three decades of teaching, research, and professional experience. Her expertise spans sustainable architecture, urban climate, and disaster resilience, with extensive national and international contributions to research, training, and policy.

### Abstract:

The presentation introduces Nature-based Solutions (NbS) through the “NbS Umbrella Concept,” which organizes actions into four pillars: Strategic, Spatial Planning, Engineering, and Socio-Economic Performance. It aims to clarify what falls under NbS and inspire future urban applications by showcasing six successful South Asian examples. Each case study is linked to specific NbS pillars, revealing a contextual change in application and highlighting how it fosters climate resilience, disaster risk reduction and ecosystem health.