

**The need for community involvement in glacial lake research:  
a case of Imja Glacial Lake Project, Nepal**

(氷河湖研究におけるコミュニティ参加の必要性：  
ネパール、イムジャ氷河湖プロジェクトの事例)

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Glacial lake outburst floods (GLOFs) are among the most serious high mountain hazards for the local communities in the Himalayan areas. Imja Glacial Lake, located in the northeastern corner of Sagarmatha National Park, Nepal, has been identified as one of the most serious potential GLOF threats in the Himalaya because of its accelerated expansion. In order to prevent GLOF that may happen from Imja Glacial Lake, Nepal National Adaptation Plan of Action (NAPA) implemented the Community Based Flood and Glacial Lake Outburst Risk Reduction Project (CFGORRP). The major outcome of the project is reducing human and material losses due to a potential Imja GLOF. This outcome was achieved through lake level lowering, monitoring of the lake, installation of an early warning system, and institutionalization of GLOF risk management.

As early as the 1960s, Imja Glacial Lake has attracted scientists' attention and has become one of the most studied glacial lakes in the Himalaya. There are more than 20 studies that have examined Imja Glacial Lake. On the contrary, limited open literature to date has reported the social and humanistic perspectives on GLOFs, and social studies of GLOFs have emerged only in recent years.

This study examined attitudes of the local people and project-related people to the CFGORRP through questionnaire survey and interview survey, and communication problem between local people with project-related people and researchers. Field survey was conducted in two periods, namely between April 2018 and May 2018, and in December 2018. Face-to-face questionnaire surveys in total with 223 local people and interview survey with 3 project-related people were conducted. The results show that 86% of the respondents' attitude towards the CFGORRP is either very positive or positive. Seventy-six percent of the respondents and 67% of project-related people think that it was necessary to have more communication between local people and project-related people before the implementation of the CFGORRP. Respondents feel more positively to researchers who came to Imja Glacial Lake for the CFGORRP than researchers who came to Sagarmatha National Park for various kinds of research. As the results demonstrated, the communication between local people with researchers and project-related people is not efficient enough. Additionally, there is a need of involving local communities before any action is taken place, not only when glacial lake research is conducted, but also when other research such as climate change and environment issues is conducted.