

**UNIVERSITI TEKNOLOGI MARA**

**DEVELOPMENT OF HAZE CLASSIFICATION  
TECHNIQUE USING REMOTE SENSING IN  
MALAYSIA**

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## ABSTRACT

This research presents the development of haze classification using remote sensing in Malaysia. The study area was covered around Kuala Lumpur and Selangor with total area of 8,347.65 KM<sup>2</sup>. The resulting haze in Selangor and Kuala Lumpur due to transboundary haze on its way from Indonesia to Malaysia. The main reason for this haze caused by slash and burn practices by farmers and peat fires blown by the wind from Indonesia. By having drastically increasing of the Air Pollution Index to the unhealthy level, it will directly affect the health and limit the view. Consequently, this paper attempts to fill the gaps of knowledge by research on the techniques and methods that can measure the level of classification of haze using remote sensing. The concept of this study will focus on remote sensing and how to identify the concentration of the haze using the RGB model. The study will also include variables such as wavelength and colorclassification. Therefore, the objectives of this research study was focusing to new alternative way to measure the level of Haze. To adapt the application of remote sensing, research has focused on classifying the image to the level of low, medium and dangerous. In addition, the haze of remote sensing images were captured from Landsat 8 which has 11 spectral bands. With these advantages, the image will be processed using ERDAS Imagine processing software for identified the haze and the maximum likelihood. In addition, the image classification will be compared with actual data collected at the air monitoring station. Finally, there was some result analysis proved that by using the remote sensing, we able to categorise the level air pollution index to low, unhealthy and dangerous.

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