

An assessment of the degradation of air quality in the city of Colombo - Using GIS and Remote Sensing Techniques



Lasantha Manawadu.

An assessment of the degradation of air quality in the city of Colombo

Using GIS and Remote Sensing Techniques



- **ISBN** 978-3-8484-4137-2
- **Publisher:** LAP Lambert Academic Publishing
- **Publication date:** 4/6/2012

Overview

Air pollution is considered as one of the silent killers which has got aggravated in the last two decades in Colombo, Sri Lanka. Several studies carried out by scholars have proved and produced remarkable results highlighting how air pollution has got aggravated in the city of Colombo and its impact on human beings in terms of health, economic aspects and environment. In this study an attempt has been made to examine the quality of air in the city of Colombo and assess the factors causing degradation of air quality in the city of Colombo. In addition to the main objective, the specific objectives of the study are to examine the spatial and temporal patterns of air quality over the city of Colombo and identify pollution "hotspots" to define "risk areas", examine spatial and temporal patterns of the heat islands of the Colombo Municipal Council Area and study the relationship between urban heat distribution and selected socio-economic parameters, assess the suitability of remote sensing data to extract the air quality parameters such as surface temperature and urban agro forestry; and examine the socio-economic and physical factors that affect air quality in the city of Colombo.