Benefit estimation of water quality improvements in the Bagmati River: Choice experiments

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In this paper we estimate the benefits of improving water quality in the Bagmati River in Kathmandu using Choice Experiments. Water quality of the Bagmati has direct impact on health, environment, ecology and development of the Kathmandu valley. Only a few known studies have been conducted focusing exclusively on the benefits of improvements in quality of water in the Bagmati River. We identify and use important attributes of river water quality including cost under different management scenario to estimate willingness to pay and willingness to contribute for river water quality improvements. We also calculate compensating surplus for different level of water quality improvements. Society's preference over payment and funding mechanism for the clean up program are also identified. Benefit estimation, households' preferences on payment, and funding mechanism for the clean up program are expected to yield valuable inputs into policy implications, especially in the context of a government initiative for the long term Bagmati River management program such as the Bagmati Action Plan.

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