Household preferences for improved water services in Kelantan, Malaysia: a choice experiment approach

ABSTRACT

The condition of water supply provided to consumers is an important element which influences their health and daily routine. Excellent water services will give consumer's confidence to consume the water but poor services may endanger the households in many aspects and may tarnish the water company's reputation. Low water price may limit the water services improvement and upgrading projects. The objective of this study is to estimate household's willingness to pay using stated preference technique, the Choice Experiment (CE). This technique is employed to assess consumer's preferences in water service attributes such as water quality (QUAL), water disruption (DIST), Non-Revenue Water (NRW) and water price (PRICE). The Mixed Logit (ML) was applied to derive the households' marginal value for different attributes of the water services. The findings show that households are willing to contribute more on “water quality” attribute which derives the highest marginal value. The outcomes of this study will form the basis of policy recommendations to improve and enhance current domestic water services to a better level in the future.

Keyword: Attribute; Choice modelling; Mixed Logit model; Water service; Willingness to pay