Economic valuation using Travel Cost Method (TCM) IN Kilim Karst Geoforest Park, Langkawi, Malaysia

ABSTRACT

Kilim Karst Geoforest Park is a special conservation area within a Permanent Forest Reserve (PFR), consisting of limestone landscape, an extensive mangrove forest system, beaches, coastal wetlands and islands. However, the limestone, forest reserve and mangrove areas have been identified as environmentally sensitive, and are under threat by development activities. Currently, there is a lack of information on the economic benefits of the geoforest park, in terms of services. A demand model of international visitors to the Kilim Karst Geoforest Park (KKGP) was derived and compared the benefit estimated using both travel cost and consumer surplus adjustment techniques. The Travel Cost Method (TCM) has been employed to derive the demand model, whilst the concept of consumer surplus was used for value determination and comparison. The findings showed that the benefit estimated using travel cost adjustments, based on satisfaction attained, is euro288,000,000, and number of hours spent in the park is euro141,000,000, which was greater than that for the consumer surplus adjustment based on satisfaction attained euro 278,640,000 and number of hours spent euro123,840,000. The study proposed the travel cost adjustment technique findings rather than the consumer surplus adjustment technique, since it was based on specific KKGP model estimation. In conclusion, the findings on the monetary value of the geoforest park will alert the community regarding the importance of conserving KKGP.

Keyword: Consumer surplus; Demand; Economic benefits; Tourism economics