

The Cartographic Modeling To The Urban Hazards In Hergada City

Abstract

The paper introduces a proposal to a cartographic model as an Application of GIS, that is built on three threats related to Urban structure of the city. Those threats consist of some exhausted oil wells, that still opened without insurance and perform gaps inside the urban block ,also potential hazards of floods related to "Faleq al Sahl & Faleq al Waer" valleys, where the urban block stopped them of reaching the Red Sea. As it is recorded, their floods (1996) destroyed buildings before, in addition to some workshops occupied vital places in such a tourism and hospitalization city.

The researcher has studied some of the city urban properties (building statues, materials and land use) ,so that he could depend on GIS for building a cartographic model consists of three raster layers of those mentioned hazards, that every pixel at any layer of them has relative weight related to its nearby to the hazards location. Then the Mean equation has been used for producing the model carrying all hazards properties, after that the overlay analysis has been applied for urban properties evaluation based on the suggested model.

The main results showed that, there are real urban hazards in the city related to the oil wells, the potential floods and the workshops. the insecure oil wells perform effective hazards on the third of Hergada City buildings. The main ratio of the buildings with the excellent status of the city (especially at El Mena, El Sakala and El Arab districts) are situated at the high risky areas according to the study model.