

The Potential for Landslides in Tongluo Industrial Park

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Abstract

Taiwan is located in the Pacific Ring of Fire, with 70% of its topography dominated by mountains. During heavy rains, landslides frequently cause harm to people and property. Therefore, assessing the potential for landslides in mountain areas is a crucial task. In this study, qualitative analysis was used to examine the slopes, retaining walls, drainage systems, and other structures in industrial parks in Taiwan. Physical examinations and assessment questionnaires regarding the major disaster-causing factors and formulas were used to calculate the sensitivity of each block or grid. These results were used to formulate a disaster prevention and management plan and to present suggestions for future measures regarding hillside or mountain area disaster-potential assessment in the hopes of assisting in effectively mitigating or avoiding the occurrence of future incidents. These results can be used as references for management units when making decisions.

Keyword : Landslide; industrial park; slope analysis; soil loss estimation; retaining wall; risk management