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## Poverty Eradication by Improving Waste Collection: an African Case Study

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This contribution analyzes data from a Contingent Valuation survey that we conducted in 2014 among 402 households in low-income settlements of Abidjan in order firstly, to identify the determinants of stated demand for an informal waste collection service and secondly, to evaluate the benefits of using this service on different impact variables linked to human development. Indeed, households are exposed to negative externalities (odors, insects, health risks, loss of quality of life) that could lead them wish to offset the loss of utility with an individual investment in the informal service. The contingent valuation survey proposes "The provision of two trash containers [in two different colors to encourage sorting and recycling] with twice-weekly collection") and to pay a fee in order to fund the program. The article contributes to the academic literature and gives recommendations in terms of economic policy applied to the waste sector in Africa. Firstly, our study identifies the determinants of stated demand for the informal service and the ability of households to finance an improved service. Secondly, the article evaluates the beneficial effects of using the informal service by the propensy score method. By controlling for socioeconomic differences between households, our results show the real sensitivity to the project. These results show a positive but not significant difference in the tax per kilogram of household waste the treatment and control groups are willing to pay. We evaluate the impact of the use of the informal service on the monthly amount that households are willing to pay for the improved service (CV). We quantify the benefits in terms of socioeconomic and human development. Per-capita monthly expenses allocated to food, health, and education are significantly higher in the treated group. The results show the positive impacts of the waste service access on others positions dedicated to improving quality of life and well-being.



