汶川地震坡地災害勘查與集集地震比較探討

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摘 要 2008 年 5 月 12 日中國大陸四川省汶川縣於當地時間下午 2 點 28 分,發生規模 Ms8.0 的地震(以下稱汶川地震),震央位於北緯 31.0°、東經 103.4°,位於成都市西北西 方約70公里,距離重慶市約360公里,震源深度約19公里。據中國國務院抗震救災指揮 部統計汶川地震已造成四川、甘肅、陝西、重慶、雲南、湖北、河南、貴州、山西、湖南 等 10省(市)417個縣(市、區)受災;造成 69,225人遇難,374,640人受傷,失蹤 17,939 人。房屋倒塌超過778 萬間,房屋損壞超過2459 萬間。四川省境內因汶川大地震影響, 估計造成了超過 130 個堰塞湖,其中 34 處有災害危險的堰塞湖,倘若潰堤,將危及下游 百萬人的性命,對於地震所引致山坡地之崩塌與堰塞湖更是二次災害發生重要的原因。本 文以汶川地震重大坡地現地調查結果與 921 集集地震進行相關比較,探討汶川地震未來坡 地災害所可能面臨之問題。

關鍵詞:汶川地震、集集地震、堰寒湖、減災策略、二次災害。

A Comparsion of Wenchuan Earthquake with Chichi Earthquake for Slopeland Disaster Investigation

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ABSTRACT The Shchuan earthquake was also known as Wenchuan Earthquake, which measured at M_s 8.0 occurred at 14:28 on May 12, 2008 in Sichuan province, China. The epicenter was at N31.0/E103.37, which was 70 km west-northwest of Chendu and over 360km from Chongqing, with a depth of 19km. This earthquake also caused damage in nearby over ten provinces and 417 counties, including Sichuan, Gansu, Haanxi, Chongqing, Yunnan, Hubei, Henan, Guizhou, Shanxi, and Hunan. Official figures (as of August 11, 2008 12:00) stated that 69,225 people were confirmed dead, 374,640 people were injured, with 17,939 listed as missing. The earthquake caused over 7.78 million buildings to collapse, and caused damage to

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24.59 million buildings. Approximately 130 landslide dams were occurred following Wenchuan Earthquake, which 34 landslide dams were hazardous and over million people lived in the affected area. Based on the Chichi Earthquake slopeland disaster mitigation strategies, this investigation explores the slopeland disaster and future impact of Wenchuan Earthquake for official establishment of appropriate emergency response and mitigation, in order to prevent secondary damage and reduce loss.

Key Words: Wenchuan Earthquake, Chichi Earthquake, Landslide dam, disaster mitigation, secondary disaster.