



> GO!

11/13/2012 - 11/15/2012 The International Conference on Advanced Eng 8/24/2012 - 8/25/2012 AMMT 2012: 2012 International Conference on 8/24/2012 - 8/26/2012 2012 2nd International Conference on Material :

more...

Advanced Materials Research Vols. 243-249 (2011) pp 592-596 Online available since 2011/May/17 at www.scientific.net © (2011) Trans Tech Publications, Switzerland doi: 10.4028/www.scientific.net/AMR.243-249.592

Chain Reaction of Mountainside Disasters and its Dispersing Impact on The Traffic and Transportation Network

Beiping Tian^{1,a}, Hanmei Wang^{1,b}, Wenfang Liu^{1,c} Baojun Yuan^{2,d} and Xiaobing Zhong^{1,e}

¹Institute of Architecture and Engineering, Sichuan University of Science & Engineering,

Zigong,Sichuan, 643000 China

²College of Civil Engineering Southwest Jiaotong University, Chengdu, Sichuan, 610031 China

atianbeiping@126.com, bwanghanmei1231@tom.com, c16437023@qq.com,

d461731025@qq.com, 444634372@qq.com

Keywords: Chain Reaction, Dispersing Impact, Inner Variable

Abstract. There are much mountainous areas in China. Mountainous traffic is greatly different from the plain.Interrelation of mountain landform and the traffic there is analyzed first. Because mountainous traffics and towns are greatly influenced by the disasters there, chain reaction of disasters and its dispersing impact are in particular demonstrated. The course of a disaster could be divided into several stages. Through analyzing their characteristics, solutions in turn to treat disaster are listed. A case is given to elaborate the disaster and its impact on the traffic and town.

Introduction

China is a mountainous country, having two thirds of the area occupied by mountains. Mountainous areas are almost in western homeland, such as China's Sichuan Province, of which 97 percent is mountain as is shown in figure 1.

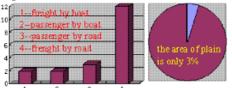


Figure 1. Transportation growth rate in 2008

about Sichuan province whose mountain areas account for 97%

With the advance of westward exploitation and the implementation of the policy about the expanding domestic demand, westward transportation is also greatly developed as is also shown in figure 1.

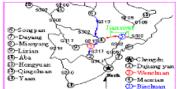


Figure 2. Damaged transportation system in Sichuan

An earthquake reaching magnitude 7.8 on the Richter scale hit Wenchuan county, Sichuan province on May 12th, 2008. It has brought series of disasters. They seriously influence the

All rights reserved. No part of contents of this paper may be reproduced or transmitted in any form or by any means without the written permission of TTP, www.ftp.net. (ID: 122.70.132.162-16/12/11.19:32-28)