

## Landslide Hazard Zonation along NH 54A from Lunglawn to Zotlang in Lunglei, Mizoram, India

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### Abstract

*The state of Mizoram in North East India is a landslide prone one. It is a landlocked state bordering Myanmar to its east, Bangladesh to its west and the State of Assam to its north. In recent years Lunglei witnessed two devastating landslides in 2018 and 2019 with numerous loss of life and property. The loss incurred from natural and man-made disasters in other areas in the State too has led to tremendous loss of money to the exchequer, particularly landslides. Many of the landslides are results of combinations of geology, geomorphology, topography and anthropogenic activities. The seasonal rains served as triggering causes of these landslides on many occasions especially during the monsoons.*

*Landslides in general have caused numerous casualties with immense economic losses and they will continue so in this hilly and mountainous region like Mizoram unless sound and effective scientific decisions and measures are not adopted by the people and the authorities. Identification of landslide hazards of urban areas situating on tops of mountainous ridges like Lunglei is essential for minimizing losses due to landslides and other mass movements. This study encompass an area of 8.86 sq kms transversing the Lunglei town from Lunglawn to Zotlang localities with the NH54A being buffered with 500m on both sides in homogenous domains and the obtained results classify the study areas ranking them accordingly to the potential landslide hazard threat they can cause in future.*

**Keywords:** Landslides, hazards, zonation map, ArcGIS10.3, geology, Lunglei.