

Economical and Environmental Friendly Holiday Home Site Identification Using GIS: Case Study of Selecting Suitable Land to Build a Holiday Resort in Hikkaduwa Area

DMW Panditha[#] and RMM Pradeep

Department of Information Technology
General Sir John Kotelawala Defense University of Sri Lanka
[#]dhakashika94@gmail.com

Sustainability of the project specially concerns developing the Holiday Resort in the best place in Hikkaduwa area. It has been evident that development activity has high potential to cause damage to the environment and gives the satisfaction to the customer and business man. Geographic Information Systems (GIS) is a system designed to capture, store, manipulate, analyze, manage and present spatial or geographic data. The aim of this study is to develop Geographic Information Systems (GIS) based model to assess suitable sites to build a Holiday Resort. This case study incorporates three major steps for suitability analysis which includes, identifying the factors that are essential for Holiday Resort site selection, weighting suitability factors and developing a suitability map and model spatial analysis tool in GIS. In addition, several opportunities for research are suggested including those related to GIS management organizational impacts, evaluations of decision-making effectiveness and societal impacts in both developed and developing countries.

Keywords: Geographical Information Systems, Sustainability, Spatial Data