

Policy Analysis for Hitting the Right Target: Risk Communication in Mt. Merapi

○ Saut Sagala, Norio Okada

1. Introduction

Risk communication is often argued to be very important at the core of risk management. Many decision makers, NGO/NPO workers and local champions attempt to educate people in order to increase their preparedness against disaster risks. However, sometimes even after some risk communication is performed people yet are not motivated to effectuate preparedness. This paper presents a model of macroscopic and microscopic analysis of how people take decision under disaster condition and societal context that governs such a preparedness action. In the study area, common risk communication method includes: a distribution of hazard zone maps to the people, information through radio, disaster preparedness brochures, etc. Our observation and interviews from the field suggest that the respondents do not fully understand what the information means, moreover how to utilize them into practice. To investigate this problem, we carried questionnaire surveys and in depth interview in January – February 2008 to communities (N = 322) living at fourteen hamlets in southern flanks of Mt. Merapi, Yogyakarta, Indonesia.

2. Methods and analytical tools

Two analytical approaches are applied in this study, namely: model of social resilience and evacuation decision analysis. The model of social resilience examines a macroscopic analysis of the study area that enables to identify what factors at personal, community and institutional levels that influence one's intention to carry out disaster preparedness (Paton et al 2008). The second approach includes a

statistical analysis on relationships between factors that influence evacuation decisions (Lindell and Hwang 2008) that gives a detailed category of communities and the related factors that govern their decisions. These two analytical tools provide a combination analyses that are used to better address what communities need.

3. Results

The macroscopic analysis, model of social resilience, comes up with community variables (community participation and collective efficacy) that determines people action in intention to carry out disaster preparedness. It is then followed by institutional variables (empowerment and trust) that support the communities with information and capabilities prior taking a preparedness action.

The microscopic analysis, analysis of evacuation decision, indicates the differences among people when receiving information to evacuate. Some people take their decision on the basis of their disaster experience while some others take their decisions on the proximities to hazard sources. However, there is a unique case where people in a hamlet take their decisions due to their cultural beliefs. The findings on the microscopic analysis illustrate heterogeneity

4. Recommendation

This study suggests policy makers and risk managers to adjust the risk communication methods and messages with needs and socio-context of the communities.