Challenges in Strengthening Capacity on 'Developing Adaptation' in Nepal

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Disaster Context of Nepal | Vulnerability

- Global Risk Index 2021: Nepal is ranked as 4th, 11th & 30th (out of 200 countries) vulnerable country to climate change, earthquake & flood hazard/risk, respectively
- What makes Nepal vulnerable?
  - Himalaya are sensitive to **climate change & risk of GLOF**s
  - Young/fragile geology & steep topography makes it vulnerable to **geo-hazard/risks**.
  - Flat topography in the southern Nepal, makes it vulnerable to **flood** hazard/risk.

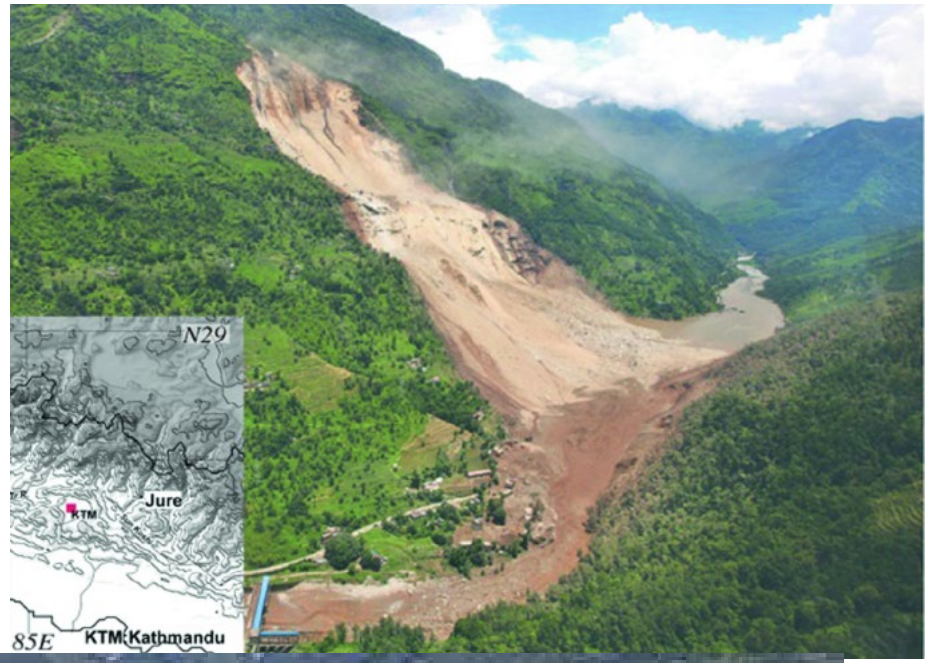
Mountains – Glacier retreat, GLOF risk

Hills – Landslide risks

Terai – Flood risk

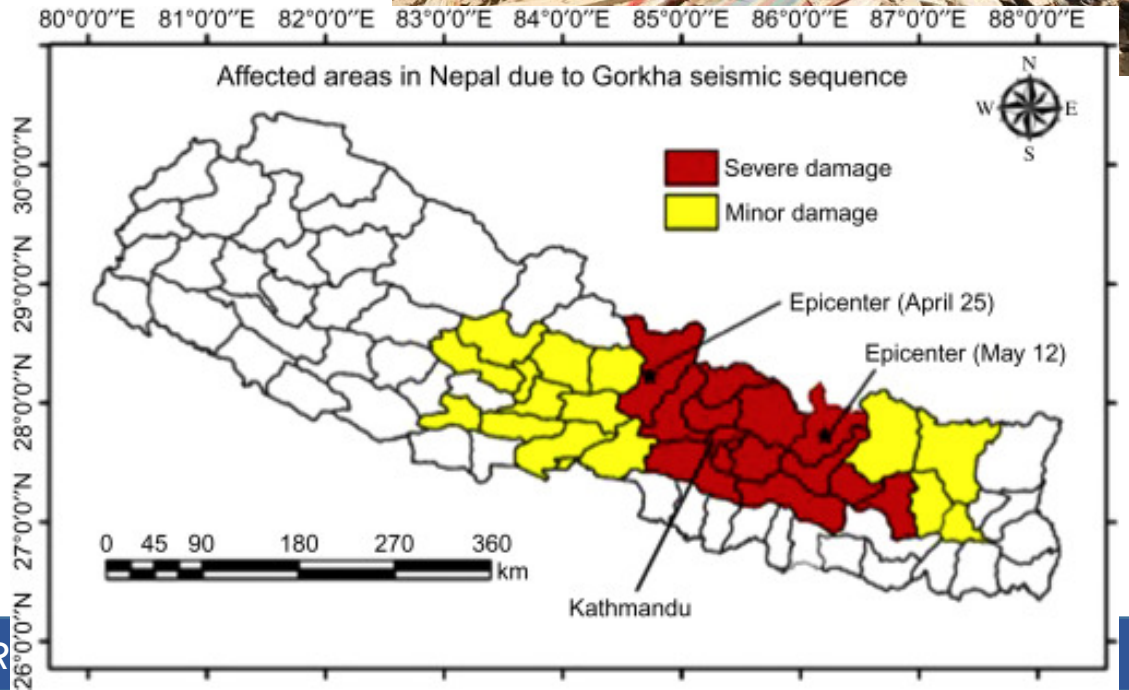
Disaster Context of Nepal | Selected Cases | Jure Landslide 2014

- Location: Jure village, 70km N-E of Kathmandu
- Date: **2nd Aug 2014**
- Type:
  - Rainfall-induced massive landslide;
  - Typical slope failure, with massive rock fragments, sand & soil
- Impacts
  - 156 people were killed
  - An estimated 6 MCM debris raised more than 100m from water level
  - Blocked Sunkoshi river completely forming an estimated 8 MCM lake of 3km length & 300-350 m width



Disaster Context of Nepal | Selected Cases | 2015 Gorkha Earthquake

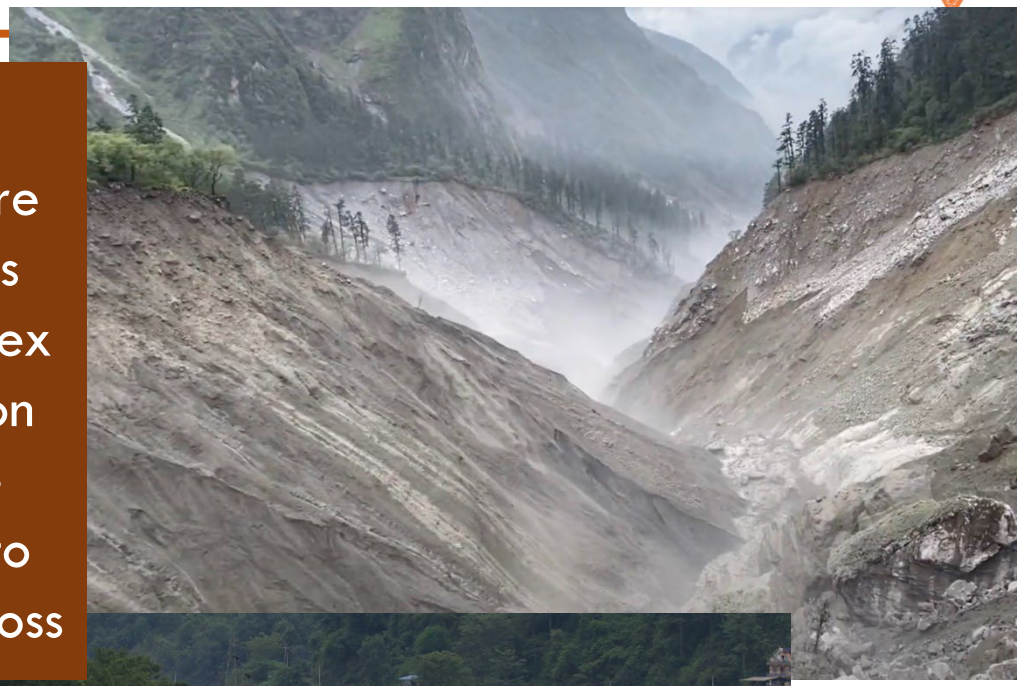
- Location: Epicenter in Gorkha, 76km N-W of Kathmandu
- Date: **25th April, 2015**
- Type: A 7.6 magnitude earthquake
  - >450 aftershocks of magnitude > 4.0; & 4 with magnitude > 6.0
- Impacts
  - ~1/3rd of population in Nepal in 31 out of 75 districts were impacted
  - ~ 9,000 died; ~ 22,000 injured
  - > 0.8 million houses & heritages were destroyed or damaged



Disaster Context of Nepal | Selected Cases | Melamchi Flood 2021

- Location: Melamchi watershed, 30km N-W of Kathmandu
- Date: **15th June, 2021**
- Type:
  - Devastating Debris Flow → **A clear case of Multi-hazard cascading**.
- Impacts
  - Displaced 525 Households
  - Total damage of 337 houses
  - Death/Missing of 25 people
  - Injury of 6 people
  - Damaged **headwork of Melamchi WS project**, thus affecting water supply to Kathmandu

Message: Disasters are evolving as more complex phenomenon with more likelihood to damage & loss



Disaster Context of Nepal | Existing Institutional Arrangements

- Natural Calamity Relief Act 1982
- Local Self-Governance Act 1999
- National Strategy for DRM 2009
- Nepal Risk Reduction Consortium 2011
- Guidance note on Disaster Preparedness & Response Planning 2011
- National Disaster Response Framework 2013
- National Guidelines for Search & Rescue 2014
- Constitution of Nepal 2015
- DRR&M Act 2017 – it sets formal structures, roles, & responsibilities at different levels, including formation of **NDRRMA** (National Disaster Risk Reduction & Management Authority)
  - NDRRMA is an apex coordinating body for DRR&M in Nepal

DRM Challenges in Nepal

- **Continued engagement** & commitment from various government and international agencies → Need to graduate from project model to **programme mode**.

- **Coordination** among partners and various platforms to avoid duplication and maximize use of resources.

- **Specialized information platforms** for basic to advance information on disaster event's statistics, generating hazard/risk information, scenario analysis, and communicating them, etc. (**AP-PLAT may be able to contribute in this endeavor**!)

- **Financial resources** constraints in many instances

- **Technical capacity** limits the scale & scope to implement programs on **adaptation**.

NAPA/LAPA as a Roadmap for Adaptation

- GoN has developed NAPA/LAPA as a roadmap for adaptation
- National Adaptation Programme of Action (NAPA) was formulated in 2010
  - NAPA provides a process to identify priority activities that respond to urgent & immediate need in regard to Climate Change
- National Adaptation Plan (NAP) process outlines 4 processes
  - Lay the groundwork & address gaps
  - Preparatory elements
  - Implementation strategies
  - Reporting, Monitoring & Review
- NAP Process was started in 2015, and still continuing
- LAPA: aims at delivery of **adaptation services** to the most climate-vulnerable areas & people.

Strengthening Capacity is a key for Implementing LAPA!

- Achieving the goal of '**developing adaptation**' requires a focus on capacity strengthening.
- Some challenges associated with **capacity strengthening** are
  - More awareness on the **concept of adaptation**: Many people still consider **Adaptation is not a new thing,** because many interventions suggested in the name of ADAPTATION are more or less same type of activities that people do regularly.
  - Prioritizing adaptation interventions: Strengthening capacity on **evidence-based prioritization of adaptation** is required to maximize utility of limited financial resources
  - Designing capacity strengthening programs **as a process**: One-time activity for capacity strengthening are not sustainable, it needs refreshing and upgrading. Therefore such programs requirs continued efforts in a **programme mode**.
  - Enhancing **access to capacity building related courses** such as **AP-PLAT**, & develop a pool of Trainers in different geographic regions.
  - **Targeting** to a right set of participant is also a challenge.