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The debris cover surface of Ponkar glacier: a laboratory for learning

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Understanding the evolution of debris-covered glaciers, including their evolution over time, the distribution of surface features such as exposed ice walls and supraglacial lakes, and their contributions to glacier ice melt and to glacier-related hazards such as Glacier Lake Outburst Flood (GLOF) events requires an interdisciplinary approach, with a combination of remote sensing methods and collaborative fieldwork.

Since 2017, the IGCP 672 /UNESCO project led has been focussing on the transfer of scientific knowledge on monitoring debris-covered glaciers to local partner institutions in high Asia through trainings, workshops and field collaborations. Our long-term goal is to disseminate methodologies developed under this project to local institutions in high Asia and to embed scientific knowledge into local communities. Here we report on recent capacity building activities held within the context of this new project involved local participants from universities in Nepal and Sikkim. The training included remote sensing/GIS modules, temperature measurements, sediment logging and drone surveys of the ablation zone, which will allow us to better quantify the surface features and their evolution.