

# Landslide Studies Re-Setting Research Priorities

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## Landslide Hazard

- Despite growing scientific knowledge, the threat posed by landslides continues to increase—development on vulnerable slopes, severe weather conditions and deforestation
- Landslide losses usually get lumped with more publicized natural phenomena

## Landslide Studies

- Landslide studies in India supported by various research and operational organisations
- Overemphasis on generation of LHZ maps
- Led by GSI, for more than 30,000 Sq. Km, LHZ maps have been generated
- LHZ methods non-standardised
- **Inadequate inputs of local geo-technical, meteorological and hydrological characteristics limit the utility of these ‘uncalibrated’ maps**

## Guiding Experience

- Intensive field-based studies on slopes have helped reduce losses by a factor of 10 in countries like Japan, Hong Kong, USA, France etc.
- Success stories in India are emerging through systematic studies undertaken by institutions like CBRI, CRRI, CSMRS, Jadavpur Univ., IITs
- **Need to build on these highly differentiated experiences, an integrated & coordinated national approach**

## The Need

- **Go Beyond Zonation**
- Instrument selected slopes in different ecological terrains for collecting geophysical, geo-technical, hydrological and meteorological data
- Develop Control Measures and Evolve Mitigation strategies
- Capacity building in the State PWDs
- Strengthening local technical/engineering colleges
- Develop an integrated data base at different spatial resolutions
- **Adopt and Enforce Land Use Regulations**

## Summary

- **Coordination among operational, research and funding agencies to evolve a National Mission on Landslides**
- Prioritize development and proving of cost-effective Control Measures in the field
- **Accessibility and Sharing of Data-an Essential Pre-requisite**
- Integrated approach combining Science, Technology, Regulation and Informed Public Participation
- **Pivotal role of NDMA in Recasting Priorities**