EXPLORING THE REASONS FOR AGGRAVATION OF SILENT KILLER IN THE CITY OF COLOMBO

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Air pollution has been identified as one of the silent killers in the present world as pollutants are killing people without making any noise. Air pollution is a disaster which destroys human life gradually unlike other disasters. People can see, understand and experience when environmental disasters occur. However, people cannot see or understand when air pollution is taking place until people are affected physically.

This study attempts to examine the spatial pattern of sulfur dioxide and nitrogen dioxide in the city of Colombo using the data collected by the National Building Organization (NBRO) from January, 2003 to December, 2005. Specifically, the main objective of this study is to explore the reasons for aggravating air pollutants in the city. Some-socio economic data which used as explanatory variables for the spatial pattern of air pollutants were collected from different government organizations.

GIS techniques such as spatial interpolation, spatial query and geostatistics techniques were adopted to analyze data. It has been identified that there is a highly significant periodic changes of contamination of pollutants with the rainy seasons. By using grid regression analysis, traffic density has been identified as the most significant explanatory variable among the selected socio economic variables. Characteristics of traffic fleet highly influence for the degradation of air quality in the city of Colombo.