MULTIMEDIA GIS APPROACH FOR SPATIAL DECISION MAKING IN DISASTER SITUATION: A CASE STUDY OF SRI LANKA TSUNAMI

RAM ALAGAN

Department of Geography, Faculty of Arts, University of Peradeniya

This research explores the capability of Multimedia GIS application for spatial decision-making in disaster situations. The need to understand the natural and social destruction of the recent Tsunami on the one hand and to enhance the rehabilitation policy planning activities on the other makes Multimedia GIS application one of the best spatial decision support tools in disaster situations. Integrating differential data (such as spatial data and aspatial data) digital images, photographs, web information, narrative, mental maps, and sound processing are central in Multimedia GIS. Multimedia GIS has now become the tool of choice in addressing complex environmental and social problems encountered in natural disaster situations.

The incorporation of multimedia data types is increasingly becoming a requirement in spatial decision-making. However, very little focus has been given to the integration of Multimedia GIS in the recent Tsunami impact and reconstruction process. Since any natural disaster brings more complex problems, it is vital to consider a robust information system to capture complex issues and to represent data in an understandable manner in policy planning. This research reviews the recent Sri Lanka Tsunami disaster and aims to integrate Multimedia GIS for spatial decision-making. Such integration promises significant advantages for assessing damage, enhances communication, coordination, and the addressing of public concerns over development proposals.