

# **PhD position in multi hazard risk modelling and assessment in the Himalaya of Nepal (open to Nepali citizens only)**

## **Start of employment: 01.06.2025**

In the framework of a new Swiss-Nepali project funded by the Swiss Agency for Development and Cooperation (SDC), we are looking for a motivated and ambitious Nepali student to undertake a PhD based at University of Zurich (UZH). The thesis will be jointly supervised by the Institute of Engineering, Tribhuvan University, and frequent research visits and fieldwork in Nepal are anticipated. Close engagement with other partner institutions in Switzerland and Nepal is also foreseen.

The overall project focusses on developing a multi hazard risk assessment model and supporting the design of a multi hazard early warning system approach in the Koshi Province of Nepal. UZH leads a work package focusing on modelling of glacier and permafrost related hazards and ensuring this science feeds into the development of Disaster Risk Management Plans. Training and capacity building activities are integrated across all project work packages.

Within this overall framework there is some flexibility to tailor the PhD thesis to the strengths and ambitions of the student, but core tasks may include:

- Developing new probabilistic approaches for modeling of cascading glacial and permafrost related hazards (ice-rock avalanches, GLOFS, debris flows), to better quantify the risk to critical infrastructure and provide a robust basis for cost-benefit analyses and decision-making.
- Integrating results with more traditional scenario-based hazard modelling, and data from other project partners on floods and landslides, to compile multi-hazard maps.
- Integrating local and indigenous knowledge into the multi-hazard risk assessment.
- Contributing to the scientific basis for the design of remedial measures, early warning systems, and other disaster risk management strategies.

Beyond the core research tasks, the student will have opportunities to contribute towards and develop new skills in project management, training and capacity building, and outreach activities.

## **Your profile**

- Master degree in the fields of earth or environmental sciences, geography, engineering or related disciplines, with experience in disaster risk management or climate change adaptation desirable.
- Experience with hazard and risk modelling is an advantage, but a willingness to learn and explore new methods is equally welcome.

- Experience working in mountain environments, and familiarity with the Koshi province would be an added bonus.
- Fluent in English and Nepali.
- Confidence and diplomatic skills to interact with diverse stakeholders and partners, while prior experience working with World Bank, Asian Development Bank or SDC would be a major advantage.
- Self-motivated, practical, pragmatic, and flexible.
- Work independently and proactively, as well as in a team.
- Nepali citizen (this strict restriction is defined by the project requirements of the donor).

## What we offer

- The PhD student will be part of the research group EClim (Environment and Climate: Impacts, Risks and Adaptation) at the Department of Geography of UZH, an internationally renowned group in the field of high-mountain hazards and climate adaptation. EClim and the Department offer a supportive, inclusive and diverse working environment.
- The possibility to work at the interface between research and on-ground disaster risk management, within a large, multi-partner and multi-disciplinary project.
- Your PhD will be part of a structured programme in the [Graduate School of Geography and Earth System Science](#).
- Pay according to the regulations of the University of Zurich for [PhD Candidates](#) (at the standard employment level for doctoral students of 80%)
- Holiday entitlement of 25 days plus public holidays per year.
- Regular supervision and mentoring.
- Opportunities for research stays and exchanges both in Switzerland and Nepal.
- Support for publications, conferences and workshops.
- UZH offers [attractive working conditions](#) and opportunities for further education

We aim for a start date of June 1st 2025, or as soon as possible thereafter. The appointment will be for up to four years, with an initial appointment for three years and a one year extension.

## Application and further information

To apply, please upload the following documents (**as a single PDF**) in English

- 1) A motivation letter, explaining why you want to apply for this position, and demonstrating how you fulfil the profile listed above.
- 2) A CV and the contact details for two referees.
- 3) Degree transcripts.

The deadline for applications is **30th April 2025**. Review of applications will commence thereafter.

For questions and queries feel free to get in touch with Simon Allen ([simon.allen@geo.uzh.ch](mailto:simon.allen@geo.uzh.ch)).