Validation and Optimization of Dam Break Flood Risk Mapping Based on Field Test Cases in Armenia

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- Chapter
- First Online: 01 December 2020
- **148** Accesses

Abstract

The Alliance for Disaster Risk Reduction (ALTER) project began in February of 2018 with the goal of establishing public-private partnerships in Armenia to address flood risks that stem from water and mine dam failures. During the project duration, targeted work packages including extensive research, consensus building, technological implementation, and dissemination have been implemented covering flooding risk analyses and modeling for tailing storage facility and reservoir dam failures in the pilot areas of the Syunik and Lori regions. Based on the risk identification for the Kapan, Sisian, and Akhtala communities, disaster risk management and response plans were developed, tested, and refined during table top exercises conducted in those communities. Disaster response field exercises of unprecedented scale were implemented in Sisian, Kapan, and Akhtala involving more than 1300 participants. Public-private partnership MoUs were the logical outcome of the disaster risk management efforts at the local level.

Keywords

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