EXPERT ON HIMALAYAN MELTING GLACIERS
IN THE
GEOGRAPHY COLLOQUIUM

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Will Discuss

Notes from the Field:
Some Recent Geologic and Climate Change
Impacts on Nepal’s Glaciers

The presentation reviews the results of recent research regarding the impacts of three geologic and climate change-related events upon Nepal’s glaciers and glacial lakes, including: (a) the 25 April, 2015 earthquake and aftershock, (b) englacial conduit floods from the Lhotse and Khumbu glaciers, and (c) a rockfall-induced glacial lake outburst flood (GLOF) in the Barun valley in April, 2017. The 2015 earthquake resulted in only one relatively small GLOF, but appears to have de-stabilized lateral and terminal moraines based upon the widespread presence of new cracks, slumps, shifted or displaced boulders, and landslide activity. Englacial conduit flood activity from actively receding glaciers appears to be increasing in the Everest region, and may signal the need for enhanced zoning and other risk mitigation measures. The trigger of the April 2017 GLOF in the upper Barun valley was a massive landslip from Saldim Peak above the comparatively small (< 0.1 km²) Langmale glacial lake, and illustrates the complexity of geologic, hydrologic, and climate change processes at work in today’s High Himalayan regions. Collectively, the study highlights the importance of conducting integrated field studies of recent catastrophic events as soon as possible after they occur in order to best understand the complexity of their triggering mechanisms, resultant impacts, and risk reduction management options.

Friday, October 30th
3:00 - 4:15 PM

Online: https://minnstate.zoom.us/j/99070205470

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