



Households willingness to adopt renewable energy source in Puttalam city, Sri Lanka: A logit regression approach

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ABSTRACT

Due to the adverse effects of extreme usage of non-renewable energy sources affects the environment drastically, the entire world community is switching to renewable energy sources instead of non-renewable energy sources. Therefore, renewable energy sources are becoming more popular across the world. The objective is to investigate the determinants of households' willingness to adopt renewable energy technologies in their houses in Puttalam. The study employed the binary logit regression model to identify the main determinants. A well-structured questionnaire was used, and 195 households were selected from the study area. The results revealed that age, employment, energy subsidy, education, monthly income and average electricity usage of more than 90 units influence households to adopt renewable energy sources in the residential area. However, the empirical analysis showed that young people, government employees, households with high-income, households with degree holders and those who use more the 90 units/month are willing to adopt renewable energy sources. In contrast, the subsidy energy scheme encourages households to adopt renewable energy sources in their residence.

Keywords: Alternative energy sources, Logistic regression, Willingness-to-adopt.