

# **Increasing Community Toilet Use in Urban Slums: Preferences and Willingness to Pay from a Discrete Choice Experiment in India**

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## **Abstract**

This study examines strategies to increase community toilet (CT) use in Delhi slums, focusing on women's safety and the behavior of open defecation (OD) practitioners. A discrete choice experiment (DCE) with 310 respondents evaluated preferences for water availability, gender separation, cleanliness, odor control, and user fees. Data were analyzed using conditional and mixed logit models, with interaction terms applied to test subgroup hypotheses. Results show strong positive preferences for improved CT attributes, particularly seat cleanliness, gender separation, and water access, with significant willingness to pay for these features. Mixed logit analysis revealed substantial heterogeneity, especially regarding odor control. Subgroup analysis confirmed that women, and especially those from households with adolescent girls, placed greater importance on gender separation, reflecting heightened safety concerns. OD practitioners expressed stronger preferences for improved CTs than for the status quo, suggesting that avoidance of CTs reflects dissatisfaction with current conditions rather than rejection of the facility type. From a development and microeconomic perspective, the study provides rare empirical evidence on collective sanitation behavior and willingness to pay in low-income urban settings, offering policy-relevant insights for promoting equitable, gender-sensitive, and sustainable sanitation solutions.

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