

Households' Willingness to Pay for Watershed Management Practices in Lake Hawassa Watershed, Southern Ethiopia

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Abstract : Watershed provides vast economic benefits within and beyond the management area of interest. But most watersheds in Ethiopia are increasingly facing the threats of degradation due to both natural and man-made causes. To reverse these problems, communities' participation in sustainable management programs is among the necessary measures. Hence, this study assessed the households' willingness to pay for watershed management practices through a contingent valuation study approach. Double bounded dichotomous choice with open-ended follow-up format was used to elicit the households' willingness to pay. Based on data collected from 275 randomly selected households, descriptive statistics results indicated that most households (79.64%) were willing to pay for watershed management practices. A bivariate Probit model was employed to identify determinants of households' willingness to pay and estimate mean willingness to pay. Its result shows that age, gender, income, livestock size, perception of watershed degradation, social position, and offered bids were important variables affecting willingness to pay for watershed management practices. The study also revealed that the mean willingness to pay for watershed management practices was calculated to be 58.41 Birr and 47.27 Birr per year from the double bounded and open-ended format, respectively. The study revealed that the aggregate welfare gains from watershed management practices were calculated to be 931581.09 Birr and 753909.23 Birr per year from double bounded dichotomous choice and open-ended format, respectively. Therefore, the policymakers should make households to pay for the services of watershed management practices in the study area.

Keywords : bivariate probit model, contingent valuation, watershed management practices, willingness to pay

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