pamir

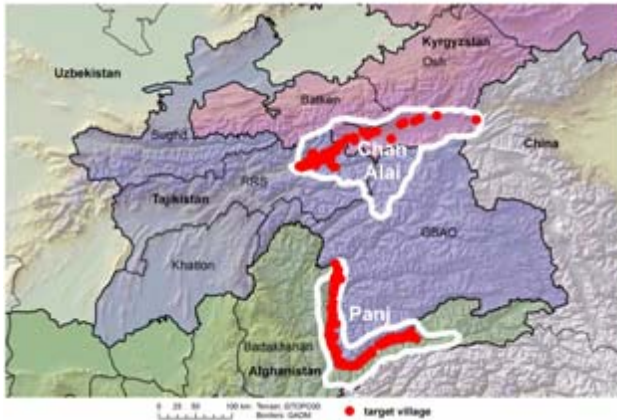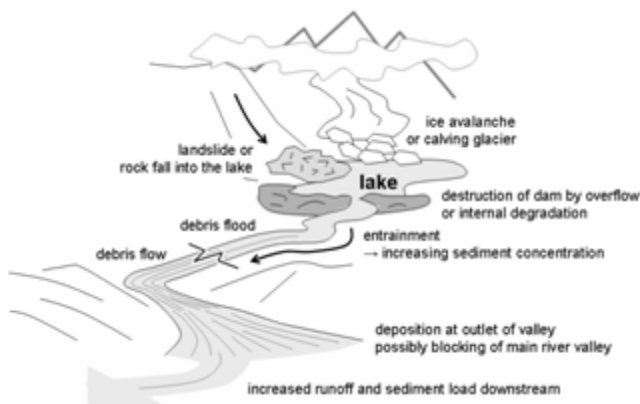Poverty Alleviation by Mitigation of Integrated High-mountain Risk

Project layout

Duration: 01/2011 to 12/2013
Funding: EuropeAid

Project areas are the Chan-Alai Valley (Tajikistan and Kyrgyzstan) and a section of the Panj Valley (Tajikistan and Afghanistan). The areas are located in the Pamir and Tien Shan, which are heavily glaciated and culminate above 7000 m.

Sub-processes possibly involved in glacioal lake outburst floods (GLOFs)

Hazard identification

⬇

Impact assessment

⬇

Risk mitigation

Background

In central Asia, communities in peripherized mountainous border regions face difficult living conditions and suffer from lacking governmental support. The means for the mitigation of mountain geohazards are limited. However, the communities have learned to deal with high-frequency-low magnitude hazard events.

On the other hand, there is very little awareness of remote geohazard events, originating far up in the mountains but causing major disasters in the valleys. Such events include glacial lake outburst floods (GLOFs) conditioned by glacier fluctuations and process chains induced by earthquake-triggered landslides.

Objectives

To generate and to transport knowlege on high-mountain hazards and the connected risks in order to contribute to more effective risk mitigation strategies..

Tasks and Methodology

Natural-scientific and social-scientific approaches are combined:

1. Identification of source areas of high-mountain geohazards: a first screening is done with GIS/Remote Sensing tools, critical areas are then surveyed from the helicopter and in the field

2. Impact scenarios of possible hazardous events are derived, employing computer modelling tools

3. Based on the findings from the hazard assessment, risk mitigation measures like awareness-raising and preparedness-building as well as the implementation of further measures will be conducted directly in the communities.