# GEOGRAPHIC INFORMATION SYSTEM FOR MANAGEMENT OF MINERAL EXTRACTION IN THE KANDY DISTRICT

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Unprecedented construction, industrial expansion and the population increase have made the demand on colossal utilization of natural resources. Management of Mineral resources exploitation in Sri Lanka is a government responsibility. However conventional office management methods with information on paper documents may not fulfil present and future demands.

Mineral extraction effects on environment against the revenue recovery need to be spatially analyzed because proper spatial information systems can continuously provide real time information.

GIS is the present spatial data management system in the world which provides efficient and accurate decision making approach. According to the requirement, people to be addressed by the information should be assorted.

Automated spatial data updating systems using GIS techniques with six steps to make efficient mineral management is discussed with their methodologies separately. Executable tools must be utilized on daily basis for accomplishment of continues monitoring and visualization according to diverse clients and their computer utilizing ability. The present study area is confined to Kandy district as a pilot project but the methodologies could be adoptable in other districts as well.

Geodatabase of mining licence details and shape files of location distribution of different minerals provide enhancement for the foundation to the diverse type of spatial data analysing techniques. For data visualization in decision making at the higher management levels, disseminate spatial information on mineral extraction management WEB GIS, Keyhole Markup Language files and Portable Document Format files can be used effectively at present and future requirement.