

## 第 IV 部門

## Developing Community Safety Maps for Urban Diagnosis

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Sustainable urban disaster management in a long-term time-span would chain post-disaster, retroactive recovery and restoration processes to succeeding pre-disaster, pro-active planning processes (Okada, 2001), and disaster management could not be fulfilled only by the government sector but needs to be participated by the local people, the NGOs and private companies. Community participation through familiarity with the necessary information, strategic management of volunteer resources and adoption of special tools is very important in disaster reduction, especially in an emergent case. The Hanshin-Awaji Earthquake disaster in Japan in 1995 and the India Ocean Tsunami disaster in 2004 indicated the importance of pre-disaster management and community participation for disaster management. Community safety map is a necessary and useful platform for effective community activity and pre-disaster management.

The proposed community safety map is a kind of digital map, which needs to be collaborately developed in the normal stage (disaster preparedness stage) by both the government and community people with the help of experts, private companies or others, to serve for community pre-disaster management, to be installed with basic information & disaster preparedness information, and to be operated, updated and maintained by both the government and community people. The scale of the community here is about the size of 20 Cho-Mokus of the Japanese administrative district.

Community safety map is a good medium to help local government and local people to manage the community. Refuges, evacuation routes, the shortest way and shortest time to the refuge, and other disaster preparedness status of the community can be displayed clearly and visually in

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maps.

Community safety map makes it possible to develop the community damages and losses maps during a short period in both the chaos phase and relief & rescue phase.

Information in the community safety maps obtained from continuous monitoring (before disaster) enables comparison between preparedness status and recovery process. Two steps are necessary during developing the community safety map. The first step is the basic information collection and basic map make by the government. And the second step is communication with the community people and adding their ideas about disaster preparedness to the basic map.

According to the concepts above and based on the foundation maps, some pilot and preliminary studies of community safety maps are addressed in Nagata Ward of Kobe City with the help of DiMSIS.