

The cases and their aspect of glacier lake outburst in the Himalayan range

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The risk evaluations by previous studies for glacial lake outburst flood (GLOF) have been conducted on shaky ground. "Dangerous glacial lake" means many of different by various researchers and agencies. One glacial lake in Sagarmatha region, eastern Nepal is examples of that. Because the lake which has been considered as both side, very dangerous and not so dangerous. The former side, international donors and researchers spent precious time and money in recent for protection work. In order to give reliable evaluations, further detailed information and considerations are required.

The author had reported the past outburst events and occurrence tendency in the Bhutan Himalayas (an abstract paper in the JpGU 2012. Global Environmental Research, 16, 69~80). Furthermore, I expand the area of observation into the Himalayan range. As the recent work, following results were obtained, 1) Most of outburst events had occurred till the 1970s in the Himalayan range. It means that glacial lake outburst is a part of transition phenomenon between from the Little Ice Age to the present climate, rather than just a recent global warming. 2) The location of outburst event is concentrated in the central and eastern Himalayas (Bhutan, Sikkim and Eastern~central Nepal). 3) Flood records in the previous described data and local information is not always glacial lake outburst floods.

In this presentation, I will show the other condition and tendency of occurrence of outburst events which are related to the basement topography and so on.

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