Abstract:
Natural disasters in Afghanistan, including avalanches, earthquakes, floods, and landslides, affect more than 200,000 people each year. Landslides are a primary risk because they often initiate through other hazards, such as earthquake shaking, rainfall and flood related infiltration, undercutting, over steepening, and runoff. This research is developing a landslide hazard package for Fayz Abad District, Afghanistan, a region that experiences intense seismic activity, monsoons, and landslides. Products includes a landslide inventory, landslide susceptibility map, and hazard map focusing on at-risk settlements.

Inventory:
900+ landslides in selected watersheds.
3200+ landslides in Fayz Abad district so far.
Abundant terraines intensely eroded or failed.

Observations:
LSI values well associated with inventory despite true landslide exclusion from model parameters.
Conversion to Hazard Index reduces consideration of highly susceptible areas distant from populations as intended.

Plans:
Seismicity is WIP:implementing as peak ground acceleration excedence of critical acceleration for given lithologies.
Seasonal /monthly models via NDVI (Lansat).

Sources:
HRTE (High Resolution Terrain Elevation); Project Cedar and Rampant Lion II. (2008). Department of Defense, Army Geospatial Center. DVD format.