

Using Geographic Information System in Disaster Management Decision Support¹

Erfan Ali²

Sa'adalah Agha Alkala'ah³

Abstract

Syria, as other countries, is annually exposed to many hazards and disasters which will be followed by a direct effect on the community in death and long-term negative social impact, beside the serious environmental and economical consequences.

The research concentrates on the importance of creating a know-how system for dealing with disasters, from planning to rehabilitation arrangements.

In addition to that, it was suggested that integrated data forms should be provided to the decision makers in the right format at the right time. This is in order to make the right decisions under pressure. Communication coordination among concerned bodies in the site was also included.

Spatial representing for data was taken into consideration in this research for decision making, besides making all needed spatial analysis to answer the queries of the decision makers through Geographic Information "GIS" application in supporting decision making in disaster management.

The conclusion included the necessity of updated and correct data, and to activate all available communication means. Linking early warning systems with disaster management data systems were also deduced.

¹ For the paper in Arabic see pages (37- 63).

² Dep. of Engineering Management- Faculty of Civil Engineeening- Damascus University.

³ Dep. of Engineering Management- Faculty of Civil Engineeening- Damascus University.