災害高風險縣市之坡地村里耐災程度評估

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摘 要 本研究主要之目的乃在建立一套評估社區防災整備及環境條件良窳的方法,各評估項權重係利用專家問卷的方式訂定之。評估對象包含新竹縣、台中縣及南投縣之土石流潛勢溪流村里,利用在本研究發展之社區防災整備工作檢核表評估各村里之防災整備績效,另外藉由GIS 技術來處理社區環境條件,透過土石流潛勢溪流危險度及 Logistic 迴歸所得之崩塌潛感度等社區環境指標的訂定以進行評估,將社區防災整備結合社區環境條件,建立社區耐災程度風險評估模式以評估社區對於災害的承受度。本研究以 1996 年賀伯颱風至 2004 年敏督利颱風所造成的災害傷亡與評估結果進行討論,作為未來強化防災工作落實與效率提升之依據,進而減少生命財產的損失,達到減災的效果。

關鍵詞:崩塌潛感度、耐災程度、Logistic 迴歸。

Disaster Resistant Hillslope Villages Assessment in High Risk Counties

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ABSTRACT This study presents a preparedness assessment for evaluating the performance of hillslope village disaster prevention and environment planning. For this, a professional questionnaire was used to determine the weight of each evaluating factor. In this paper, the villages in Hsinchu, Taichung and Nantou Counties with debris flow torrents were estimated, and the preparedness of disaster prevention for these villages was evaluated by an assessment check list. Using GIS technology and logistic regression analysis, the danger indices of debris flow torrents and the landslide susceptibility of each village was determined. Thus, this study established a risk assessment model to evaluate the capacity for disaster resistance of hillslope villages. This study reviews casualties caused by disasters due to Typhoon Herb in 1996 and Mindulle in 2004. In addition, the results of assessment through this model are discussed with the aim of developing the references for implementation, raising the effectiveness of disaster prevention methods in the future, and reducing the loss of life and property.

Key Words: landslide susceptibility, disaster resistant capacity, logistic regression.

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