



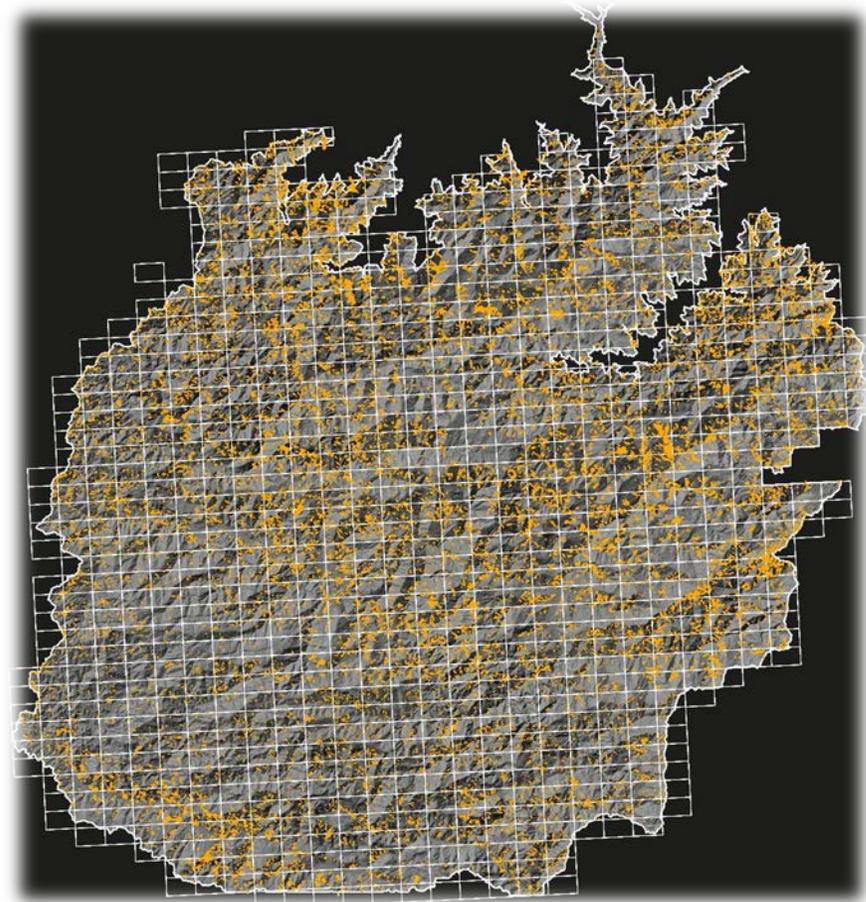
Roads, Landslides and Local Socio-ecological Resilience in Far Western Nepal

Prakash Khadka¹, Wei Liu¹, & Arnulf Schiller²

1. International Institute for Applied Systems Analysis (IIASA), AUSTRIA

2. Austrian Geological Survey (GBA), AUSTRIA

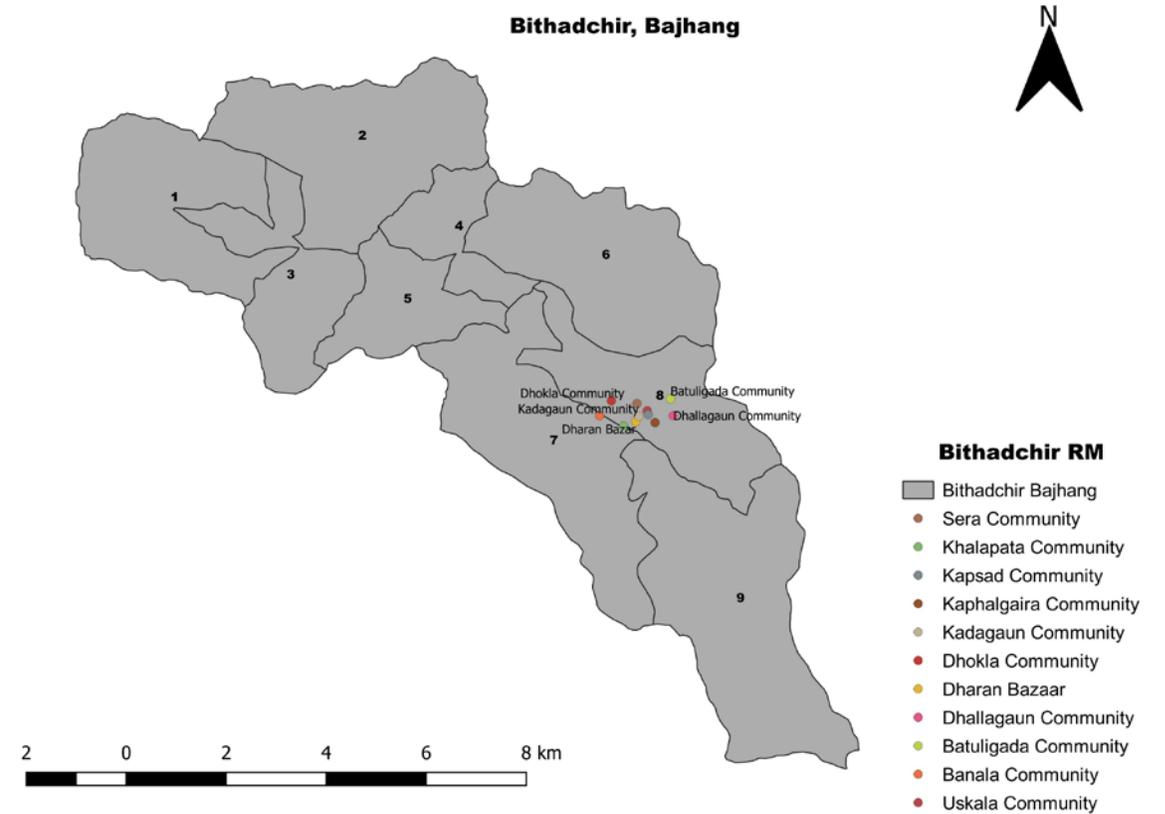
Nepal - A Global Landslide Hotspot



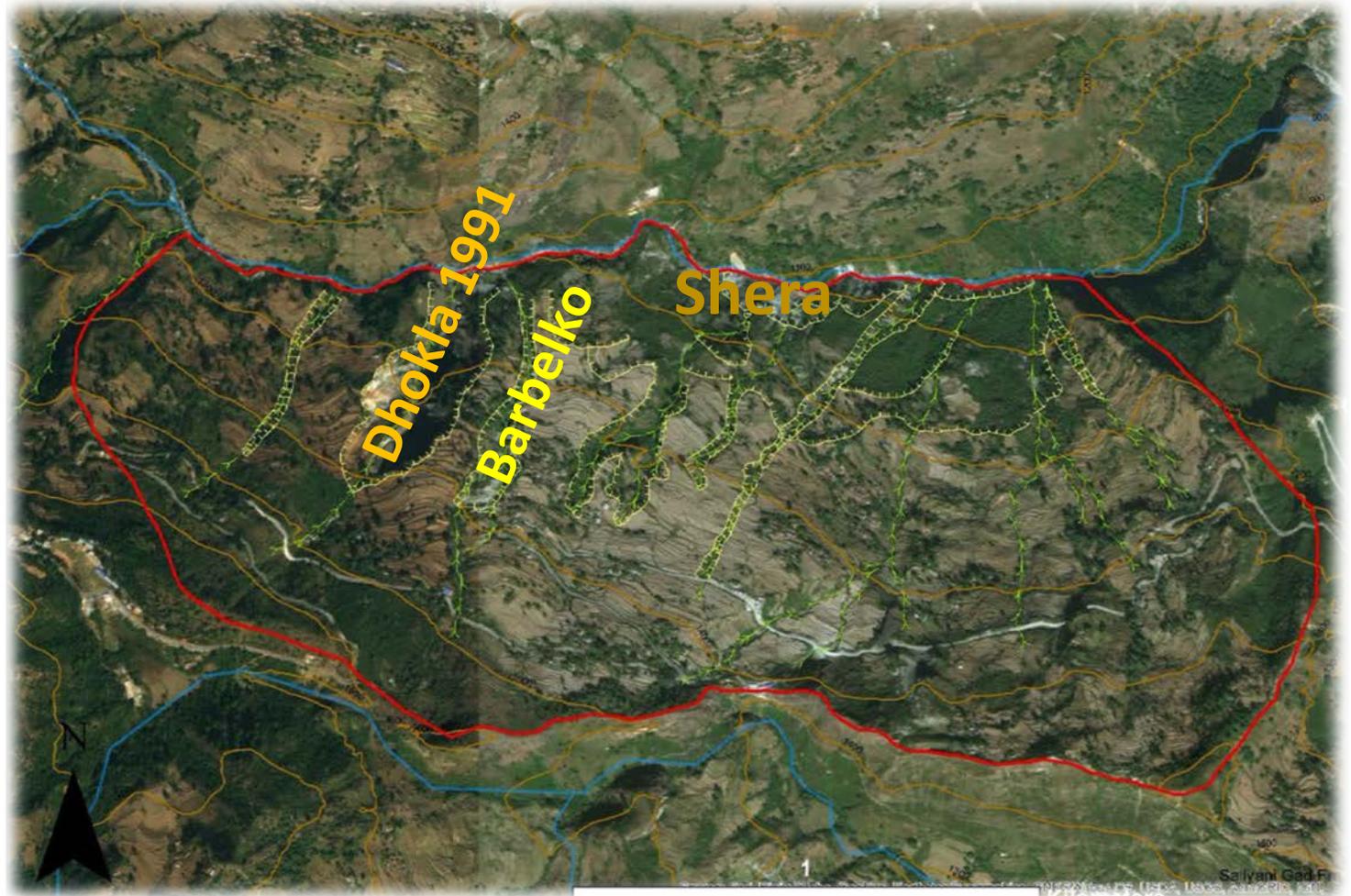
2003-2017, >26,000 landslides identified in Seti River Basin



Development and disasters – Bithadchir, Bajhang



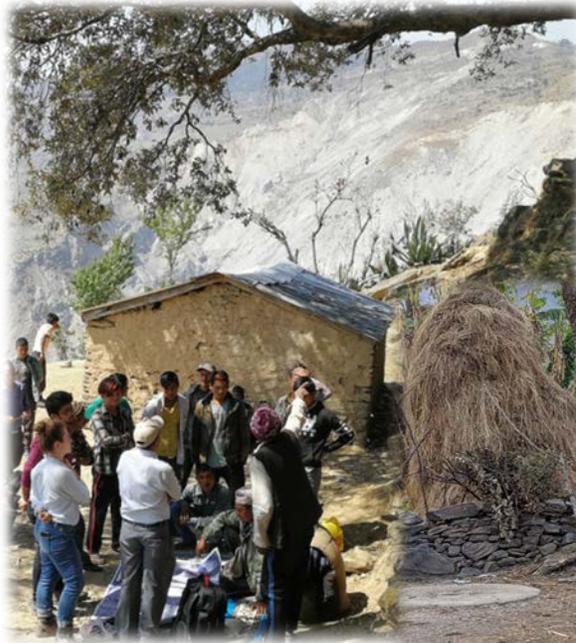
Sunkuda landslides



Sunkuda Landslide area (framed with red line) with 100 m contour lines displayed on a ortho-foto (by World Imager).

Landslide-EVO – Citizen Science for Landslide Risk Reduction and Disaster Resilience building in Mountain Regions

- Participatory and collaborative mapping
- Interviews, focus groups, and household surveys
- Geomorphology and hydro-meteorology

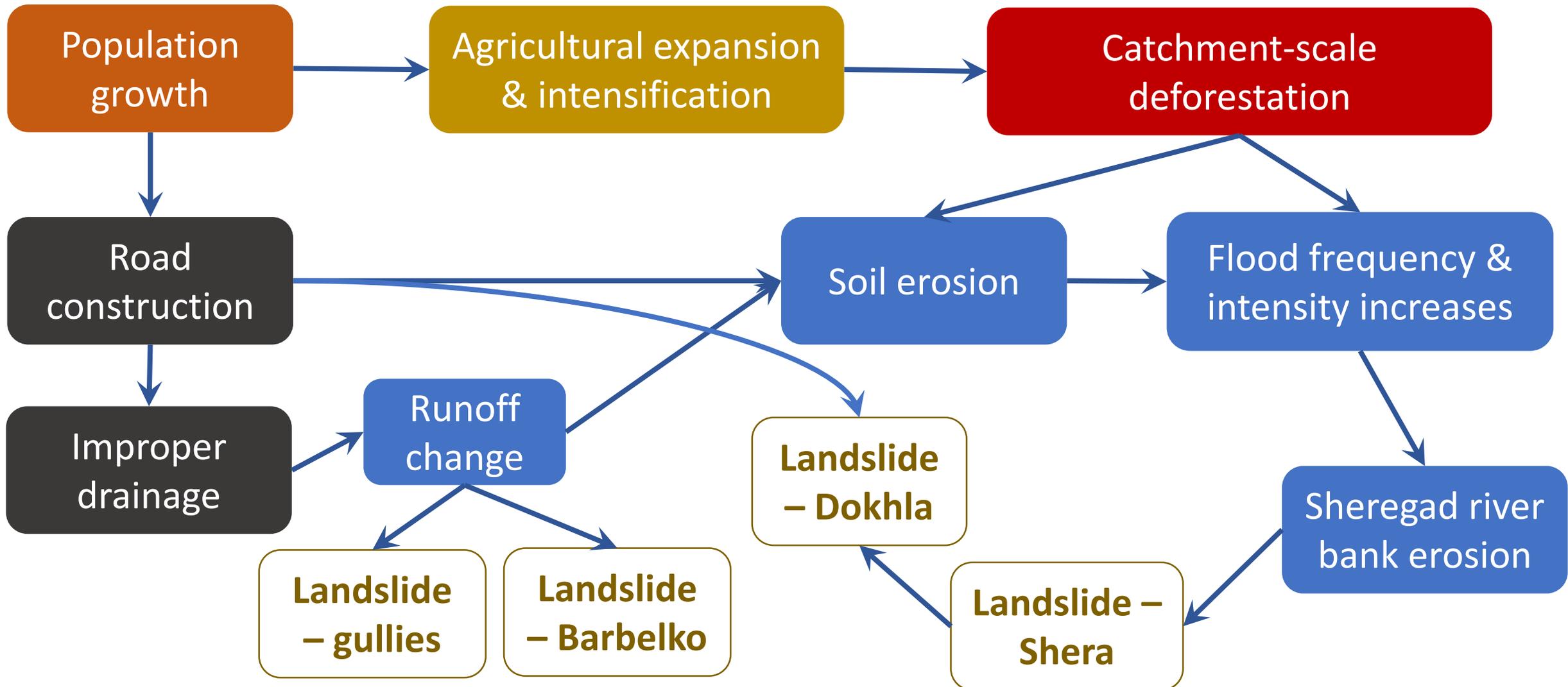




Land cover and land uses

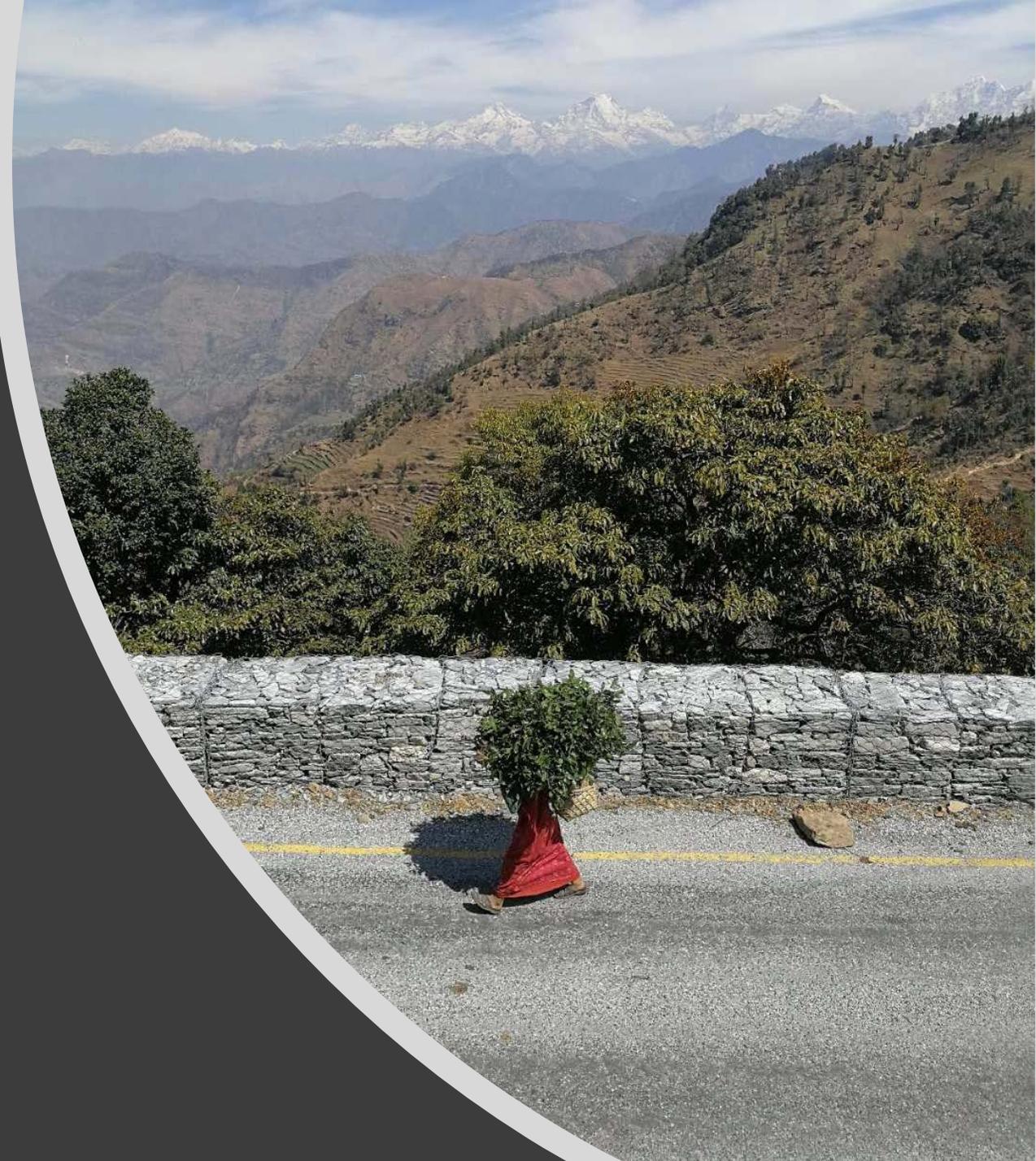


Land use/cover changes and landslides



Impacts, vulnerability and strategies

- Mitigation – water diversion, reforestation
- Coping – financial safety nets, temporary shelter
- Adaptive – new livelihood (e.g., vegetable farming)
- Transformative – permanent or temporary migration



Landslides in Western Nepal in the Age of Changes

New municipalities (2017-2022) & National Disaster Risk Reduction and Management Act

Challenges for research and practice –

- Mismatch of demand and supply
- Unsustainable land uses to meet short-term development needs
- Communicate landslide risk
- Lack of capacity

