Determination of factor in willingness to pay for firefly conservation in Kuala Selangor, Malaysia using contingent valuation method

ABSTRACT

Firefly is an ecotourism icon in Kuala Selangor, Malaysia and benefits the local community, especially as a source of income. The beauty of fireflies in producing light has made firefly watching activities increasingly popular around the world. Unfortunately, land conversion to agriculture activities and oil palm plantation has caused their habitat loss. Firefly was categorized under non-market value, which by using WTP concept, it able to estimate the economic value of firefly conservation. Therefore, a face-to-face interview to identify factors that affect Willingness to Pay (WTP) for firefly conservation in Kuala Selangor, Malaysia. Double Bounded Dichotomous Choice (DBDC) and an open-ended survey were conducted involving 330 visitors of Kampung Kuantan Firefly Park. The logit regression model, specifically the Contingent Valuation Method (CVM), was applied to investigate the factors that determine the visitors WTP. The results indicate that the WTP of visitor's was significantly influenced by initial bid level, age, household number, income, awareness, attitude and perception. The findings of the study are capable of helping policymakers and the Kuala Selangor District Council to design and improve a more efficient strategy to conserve the firefly population for the future.

Keyword: Contingent valuation method; Willingness to pay; Firefly; Conservation