A New Insight for Ecotourism Rating for Sustainable Management

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ABSTRACT

Malaysia is making its mark as a nation with much ecotourist potential. Ecotourism is making its presence felt in Malaysia by being the potential revenue earner in the tourism sector for the nation. The ecotourism concept emphasises the maximisation of the ecological interest areas and at the same time ensuring sustainable management. Ecotourism, while having vast potential for further development, has not received adequate attention in Malaysia in terms of sustainable management. All ecotourism sites must be planned, guided and developed in a monitored and controlled manner for effective and efficient management. A systematic expert rating system is developed to maintain a certain level of standards based on different levels of categorisation to ensure the sustainability of these ecotourism sites, which can be used for intelligent decision-making. The expert system developed uses a web-based information-sharing platform in line with the existing Malaysian legislation on safety, health and environment. Where no guidelines are available, recommendations based on the domain experts, literature and field survey statistics are incorporated. The ecotourism sites listing based on preset categorisation in Malaysia, developed by the World Wildlife Fund as The Malaysian National Ecotourism Plan, is also used in enhancing the expert rating system. The system is designed and developed on a back-end on-line database. The web site, which is the graphical user interface (GUI) for the user, is hosted in the Technology Park for more efficient maintenance and management with its domain name being www.ecotourism-upm.net. The web designing is done using HTML codes and Java Scripts. The on-line database would be designed using Visual Basic with MS-Access 2000 back-end database engine, which encompasses Standard Query Language (SQL) and Active Server Pages (ASP) as part of the rule based expert system shell.

INTRODUCTION

Malaysia is a tropical wonderland that is substantially rich in a variety of ecological based pursuits. It is abundantly green and is home to over 11000 known species of flora and fauna (Khairuddin, 1992 and Ahmad Shuib et.al, 1992). Therefore, it is an ecological area of much tourist potential.

As the tourism industry evolved further, a new type of tourism, "ecotourism", has emerged and is making its mark in Malaysia. The debate to what is real ecotourism continues to be discussed in many forums all over the world. Ecotourism evolved from nature tourism, which can be defined as ecologically sustainable tourism with a primary focus on experiencing natural areas. Using the same definition, ecotourism can be defined as ecologically sustainable tourism with a primary focus on experiencing natural areas that fosters environmental and cultural understanding application and conservation. In 1993, Hector Ceballos-Lascurain from Mexico, widely acknowledged as the "father of ecotourism", defined it as environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features - both past and present) that promotes conservation, has low negative visitor impact, and provides for beneficially active socio-economic involvement of local populations. In short, ecotourism is responsible travel to natural areas that conserves the environment and sustains the well being of the local community.

In short, the ecotourism concept emphasises the maximisation of the ecological interest areas, which include marine parks and islands, national parks, recreational forest reserves, and other forests, mangrove sites, limestone hills and cave sites, river, waterfalls and lakes, beach sites and montane areas (Ceballos-Lascurain, 1993). The ecotourism sector, while having vast potential for further development, has not received adequate attention in Malaysia as far as sustainable management is concerned. All ecotourism sites must be planned,