

ABSTRACT

The chemical industries is the procedure of changes as a revolution in problems that consequence its negative relations with residents which living near chemical industries and Industrial vulnerability determined by using Questionnaire. Questionnaire were filled by the residents which are living in residential area near chemical industries of Lahore metropolitan area (n=225 people) and statistical analysis is used to compile the result of questionnaire. In Lahore the pollution has recorded alarming height so, the aim and objective of this study is to measure the risk and vulnerability caused by chemical industrial noise, odour, industries worries due to lack of security, possible health effects and to identify the distance and lack of installments of emergency rescue services near chemical industries. GIS(Geographic information system) provide an worthy alternative to conventional GIS mapping techniques for mapping and monitoring of chemical industries risk an vulnerability. Network analysis is one of the excellent context used in this study for the best accessibility of Emergency rescue service by use of mapping of roads connectivity between chemical industries and emergency rescue services. Results from analysis suggested that there is a lack of emergency services near the chemical industries in Lahore Metropolitan area and require to install more emergency services near industries. Buffer analysis is used in this research as a circular zones to identify the risk assessment of vulnerable residence near chemical industries and 220 feet area is selected which is declared by the industries commerce & investment department as a high risk areas. Consequently, there is need to trained and educate the community which is living near chemical industries. Emergency rescue services, planners, urban development policy maker are encourage to locate the emergency services near the chemical industries. There must be used GIS advance technologies to manage the data of risk assessment ,recent approaches of GIS also used in Lahore metropolitan area is also such type of research which explain the risk of residential areas near vulnerable chemical industries and also suggest that how to cope the risk of industries in residential areas.