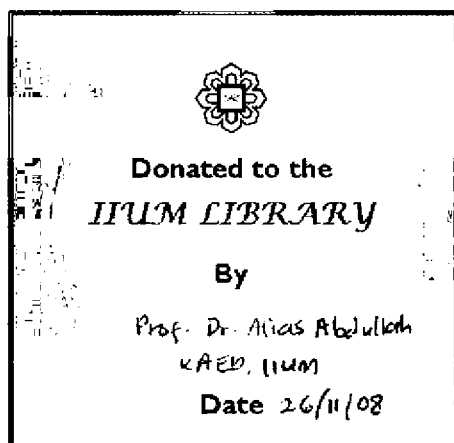


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Spatial Decision Support for Urban and Environmental Planning

A collection of case studies

Edited by
Davide Geneletti
Alias Abdullah



ARAH PENDIDIKAN SDN BHD (618680-H)

Level 3A, Block B, Peremba Square,

Saujana Resort, Section U2,

40150 Shah Alam,

Selangor Darul Ehsan

Tel: (603) 76529888

Fax: (603) 76229810

Email: enquiry@arahpendidikan.com.my

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Chapter 5

SPATIAL AHP FOR THE NATIONAL PHYSICAL PLAN OF MALAYSIA

Nor Sallehi Kassim¹, Rafikul Islam²

¹Information Technology Division
Federal Department of Town and Country Planning, Malaysia

²Department of Business Administration
International Islamic University Malaysia

National Physical Plan (NPP) of Malaysia is a long term strategic plan for the period until 2020, that contains written statement formulating strategic policies for the purpose of determining the general directions and trends of the physical development and conservation of Peninsular Malaysia. The NPP is needed to strengthen the existing national planning system so that it is more systematic, effective and efficient. The NPP also coordinates the country's various planning agencies and authorities at the national, state and local levels and acts as the basis for preparation of lower tier physical development plans, e.g. structure and local plans. Typically, development of any plan involves multiple, conflicting criteria. This chapter presents an integrated approach combining GIS and Analytic Hierarchy Process (AHP), a popular Multiple Criteria Decision Making (MCDM) method to develop the NPP. While GIS has provided its capability in data storage, retrieval and analysis of data, MCDM technique has reflected its capability as the tool for aggregating the geographical data and decision maker's preferences. The NPP has been approved by the Cabinet and also by the National Physical Planning Council chaired by the Prime Minister.

Keyword

Malaysia National Physical Plan
Geographic Information System

Analytic Hierarchy Process
Land Suitability Analysis