

# عنوان مقاله:

Slope Stability Analysis and Preventive Actions for a Landslide Location along NH-oa in Himachal Pradesh, India

## محل انتشار:

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### خلاصه مقاله:

The Himalayan mountain range is susceptible to slope instability in numerous areas due to its complicated topography, because of the existing natural conditions and human influence and intervenes. National Highway-∘∆ is considered in this work. The area under investigation located in Rampur, district Shimla, Himachal Pradesh is evaluated for slope stability. The primary purpose of this work is to maintain the slope's stability in order to protect NH-∘∆ and the neighboring three-sided residential structures. Following the site visit, the geotechnical investigations in the form of bore holes and laboratory tests are conducted. Analysis of slope stability is commenced after interpreting the geotechnical study report. For an analytic slope stability, the studied area is divided into three sections, labelled At-Al', BI-BI', and CI-CI'. Taking into account the geotechnical aspects of the specified research region, the mitigation design parameters for the area and the circular slip failure are calculated using the numerical modeling techniques. The software computes the safety factor for both the static and dynamic situations. As a result, preventative measures .and a few improvements are suggested

# کلمات کلیدی:

Slope Stability, modeling, Landslides, National Highway-ob

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