Flash floods and their cascading tumults: an example from Teesta River valley, Eastern Himalaya, Sikkim, India

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Rapid melting of snow/ice and heavy rainfall have resulted in the formation and expansion of moraine-dammed lakes, creating a potential danger from glacial lake outburst floods (GLOFs). Around 9:30–10 p.m. on 3 September 2023, the South Lhonak Lake, a glacial lake in the upper reaches of Sikkim Himalaya, burst its banks following a cloudburst in the catchment area of Lachung River. The water, with all the debris it picked up along the way, rammed into the dam, causing parts of it to give way. This led to massive flooding downstream. This catastrophic event changed the landscape in many parts of the upper reaches of Sikkim, making the whole region more fragile and vulnerable.

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