

Households preferences and willingness to pay for watershed services attributes in North Selangor Peat Swamp Forest Malaysia

ABSTRACT

Realising the objective of payment for ecological services (PES) schemes depends on adequate demand for these services and sustainable funding. We examine the viability of using locally financed payments as additional conservation funds to protect forest watershed services. The study employed choice experiment method to estimate the willingness to pay for watershed conservation in communities along Sungai Karang and Raja Musa forest reserve in Selangor Malaysia. A Multinomial logit (MNL) model was developed to derive the marginal value and mean willingness to pay (WTP) of the respondents on the non-market values of the forest reserve. The trade-off between four different forest watershed attributes showed that improvement in water quantity is the most preferred attributes. The total conservation value is estimated at RM12, 706.347.78. This indicates households are willing to pay for watershed conservation to ensure sustainable water supply. Thus proposing PES as an alternative source of fund for conservation of Sungai Karang and Raja Musa forest reserve.

Keyword: Forest management; Payment for ecosystem services; Choice experiment method; Households preferences; Watershed service attributes