

# Valuing forest recreation in a multidimensional environment: the contribution of the Multi-Program Valuation Method

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Traditional recreation valuation methods like Travel Cost and Contingent Valuation do not take into account the multidimensional nature of some areas. Choice Experiment can be an alternative, but the number of attributes chosen must be restricted. We therefore propose to apply, previously, the Multi-Program Valuation Method (MPMV).

Based on Lancaster (1966) and Hoehn (1991), the MPMV is dedicated to the study of the relations between attributes of an environmental policy (Santos, 1998). Each survey scenario consists in a zero-price status quo and a definite-price environmental policy affecting a combination of attributes. Respondents choose their preferred scheme and thus reveal their trade-offs between the price of the policy and its attributes. The MPMV then allows apprehending the complementarity/substitution relations between these characteristics. A method centred solely on forest recreation may afterwards be applied.

We propose an application of the MPMV to stated-owned French South-West coastal forests. Ocean, sand and forest constitute one unique spot and we study their relations in consumers' demand. A survey was carried out in Summer 2006 and 385 usable responses were acquired. This paper first sets out MPMV's theoretical basis and methodological and practical issues. In a second part, the two regressions (on attributes or schemes) are compared, on a random coefficient basis. While they do not deal with interactions the same way, both show that the assets are substitutes in valuation. Visitors' willingness-to-pay for an asset ranges from 1.46 to 3.53€/visit/person and those who specifically attach importance to one asset are willing to pay an important extra premium (up to 11.21€/visit/person for forest). Visitors' willingness-to-pay for a policy ranges from 4.22 to 8.11€/visit/person. Forest alone is in that case not significant. The numerous forest substitutes present in this district (the most wooded French one) undoubtedly play a role.