READERS OF ENVIRONMENTAL PLANNING IN MALAYSIA

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QUANTIFYING IMPACTS OF AIRPORT EXPANSION: A CASE STUDY OF KUALA LUMPUR INTERNATIONAL AIRPORT 2 (KLIA 2)

Syahriah Bachok¹ and Syazwani Sahrir²

INTRODUCTION

The chapter was to provide the reader with a general overview of development impacts of airport expansion. The research aims at developing mathematical models for the impacts of airport expansion, using the KLIA 2 as a case study. This research focuses on two types in quantifying the impacts of airport developments namely particulate matter (PM) and noise levels. It basically explains the planning of the KLIA 2, the process of building the airport, its current state and position of future planning’s for the airport. Finally, this research will be discussed on how it affects its surrounding environment, the natives and the trade aspect of the area.

Demand for airport infrastructure is linked to the demand to increase the competitiveness of a region. Recent developments in civil aviation can be attributed to an increasingly globalized society in which mobility over long distances becomes ever more important. On the other hand, infrastructure development can be detrimental to the surrounding environment. Airports around the world operate in an increasingly uncertain environment. The oil price, flu epidemics, and financial and economic woes further add to the volatility of aviation demand development (Kwakkel et al., 2009). Combined with tensions between economic and environmental impacts, this makes airport planning a challenging task.

Recent social movements have alerted public opinion and political administrations to the safety of the areas surrounding airports and the negative externalities produced by airport developments. While the need to cope with high levels of uncertainty is becoming increasingly clear, the airport planning community still relies heavily on traditional methods. The planning of airport developments has only focused on elements inside the airport; such as supply and demand forecasts. Due to the increasing importance of enlargements in airport capacity, this has become a hot topic for policy makers and academics.

Enlarging the airport capacity should also consider the management of the environmental impact on surrounding areas. Externalities created by infrastructure projects in Europe were assessed by the Environmental Impact Assessment (EIA) after they were completed (Sánchez, 2007). This posterior assessment was often turned into a method for justifying decisions that had already been made. EIA can be defined as a systematic activity designed to identify, predict and evaluate the environmental impacts of a particular action.

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