

Consultative conference on
'Development of multi-hazard disaster risk and loss and damage
assessment framework for HKH'

8-9 December 2022
Kathmandu, Nepal

Natural and human-induced hazards impose serious threats to lives, livelihoods, and infrastructure. South Asia – and within it, the Hindu Kush Himalaya (HKH) – is a major disaster hotspot highly vulnerable to the impacts of hazardous events. Rapidly increasing urbanisation, pronounced climate change impacts, environmental degradation, and anthropogenic factors – including infrastructure development and socioeconomic activities – are exacerbating exposure to risk from natural hazards. Increasingly, disaster events are becoming more frequent, severe, and expensive – in terms of the human, development, and economic costs incurred. Along with an increase in disaster events, the region is experiencing an increase in disasters that are cascading in nature. Accessing, analysing, and visualising the risks of the involved has to be a priority if we are to make evidence-based decisions and build risk-aware societies armed with the information (and informed infrastructure) needed to reduce loss and damage.

Our past consultations with stakeholders such as the National Disaster Risk Reduction and Management Authority (NDRRMA), Nepal have stressed the need to develop a multi-hazard disaster risk assessment framework that is aligned with an overarching loss and damage assessment framework. With regards to glacial lakes, for instance, ICIMOD has developed a methodology to identify and prioritise potentially dangerous glacial lakes from a geophysical point of view while considering the extent of exposure. The latter is a crucial but often ignored aspect.

Considering the need for a larger framework encompassing the HKH, ICIMOD has collaborated with subject matter experts and developed a risk assessment framework using an assessment approach that analyses hazards, exposure elements, vulnerability, and adaptive capacity. It takes into account the growing consensus among experts that adaptation alone will not be adequate when it comes to meeting the speed and the intensity of challenges posed by climate change. This is true particularly for the HKH region, where the resultant loss and damage have been shown to (and will continue to be) significant. A targeted use of data on loss and damage from these disaster events will be necessary to addressing the impacts of compounding and cascading risks. This need for data on loss and damage from disaster events has also been underscored during the COP27, in Sharm El-Sheikh, Egypt.

Responding to this urgent need, our multi-hazard disaster risk and loss and damage framework will integrate multi-hazard risk, loss, and damage of four types of hydro-meteorological hazards – landslide, flood, Glacial Lake Outburst Flood (GLOF) and forest fire. It will emphasise both the biophysical and socioecological aspects of those risks. Preparations for this framework have been made through

extensive reviews of available literature and consultations with risk assessment experts within the ICIMOD and larger ICIMOD-partner networks. All three components of risk assessment – hazard, vulnerability, and exposure – have been considered. In addition, we have assessed the conceptual understanding and methodology for loss and damage, particularly in the context of the HKH region.

The present consultative meeting – jointly organized by National Disaster Risk Reduction Management Authority (NDRRMA) and ICIMOD – will be instrumental to refining the methodology. We will have experts from a variety of thematic groups (and from different countries) discussing and providing inputs. In doing so, they will be guided by the following action-related questions and seeking answers and solutions from a multi-hazard perspective:

- What are the new methodologies related to the Multi-hazard Risk and Loss and Damage Assessment Framework (MHRAF & LnDF)
- What are the challenges to refining these methodologies in the data-scarce region?
- How can the gap between knowledge and practice be addressed?

Although framed largely as a conference, the event will be conducted in both a conference format (for sharing knowledge and information) and a workshop format (for discussion on the methodology).

Objectives

Our broad objective is to develop a multi-hazard risk and loss and damage framework for the HKH region.

Specific objectives include:

1. Presentations on the multi-hazard risk assessment and loss and damage framework developed by ICIMOD
2. Learning from regional and international experts on existing methodologies and frameworks
3. Discussions on existing frameworks applicable to the HKH region
4. Understanding challenges and capturing gaps