



Sustainable Places Projects: Resilience to Earthquake-induced landslide risk in China (REACH)

REACH is an interdisciplinary collaboration between social scientists, human geographers, geologists and engineers seeking to understand resilience and recovery of communities that suffer persistent landslide hazard caused by large earthquakes.

The NSFC-Newton Fund-NERC-ESRC-funded collaboration between the Sustainable Places Research Institute and the Chengdu Institute of Technology State Key Laboratory of Geohazard Prevention and Geoenvironment Protection will focus on recovery from the 2008 Wenchuan Earthquake, where post-earthquake landslide deaths and infrastructure loss has been significant.

After an earthquake, rainfall can cause significant landslide activity within the new debris created by the shaking. These landslides can persist for decades after the earthquake, affecting the ability of communities to recover from disaster. The limited availability of flat land in mountainous, earthquake prone landscapes means that often communities rebuild in areas that are prone to landslides, leading to a cycle of loss and rebuilding that limits recovery.

Our study seeks to understand the ability for communities to “bounce back” from these persistent and ongoing hazards. Termed “disaster resilience”, our project focuses on one of the most destructive earthquakes in history, the Wenchuan Earthquake.

Our Chinese focus is of particular importance, as rapid economic expansion and urbanization has increased Chinese susceptibility to major disasters, including the 2008 Wenchuan Earthquake.

Using and improving the large landslide databases created after the Wenchuan Earthquake the research team will create hazard maps to investigate the role of particular storms and aftershocks in creating landslides and use local census data to understand social vulnerability.

Combining these approaches the team hope to understand the physical and social mechanisms driving resilience in this area.

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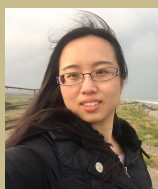
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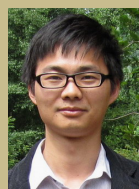
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