



A Study of Disaster Adaptation Behavior and Risk Communication for watershed Area Resident — the Case of Kaoping River Watershed in Taiwan

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Along with the global climate change, the rainfall patterns become more centralized and cause natural disasters more frequently and heavily. Residents in river watersheds area are facing high risk of natural disasters and severe impacts, especially in Taiwan. From the experience of Typhoon Morakot in 2009, we learned that poor risk communication between the governments and the households and communities would lead to tremendous loss of property and life. Effective risk communication can trigger action to impending and current events. On the other hand, it can also build up knowledge on hazards and risks and encourage adaptation behaviors. Through the participation and cooperation of different stakeholders in disaster management, can reduce vulnerability, enhance adaptive capacity, improve the interaction between different stakeholders and also avoid conflicts.

However, in Taiwan there are few studies about how households and communities perceive flood disaster risks, the process of risk communications between governments and households, or the relationship between risk communication and adaptation behaviors. Therefore, this study takes household and community of Kaoping River Watershed as study area. It aims to identify important factors in the process of disaster risk communication and find out the relationship between risk communication and adaptation behaviors. A framework of risk communication process was established to describe how to trigger adaptation behaviors and encourage adaptation behaviors with risk communication strategies. An ISM model was utilized to verify the framework by using household questionnaire survey. Moreover, a logit choice model was build to test the important factors for effective risk communication and adaption behavior. The result of this study would provide governments or relevant institutions suggestions about risk communication strategies and adaptation strategies to enhance the adaptive capacity of households and reduce the disaster impacts.