IMPLEMENTING DISASTER KNOWLEDGE TO COMMUNITY WITH GEOINFORMATICS TOOLS

Muneki Mitamura

Osaka City University, Japan

ABSTRACT

There are many active faults in Osaka and the surrounding areas. In these area, many earthquakes and disasters have occurred until today. The large earthquake (M>=8.0) along the Nankai Trough has occurred with the interval from 100 to 150 years. The government assumes that the next large earthquake along the Nankai Trough will occur within 40 years in future. The inland type earthquake along the Uemachi Fault running from north to south of Osaka are also one of the caution needed active faults. On the other hands, many floods and landslide disasters occur frequently in various regions, due to unprecedented heavy rain by large typhoons and radical frontogenesis. In order to eliminate the accidental death at the disaster, the "Inochi Lab." project is going to try to implement disaster knowledge in the region having social and geographical vulnerability by Osaka City University Project. In this project, a social education program consisting of three learning courses such as risk learning, exercise on response to extraordinary, and living environment improvement, is developed as an application for implementing disaster knowledge to community. This education program is carried out with local community such as block association members, disaster prevention leaders, fire department officials, ward bureaucrats, and students in the elementary school area.

The risk leaning course of social education program consists of three contents such as the confirmation of risk information, risk checkup in community area, hazard map making. The geoinformatics applications are available for these lesson contents. Participators easily confirm the risks on their house and area with an interface of Web-GIS which stores the various risk information. On the risk checkup in community area, participators use tablet terminal installed an application for fast qualitative field survey. They made their hazard map from photo and text data appended positional information with the drawing function in The Google Earth by themselves. This presentation will introduce an approach of the implementing disaster knowledge to community with geoinformatic tools by the disaster prevention research project group of Osaka City University.