

A COMMUNICATIVE SURVEY APPROACH TO BUILD COMMUNITY'S COPING CAPACITY FOR DISASTER EVACUATION FROM THE VIEWPOINT OF LOCAL RESIDENTS*

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1. Introduction

For this purpose, disaster evacuation planning should appropriately link up post-disaster processes to pre-disaster processes. Enhancing coping capacity (“bousai-ryoku” in Japanese) is considered an efficient approach that can systematically combine retroactive event and proactive, will help to evaluate and make the evacuation planning.

FEMA has been working with the National Emergency Management Association since 1996 on the development of the state Capability Assessment for Readiness (CAR)¹⁾, which is a self-assessment process focusing on 13 core emergency management functions, including training, planning and coordination, and is viewed as the rudiment of coping capacity. In 2003 Fire and Disaster Management Agency of Japan published the result of regional disaster coping capacity and emergent management ability of each prefecture by using 9 indicators according to its survey²⁾. And in 2005, the Cabinet Office, Government of Japan also defined the coping capacity and listed its 7 indicators in “White Book on Natural Disaster Prevention”³⁾. Since then, some of communities have developed their own definitions and evacuation indicators of disaster coping capacity in Japan.

The data of calculating the coping capacity by Fire and Disaster Management Agency of Japan and Cabinet Office, Government of Japan are collected by questionnaire surveys to leaders of local authority or local communities, not to local people (though the evaluation system of Cabinet Office, Government of Japan is available on the internet now), as well as the state CAR. And the performance criteria of coping capacity are decided by the askers and cannot be changed by the answerers or even the askers after the questionnaires are set. If the criteria are not suitable for the tested community, the result will not represent the real situation because of the unchangeable criteria. And if answerers do not agree with the classification or not understand the meanings of the performance criteria in the questionnaire, they do not have a chance to make clear and to express their opinions before they make decision because of the one-direction survey. Therefore, survey participation may decrease, non-response rate may increase, and high quality data may not be ensured. Problems of fixed performance criteria and one-direction survey also exist in some local communities when building their coping capacities.

Therefore, to overcome the above two types of problems in the current survey method regarding the community's coping capacity, this study introduces a “communicative survey”. In communicative survey any testee can also put forward questions to testers and has his own opinion of the identified questions (preliminary design of the topic). Survey questionnaire will be their communication platform of information, knowledge and technology. And the testers and testees must reach the common understanding about the topic before implementing it.

2. Building community's coping capacity for disaster evacuation by the communicative survey

* Keywords: coping capacity, communicative survey, disaster evacuation

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In this paper, we will try to build community's coping capacity for disaster evacuation from the viewpoint of local residents, by using the communicative survey approach with the case study of Nagata Elementary School Community, with a population of 8000, and located in the middle-north part of Nagata Ward (of Kobe City, Hyogo Prefecture, Japan.), where is heavily damaged by the 1995 Great Hanshin-Awaji Earthquake.

The technical flow is showed in Figure 1. The main purposes are trying to know:

- (1) How does communicative survey approach work as a risk communication approach in the area where local residents have disaster experience?
- (2) How to build community's coping capacity from the viewpoint of local residents?

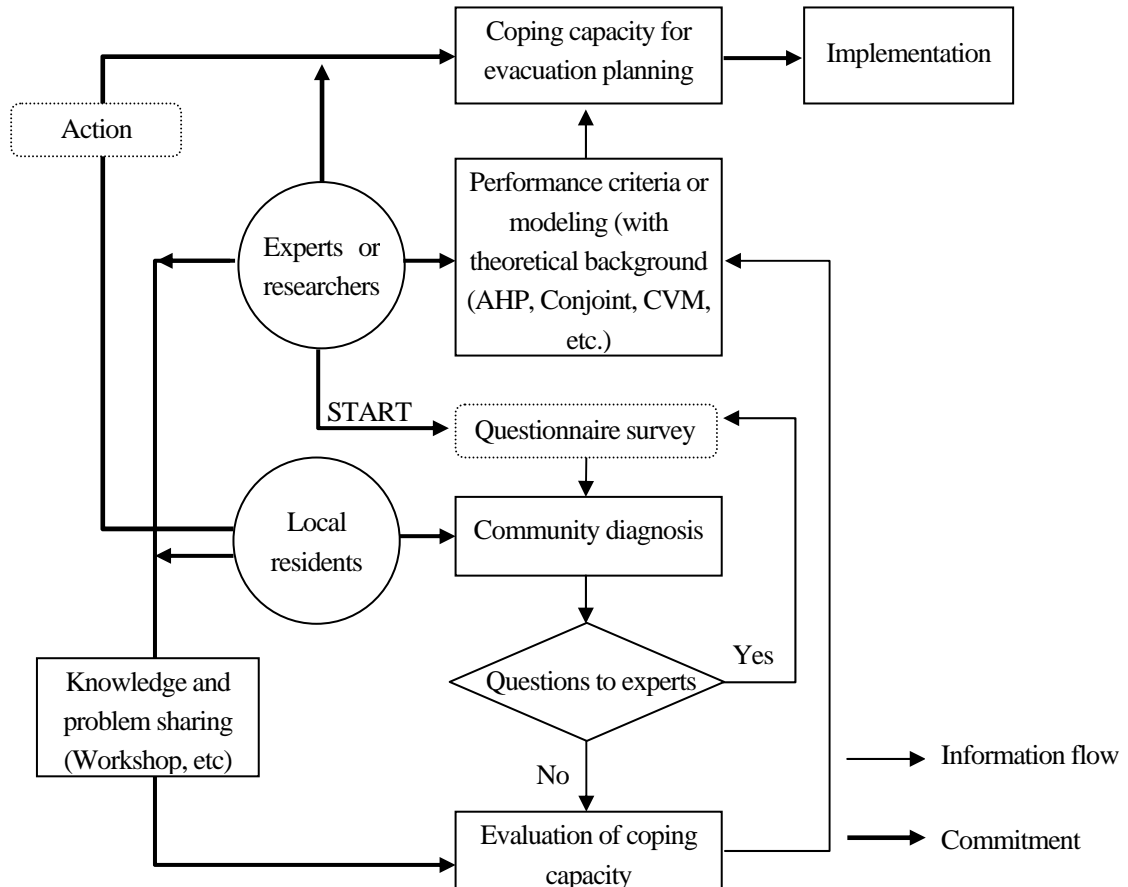


Figure 1: Communicative survey flow (preliminary scheme)

3. Future works

In future, we would like

- (1) To discuss the other uses of communicative approach regarding community disaster management, and
- (2) To develop the collaborative modeling based on the communicative approach for participatory disaster evacuation planning and management.

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