

HDS025-15

Room:103

Time:May 22 14:45-15:00

## A social survey for GLOF disaster mitigation in Bhutan

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A social survey for GLOF was carried out in central Bhutan in May 2010 as a part of JICA/JST GLOF project. The survey was focused on the awareness and the measures to mitigate the disasters.

The survey areas were along Mangdechhu, the target area of the project, and along Pnatsangchhu and Bumthangchhu, the neighboring rivers of Mangdechhu. Interviews were done using questionnaires prepared for local governments, schools and community residents. The contents of questionnaires were such as population, disaster prevention policy, emergency communication network (only for local governments), annual income, communication measures (only for community residents) and history of disaster, disaster awareness for all cases.

Key findings of the survey include:

- Generally awareness of GLOF of community residents was high, but disaster prevention education, disaster prevention measures and building communication network were still not enough. This kept them anxious about the disasters.
- Particularly in downstream of Mangdechhu, southern Bhutan, the ownership of communication tools like radio or cell-phone was comparatively low, may be because of low income of local residents. And constructions of infrastructures such as road network and communication systems were poor. This made the area vulnerable for the disasters.
- On the other hand local government and residents of Punakha and Wangdi, that suffered 1994 GLOF, showed higher awareness of the disasters as well as infrastructures compared with the other areas.

Keywords: Bhutan Himalaya, glacial lake, flood, GLOF, disaster prevention, social survey