

Willingness to pay for improved indoor air quality: A contingent valuation approach

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Abstract

Household indoor air pollution has become an important environmental issue in both urban and rural households that calls for proper economic valuation. Air pollution, both indoor and outdoor is increasingly becoming a threat to human health in most developing countries where Sri Lanka is no exception. Therefore, this study employs a contingent valuation approach to investigate the factors influencing residents' willingness to pay for improved household indoor air quality. Data were collected using a structured questionnaire from a sample selected based on a cluster sampling from households in the Colombo District. Data were analyzed using a Probit model to estimate the determinants of indoor air quality and the respondents' willingness to pay. Results revealed that 78% of respondents were willing to pay for improved household air quality, while other 22.5% who were not willing to pay claimed that it is the government's responsibility to maintain air quality. These non-payers also believe that the polluter should pay for the damage. Probit model revealed that monthly household income and respondent's education level significantly influenced their willingness to pay. Where the impact of gender is concerned, men, particularly the older ones were willing to pay more for air quality improvement than females of the same age group. A large proportion of respondents were willing to pay for improved air quality which signals that the awareness regarding the environmental issues of residents in these districts are high. This study also sheds light on the importance of prompt action to address household indoor air pollution suggesting prioritizing environmental controls to mitigate indoor air pollution in urban areas of Sri Lanka.

Keywords: Air pollution, Contingent valuation method, Probit model, Willingness to pay

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