

Interactive comment on “Epic landslide erosion from mountain roads in Yunnan, China – challenges for sustainable development” by R. C. Sidle et al.

Anonymous Referee #3

Received and published: 3 August 2014

Mountains are steep and high in relation to their surroundings. In the mountains, hazard and risk are omnipresent. Intense seasonal precipitation during monsoons in the Himalayas can trigger hazard events at different elevations. Badly designed and constructed infrastructure can lead to mountain disasters, especially road built in the steep terrain. This manuscript describes the epic landscapes from road development in the upper Salween River Basin of eastern Himalayas with very good field method and data support.

The paper has started with very good introduction about the Himalayan degradation debate: human vs. natural processes of degradation. The paper however narrows

C1760

down terrains-landslide relationship without consideration of other factors such as climate. It would be great to see how the different factors such as climate change such as rainfall intensity, vegetation and road building interact together, please see example from Ma et al. (2014) newly published in Hydrol Earth System Science 18: 1979-1994. It would like to see some level of magnitude of rainfall (including frequency and intensity) analysis to 312 landslides. There is a lot of literature on vegetation (the roots of trees as anchoring role for landslide control, while addressing potential framework for sustainable development. It would be great to see the consistence from Introduction to Discussion for this paper.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 2, 3887, 2014.

C1761