



Landslides in India

A Quick Review





12.6%
of land in India is prone
to landslides

Source: Geological Survey of India



20%
**of landslide deaths across the
world are reported in India**

*Source: International database of
fatal landslides by University of
Sheffield*



28%

of construction-triggered landslides occurred in India

*Source: International database of
fatal landslides by University of
Sheffield*



90%

**of landslides in India are
rainfall induced**

*Source: Geological Survey of
India Data*



Rs 150-200cr
annual monetary loss was
estimated due to landslides in
India

*Source: National Institute of
Disaster Management study in
2011*

Landslides-Risk Aggravating Factors



Intense rainfall, earthquake, volcanic eruption, weakness in the composition and structure of rock and soil are some of the natural causes of landslides.

Intense deforestation, soil erosion, construction of human settlement in landslide-prone areas, roads, or communication lines in mountain areas.

Buildings with weak foundations, buried pipelines, lack of understanding of landslide hazards, lack of warning system also increase landslide risks.

Landslides-Risk Reduction Measures



Plantation in barren areas, especially on slopes with grass cover is an important component of integrated watershed management programme.

Restricting overgrazing, and unsustainable agricultural practice. Construction of buttress beams, retaining walls, and anchors to stabilise the slopes.

Environmental Impact Assessment of infrastructural projects, declaration of eco-sensitive zones, hazard mapping, equipping Local Disaster Management Force.

Measures Taken to Reduce Risk



National Landslide Risk Management Strategy which addresses all the components of disaster risk reduction and management.

The Geological Survey of India has done a landslide susceptibility mapping for 85% of the entire landslide-prone area in the country.

National Institute of Disaster Management provides capacity building support to various National and State level agencies in the field of Disaster Management

Improvement of early warning systems, monitoring, and susceptibility zoning

National Disaster Management Authority guidelines on Landslide Hazard Management



Sphere India

National Coalition of Humanitarian Agencies in India

Supported By:

