



Risk assessment of natural hazards along silk road

Peng Cui

Institute of Mountain Hazards and Environment, Chinese Academy of Sciences

Silk Road, beginning in the Han Dynasty (207 BC-220 BC), covers more than 70 countries and 4.4 billion people (63% of the world). For centuries, Silk Road has been playing an essential role in connecting the East and the West, and the exchanges of the trades, science technology, and civilization. However, due to the active underlying geological structure, rapid tectonic uplift, and the obvious climate differences, natural hazards, especially earthquakes, landslides, and debris flow, occur frequently there and put threats on both social development and livelihoods along the Silk Road. Therefore, understand disaster risk and carry out a disaster risk assessment is essential to reduce the potential damage from disaster and ensure a sustainable developed for countries along the silk road. The major challenges to conduct risk assessment along silk road is that large gap is represented by the lack of a common geological and meteorological background data on natural hazards along the silk road as well as the large area of assessment region. Therefore, an international collaboration of scientists and practitioners are required to create a database of different natural hazards, study the new characteristic of natural hazards under climate change and develop method and tools for the risk assessment. It is also proposed to conduct the risk assessment at different scales and serve different purposes: 1. regional scale that covers the whole silk road, countries scale that covers countries suffered from different hazards and localized scale where the analysis can be supported by rich data and forensic study. With a better understanding of disaster risk, we can ensure a safe, green, and resilient Silk road.