Assessing Sanitation Demand

A Behavioural Model for Understanding the Household-Level Latrine Installation Decision-Making Process in Areas of Low Sanitation Coverage

Dr Mimi Jenkins & Beth Scott
Background

- Few successful large-scale sanitation investment programmes
- Most latrines in developing countries built without subsidy through the indigenous market
- Demand-led Sanitation Programme Challenge = to understand, drive and enhance the natural sanitation market
- Failure of WTP studies to effectively predict sanitation demand
- Need to understand the latrine adoption decision making process
In Developing Countries deciding to invest in a household latrine for the first time can be a complicated and lengthy process. It is not simply a case of waking up and deciding to build a latrine one day. Necessary to view the latrine adoption process as a progression of evolving attitudes, knowledge, and actions. Need to understand motivations for and constraints to household sanitation adoption.
The Preference-Intention-Choice Model

Determinants of Sanitation Adoption

- Dissatisfaction with current defecation alternative
- Positive awareness of sanitation options
- Priority among competing goals
- Absence of permanent constraints to acquiring sanitation
- Absence of temporary constraints to acquiring sanitation

Stage 1: Preference

- Preference (Motivation)
  - No Preference

Stage 2: Intention

- Intention
  - No Intention

Stage 3: Choice

- Choice
  - Delay
Applying the Model: The Sanitation Demand Tool

• A quantitative tool which:
  • Measures Baseline Sanitation Adoption and Demand Patterns
  • Predicts Changes in Demand for Sanitation Improvements by Mapping the Decision-Making Process and Understanding the Barriers to Adoption at Each Stage
  • Allows the Design of Effective and Strategic Interventions (and Policies) to Increase Sanitation Demand by Segmenting the Population into Market Segments Based on Their Decision Stage
## Results: Ghana National Survey

<table>
<thead>
<tr>
<th>Defaecation Site</th>
<th>No. (%)</th>
<th>Adopter Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Def</td>
<td>75 (14.0)</td>
<td>Non-Adopter</td>
</tr>
<tr>
<td>Public Toilet</td>
<td>312 (58.2)</td>
<td>Non-Adopter</td>
</tr>
<tr>
<td>Trad Pit Outside Compound</td>
<td>9 (1.7)</td>
<td>Non-Adopter</td>
</tr>
<tr>
<td>Neighbour’s Lat</td>
<td>3 (0.6)</td>
<td>Non-Adopter</td>
</tr>
<tr>
<td>Compound Lat</td>
<td>78 (14.6)</td>
<td>Adopter</td>
</tr>
<tr>
<td>Hsehold Latrine</td>
<td>59 (11.0)</td>
<td>Adopter</td>
</tr>
<tr>
<td>TOTAL</td>
<td>536 (100.0)</td>
<td></td>
</tr>
</tbody>
</table>

137 (25.6%) Adopters; 399 (74.4%) Non-Adopters
Segmenting the Target Population

Stage 1: Preference
100% of Non-Adopters

Stage 2: Intention
38.5% of Non-Adopters

Stage 3: Choice
31.3% of Non-Adopters

NEW DEMAND
5.8% of Non-Adopters
## Factors Affecting Where Households Lie in the Decision-Making Process

<table>
<thead>
<tr>
<th>Adoption Decision Stage</th>
<th>Factors Blocking Adv at Each Stage of the Decision Process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preference</strong></td>
<td>- Lack of awareness of benefits of household latrine</td>
</tr>
<tr>
<td></td>
<td>- Weak or absent motivations</td>
</tr>
<tr>
<td></td>
<td>- Satisfaction with existing defaecation place</td>
</tr>
<tr>
<td><strong>Intention</strong></td>
<td>- Lack of preference</td>
</tr>
<tr>
<td></td>
<td>- Lack of priority</td>
</tr>
<tr>
<td></td>
<td>- Permanent constraints e.g. limited space, tenancy</td>
</tr>
<tr>
<td></td>
<td>issues, credit and savings difficulties</td>
</tr>
<tr>
<td><strong>Choice</strong></td>
<td>- Lack of preference and intention</td>
</tr>
<tr>
<td></td>
<td>- Satisfaction with existing defaecation place</td>
</tr>
<tr>
<td></td>
<td>- Temporary constraints e.g. high cost, no mason…</td>
</tr>
</tbody>
</table>
 Accelerating Demand for Household Sanitation in Ghana

1. Strategies to increase Preference:
   Need to generate
   - Awareness
   - Dissatisfaction with current practice
   - Motivation

   Communications campaign that highlights negative aspects of current options [dirty, smelly] and/or motivations for adoption [convenience, cleanliness] of new products
2. Strategies to Increase Intention to Build:
Need to work to reduce constraints [limited space, financing & tenancy]
- New product development: emptying services, products requiring less space
- Increase access to credit, research new more flexible payment schemes
- Focus communications efforts to landlords over tenants
3. Strategies to Increase Final Choice:

Key reasons for delaying final installation =
- (perceived) high cost of toilet options
- no one to build
- complexity of building

→
- Increase the quality, range and costs of toilet technologies available
- Work to extend the private sector supply chain possibly through mason training programmes thus increasing availability and quality of building services
Summary

• Latrine adoption = complicated process of evolving attitudes and abilities
• Factors influencing the likelihood of latrine adoption:
  – Satisfaction with existing defaecation practice
  – Motivations for improving sanitation
  – Priority over competing household concerns
  – Situational and supply-chain related constraints
• Formative Research Tool and Associated Model
  → Simple, targeted programme planning & effective M&E
3 Things (I think) we Know

• How to measure *new* household demand for sanitation

• Key household motivations for wanting a latrine: privacy, dangers of the bush, comfort, pride…

• How to drive demand for household sanitation

• In short: we understand the demand side of the chain pretty well, but…
Supply-Chains Remain an Issue…
(3 Things I don’t know)

• How do we ensure latrine products and services are available to the rural poor?
• What financial models can be employed to help households install the latrine of their choice?

• How do we tackle the ever-increasing sanitation challenge in urban, high density, tenancy-based accommodation?