



UNIVERSITI TEKNOLOGI MARA

**THE ASSESSMENT ON SUSTAINABLE
OPERATION AND PROCEDURES FOR RURAL
ROAD MAINTENANCE IN TANJUNG MALIM:
WITH THE PROVISION OF JKR GREEN
CRITERIA**

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ABSTRACT

Malaysia is making progress toward implementing a green highway and rural road system. Green road rating tools such as the Malaysia Green Highway Index (MyGHI) for highways and Penarafan Hijau (pHJKR Jalan) for non-toll roads with a project value of more than RM50 million are examples of green efforts made in Malaysia to promote sustainable development. The main aim of this research is to assess the sustainable operation and maintenance procedure of rural road in Tanjung Malim based on JKR Green Criteria provision. The problem statement elaborates on how Malaysian lack of implementing regarding the sustainable operation and procedures for rural road. In order to comply with the objective of this research, two (2) case studies have been chosen to participate in comparison observation and three (3) agency which is government (Tanjung Malim district Council), private (Puncak Emas Infra Sdn. Bhd) and other contractors. This research is consisting of five main (5) chapters which is chapter one (1) Introduction where it refers the aim, the objectives and problem, method and significance, chapter two (2) Literature Review which elaborates the background study of rural road in Malaysia, chapter three (3) Research Methodology presenting the approach of the research, the research design, sampling, data collection, elaboration on case studies, and data analysis, chapter four (4) Results and Discussion elaborates on the analysis of the data that had been obtained from the respondents based on the method and their demographic background, lastly chapter five (5) Conclusions on the data analysis that has been made for this study.

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CHAPTER 1: INTRODUCTION

1.1 Research Background

Sustainable development has been a national focal point in Malaysia for decades. Ever since Prime Minister Mahathir bin Mohamad drafted the forward-thinking Vision 2020 in 1991, the governments, businesses and citizens of Malaysia have cherished the thought of the clean, green, fully developed and unified nation it proposed (CleanMalaysia.com, 2015). Malaysia is making great strides in its dream through generous green business opportunities, more scrupulous manufacturing legislation, improved knowledge of the environment and an economic atmosphere that promotes sustainable growth. A massive push for green road in Malaysia occurred in a recent show of dedication to the goal.

In Malaysia, the government is more concerned about integrating the concepts of sustainability in construction industries since the issue of global warming and climate change have become important issues. These international concerns become pressure for Malaysia to adopt the principles of sustainable practices into its construction industries. Global demands, The Rio + 20 Conference in 2012 and the Pittsburgh Summit in 2009 become a basis to commit in advancing of sustainable development (Lawalata GM,2013) and to reduce greenhouse gas emissions by 26% - 41 %, including gas emissions generated from energy and transportation by 3.8%, and industry by 1.8% (OJK 2013).

Land contact has its beginning in the form of jungle tracks, elephant tracks, bridle paths, and bullock car tracks in Peninsular Malaysia. As demand for road transport has risen over the last century, these tracks have formed the base of the road infrastructure in the country and have been upgraded and expanded to the new highway system. The major factors that attracted a huge influx of people and companies and developed large urban areas on the west coast were tin mining and estate cultivation. To move export goods to the ports and to transport imported materials to manufacturing areas and to service government and business centres, roads had to be constructed.