

Lessons about Risk Communication Learned from the Case Studies of Typhoon Disasters

○ Chao Zhang, Norio Okada, Muneta Yokomatsu, Yoko Matsuda

Introduction

In this research via case studies the various failures or obstacles of risk communication system in the real situation will be examined, and the conceptual risk communication models will be set up, and then how to conduct the effective risk communication will be discussed. For the case studies, one is the northern region of Kyoto prefecture which suffered the disaster by the typhoon No.23 in Oct. 2004; Another is the Kyushu region which suffered flood disaster by typhoon No.14 in Sep. this year.

The Patterns of Information Flow

In order to promote the participation in terms of information, knowledge and action sharing, from the aspects of information flow, for risk communication two organizational patterns and time flow patterns can be identified. For the two organizational patterns, the Upstream-Downstream River Basin Model and Lake Basin Model can be applied to the early warning and quick response retroactive situations. For the time flow pattern, the Parallel Play Catch model will be applied to proactive situations. For the Upstream-Downstream River Basin Model, the information flow is basic one-way. The information flows among the governmental agencies resemble these types. For the Lake Basin Model, the related agents share their information, and the information flows from different sources are integrated and matched properly. The lake basin model can be external dependent type, such as the case of Bousaimusen, or the self-reliance type, such as the evacuation behavior of local residents in the context of community. The risk communication conducted in

the community based disaster preparedness can be seen to belong to the Parallel Play Catch model. Here the residents and experts from NGOs or research institutes are involved. Via risk communication, the implicit knowledge hidden within one agent will be developed to explicit knowledge used for the community based disaster preparedness, e.g. the case of refuge shelter selection.

Risk Communication and Evacuation Behavior

Based on these conceptual models three key points about risk communication are discussed deeply: The problem of “assumption”; Importance of feedback and improvisatory management; the self-reliance of local residents in the evacuation.

In the end the importance of participatory risk communication is emphasized. The relations of risk communication and evacuation behaviors among town office, the local residents and the enterprises involved in the process of quick response are discussed deeply.

After all the local residents are the end victims of natural disaster. In the normal time the residents, governments and NGOs should hurry up and work together, strengthen this kind of risk communication. Otherwise, once a disaster comes, the risk communication like early-warning will not function.