Sustainably expanding sanitation services to the urban poor

Demand for Sanitation in Kenyan Urban Slums (DSKUS) IE

Kenya Evidence Forum - June 14, 2016
Using Evidence to Improve Policy and Program Designs
What is the most important sector to invest in to generate the biggest impact for the Kenyan economy?
A. Roads
B. Water supply
C. Energy
D. Education
E. Health
Which stock would you invest in (in 2006)?

A. Blue stock
B. Red stock
Which stock would you invest in (in 2006)?

![Stock Comparison Graph]

APPLE

BLACKBERRY
What are we building?

It’s not what we do but how we do it that counts
Expanding services in urban informal settlements

The origin
Global DIME workshop held in Naivasha in 2012

The partners
Nairobi City Water and Sewerage Company
Athi Water Board

The project
427 million USD investment to improve water supply in Kenya

The problem
Households responsible for ‘last mile’ connections, but willingness to pay is often less than cost
Research questions

• Who connects and at what price?
  • Help optimize the targeting and amount of subsidies
• What are the impacts of providing sewerage connections to households?
  • How does it affect rent, migration, health, general satisfaction?
Operational Question

• What should NCWSC set their base subsidy level at?
  • At what price will people connect?
  • Will those that connect actually pay back monthly fees?
What price will landlords connect at?
Landlord plans to connect to sewerage

97% Yes
3% No
...but willingness to pay varies a lot

Originally discussed monthly fee

Originally discussed monthly fee
Who is going to pay and how often?
Overall loan balance for water is reducing

Loan amount: 3670 KSh

Current balance (average): 2623KSh
But...history of loan repayment for water shows many people paying off completely with others accumulating debt.

- 35% Loan fully paid off
- 53% Loan partially paid off
- 12% Current loan amount is now larger than original loan
Distribution of current loan balances

Original loan: 3670 KSh
Repayment time (for those fully repaid)
Next steps

• Repayment model has been restructured
  • Lower monthly fees (KSh 450), but also include an upfront deposit

• Tenant survey ongoing

• Randomly offer landlords “medium” and “high” subsidies to connect
  • Measure the impact on connection rates and understand who is connecting
  • Follow up survey (end 2017) to measure impacts of connection on rental rates, migration, health, etc.
The setting: Kayole Soweto, Nairobi

### Compound has rental dwellings

- **Yes**: 17.80%
- **No**: 82.20%

### Landlord is resident in the compound

- **Yes**: 0%
- **No**: 100%

### Number of households per compound

- **Average**: 6.2

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<tr>
<th>Number of Households</th>
<th>Percentage</th>
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<tbody>
<tr>
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<tr>
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