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# Estimation of the public benefits of urban water supply improvements in Ethiopia: a choice experiment

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## Abstract

Improving existing drinking water supply services in developing countries depends crucially on available financial resources. Cost recovery rates of these services are typically low, while demand for more reliable services is high and rapidly growing. Most stated preference-based demand studies in the developing world apply the contingent valuation method and focus on rural areas. This study examines household Willingness to Pay (WTP) for improved water supply services in a choice experiment in an urban area in Ethiopia, a country with the lowest water supply coverage in Sub-Saharan Africa. The design of the choice experiment allows estimation of the value of both drinking water supply reliability and safety. The estimated economic values can be used in policy appraisals of improved supply investment decisions. Despite significant income constraints, households are willing to pay up to 80% extra for improved levels

of water supply over and above their current water bill. Women and households living in the poorest part of the city with the lowest service levels value the improvement of water quality most. As expected, also averting behaviour and expenditures play an important role.

Keywords:

- water supply
- choice experiment
- domestic water demand
- Ethiopia
- market segmentation
- willingness to pay

JEL Classification::

- H42
- I31
- L95
- Q25
- Q51

## Notes

<sup>1</sup> Birr is Ethiopia's national currency. At the time of the study, 1 Birr was equal to approximately 0.06 USD.

### Related Research Data

[Choice Modelling: Assessing the Environmental Values of Water Supply Options](#)

Source: Australian Journal of Agricultural and Resource Economics

[Scope sensitivity in households' willingness to pay for maintained and improved water supplies in a developing world urban area: Investigating the influence of baseline supply quality and income distribution upon stated preferences in Mexico City](#)

Source: Water Resources Research

[Does Market Experience Eliminate Market Anomalies?](#)

Source: The Quarterly Journal of Economics

[Heterogeneous Preferences Regarding Global Climate Change](#)

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