

# Engineering Geology (12)

- Landslide: movement of rock, soil
- Types: geometry, periodical
- Stability depends on: geology, geological structure, and other factors such as rainfall, drainage, loading etc.

- Trigger for landslide
- (1) groundwater change (dewatering, stopping of pumping, rainfall etc)
- (2) toe removal
- (3) head loading
- (4) weathering leading to strength reduction
- (5) liquefaction (due to vibration)

- Case studies:
- (1) Vajont dam slide, Italy
- (2) Portuguese Bend slide, USA
- (3) several landslides in Korea

- Monitoring methods
- Soil slope vs Rock slope
- Crack meter, Jointmeter, Inclinator, Piezometer, Geophone etc.

- Slope stabilization
- (1) drainage
- (2) support including gabion wall, anchoring, rock bolting, netting etc.