LANDSLIDE

MASS MOVEMENT

2

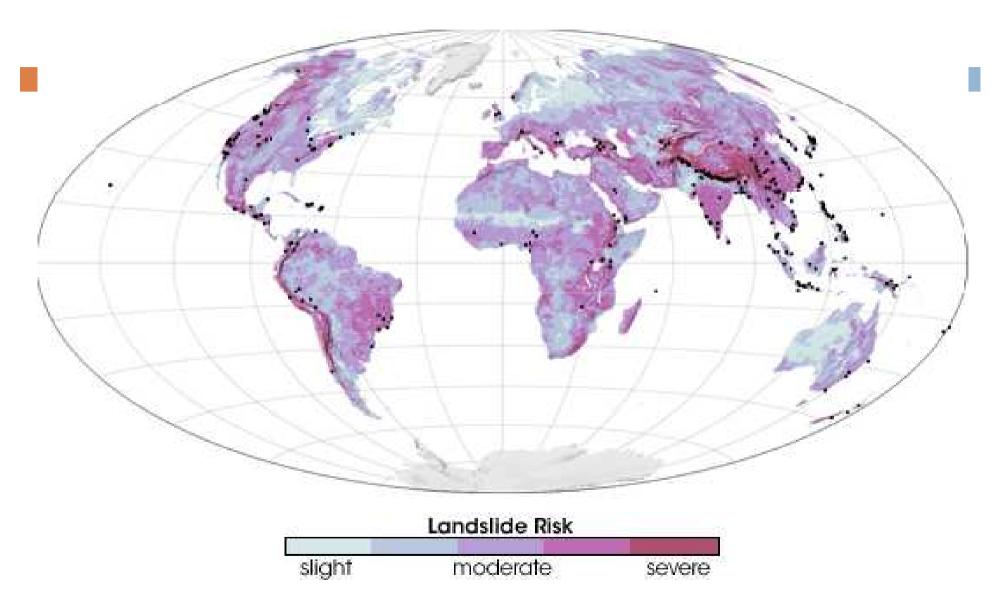
DOWNWARD OUTWARD MOVEMENTS OF MASS (ROCK/ SOIL/DEBRIS) DUE THE GRAVITY

GEOLOGICAL PHENOMENON

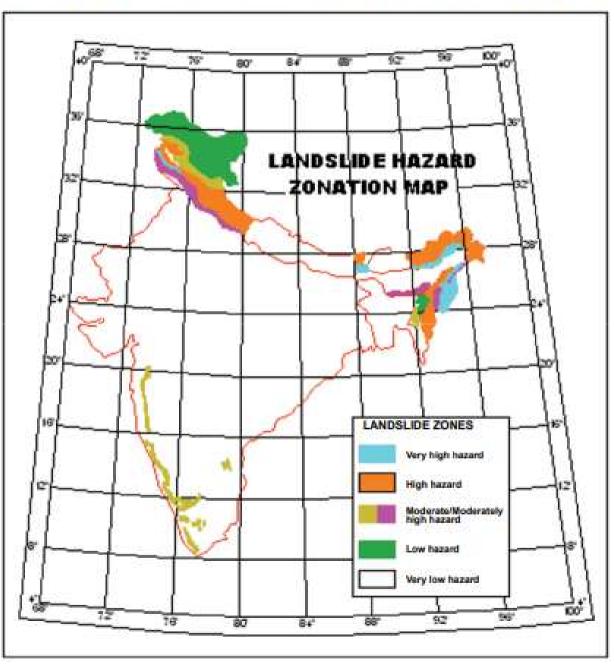
□ SLOPE INSTABILITY

ROCK FALL ROCK FLOW ROCK SLIDE

GLOBAL LANDSLIDE MAP



https://en.wikipedia.org/wiki/Landslide#/media/File:Global_Landslide_Risks.jpg



Landslide Hazard Zonation Map of India (Prepared by GSI)

https://nidm.gov.in/pdf/guidelines/new/landslidessnowavalanches.pdf

CAUSES OF LANDSLIDE

NATURAL CAUSES

EARTHQUAKE VOLCANIC ERUPTION FLOODS CLOUD BURST RAINFALL RAPID SNOW MELT AVALANCHE GROUND WATER FLUCTUATIONS NEOTECTONIC ACTIVITIES

ANTHROPOGENIC CAUSES OF LANDSLIDE

- MINING & BLASTING
- ROAD CUTTING AND CONSTRUCTION ACTIVITIES
- UNPLANNED URBANIZATION IN HILLY AREAS
- □ WASTE DUMPING etc.
- DEFORESTATION
- VIBRATIONS FROM MACHINES AND TRAFFIC
- **CHANGE IN LANDUSE LAND COVER**
- **SEEPAGE**