



## **Urban infra vulnerability assessment by physical landslide damage associated with rainfall**

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Landslide vulnerability assessment by physical force is proposed with rainfall. The Methodology is developed based on the initiate model(TRIGRS) and runout model. The initiate model calculates which cell should be a starting point of the landslide hazard. And runout model calculates the area where the landslide occurred and how much force is generated. We consider both models to reflect rainfall which affects the probability of landslide occurrence and force. The results of the landslide susceptibility assessment were compared with the landslide inventory, and the proposed approach demonstrated good predictive performance. The result can warn about landslide hazard zone that made by proposed model and can be reflected in future infra plans for the area.