Designing evacuation drills using GIS-based disaster prevention maps of cultural properties for Hanno City, Saitama Prefecture

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Serious disasters such as the Great East Japan Earthquake of 2011 and the Kinugawa floods of 2015 have highlighted the need for contingency plans to evacuate and rescue important cultural properties. Firstly, it is necessary to identify where and what types of Cultural Properties exist, and then, to know how to evacuate them from disasters. This study aims to identify the risk of damage to cultural properties and design appropriate means to evacuate them during landslide emergencies. Here, we focus on landslide disaster hazard mapping in Hanno City, Saitama prefecture using GIS. Potential landslide risk zones were identified using data provided by the National Land Numerical Information. Nine categories of Cultural Properties, including buildings and natural monuments etc., were mapped using GIS. Three regions: the Hanno City area, Agano area, East Agano area, were chosen for detailed investigation.

Keywords: cultural property, desaster prevension map, Hanno city, GIS