Developing a Sanitation Behavior Change Framework: SaniFOAM

Workshop Report
February 21-22, 2008
Durban, South Africa
March 2008

This report is part of the WSP Global Scaling Up Sanitation Project funded by the Bill & Melinda Gates Foundation. A major focus of the project is on learning how to scale up. The project is testing proven and promising approaches to create demand for sanitation and the use of marketing techniques to generate demand and improve the supply of sanitation-related products and services among the rural poor.

The report documents a workshop on developing a behavior change framework for sanitation. The workshop was held February 21-22, 2008 in Durban, South Africa. This information is being shared to encourage the exchange of ideas and information and to promote learning. We invite comments and feedback. Please send your feedback to: wsp@worldbank.org

The Water and Sanitation Program (WSP) is a multi-donor partnership of the World Bank. For 30 years, WSP has helped the poor gain sustained access to improved water supply and sanitation services (WSS). The Water and Sanitation Program (WSP) works with governments at the local and national level in 25 countries.

For more information visit our website: www.wsp.org

CREDITS
Production Coordination: Paula Carazo

The findings, interpretations and conclusions expressed in this report are entirely those of the author. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations or those of the Executive Directors of the World Bank or the governments they represent. The World Bank does not guarantee the accuracy of the data included in this publication and accepts no responsibility whatsoever for any consequence of their use. The boundaries, colors, denominations and other information shown on any map in the document do not imply any judgment on the part of the World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.
# TABLE OF CONTENTS

**ACKNOWLEDGEMENTS** ........................................................................................................ iv  
**SUMMARY** ........................................................................................................................... 1  

**Introduction** ........................................................................................................................ 3  

**Developing the Behavior Change Framework** .................................................................. 4  
  Step 1: Review of Sanitation and Behavior Change .......................................................... 4  
  Step 2: Review of Behavior Change Models and Frameworks ........................................... 2  
  Step 3: Program and Research Presentations ..................................................................... 6  
  Step 4: Define Behavioral Determinants ........................................................................... 6  
  Step 5: Categorize Determinants Within OAM ................................................................. 8  
  Step 7: Prioritize Determinants ......................................................................................... 8  
  Step 8: The Marketing Mix ................................................................................................. 11  
  Step 9: Review Objectives/Expectations and Conduct Evaluation ..................................... 12  
  Step 10: Next Steps .......................................................................................................... 12  

**ANNEXES**  
Annex 1: Participants in the Workshop ................................................................................. 13  
Annex 2: Definitions of Determinants .................................................................................. 14  
Annex 3: Workshop Agenda ................................................................................................. 17
ACKNOWLEDGMENTS

This report was prepared by Craig Kullmann. The workshop was designed and facilitated by Jacqueline Devine, Yolande Coombes, and Jason Cardosi. They would like to thank Eduardo Perez and the Global Scaling Up Sanitation Project (TSSM) team and Wambui Gichuri, Ousseynou Diop and WSP-Africa for supporting this workshop and the development of the behavior change framework. They are especially grateful to the workshop participants and the organizations they represent including UNICEF, the London School of Hygiene and Tropical Medicine, WHO, USAID-HIP, and WSP, without whose expertise and active participation there would not be a sanitation behavior-change framework.
SUMMARY

The Water and Sanitation Program (WSP) hosted a consultative workshop in Durban, South Africa from February 21-22, 2008 to develop a sanitation behavior change framework. The workshop was attended by 27 participants from organizations working to improve sanitation globally.

The framework is intended to help practitioners:
- understand consumer needs and wants,
- behavior change objectives in a given setting,
- inform research,
- improve monitoring and evaluation designs, and
- engage and supervise consultants when implementing sanitation behavior change programs.

This framework can also be incorporated into other models and frameworks being used in sanitation such as Participatory Hygiene and Sanitation (PHAST).

The workshop had three broad objectives:

1) Review determinants of sanitation behavior

2) Develop a framework for sanitation behavior change

3) Determine how to operationalize the framework

The active involvement of participants was a key factor in achieving the stated workshop objectives. The participants developed a common language of behavior change terminology and worked together to develop a sanitation behavior change framework.

Global Scaling Up Sanitation Project
called -SaniFOAM. Both participants and the facilitators thought the workshop was a success.

WSP will use the participants’ inputs and workshop proceedings to refine the framework and produce an operational guide on its use. This will include specific guidance on formative research and various aspects of program implementation.

In addition, a format for workshops will be developed for country sanitation stakeholders to apply SaniFOAM. With these tools, WSP hopes to help practitioners design, implement, and monitor behavior change activities in sanitation interventions.
**INTRODUCTION**

The Water and Sanitation Program (WSP), which is administered by the World Bank, received funding from the Bill & Melinda Gates Foundation to implement the Global Scaling Up Sanitation Project (TSSM) in Indonesia, India, and Tanzania. This project is testing new approaches to generate sanitation demand at scale and increase the supply of sanitation products and services resulting in increased access to hygienic sanitation and improved health for poor households and communities in rural villages, small towns, and informal urban settlements.

The SaniFOAM workshop grew out of the need for the TSSM project team to better understand the determinants of sanitation behavior and to develop a behavior change framework that could be applied to improve demand and supply side interventions of the project. A critical component of the project is to carry out a structured learning process to develop practical knowledge and tools for effective replication and scaling up of future programs in other countries, and a BCF was identified as one of those tools.

The sanitation behavior change framework (BCF) helps to understand the benefits and costs to individuals of moving up or down the sanitation ladder, or maintaining their position once improved sanitation has been reached. The BCF allows sanitation professionals to look through the lens of the people they are trying to serve and see, from their perspective. The opportunities, abilities, and motivations to improve their sanitation facility. It also allows sanitation professionals to strengthen formative research, interventions, and monitoring and evaluation systems.

The BCF developed in this workshop builds on existing behavior change models and frameworks that are used by the sector such as PHAST, WASH, and SARAR; and within public health, such as the Health Belief Model, Theory of Reasoned Action, Diffusion of Innovation, and Stages of Change. The workshop included participants from a range of backgrounds (engineering, public health, social sciences) representing six different organizations and 12 countries.

The workshop was held in Durban, South Africa from February 21-22, 2008 following the AfricaSan Conference. (AfricaSan convened thirty countries in Africa and focused on the current state of sanitation on the continent.)

The workshop’s objectives were to:
1. Review determinants of sanitation behavior
2. Develop a framework for sanitation behavior change
3. Determine how to operationalize the framework
In 2007, WSP held a series of workshops to develop a behavior change framework for handwashing. These lessons and experience helped inform the design of the SaniFOAM workshop. Sessions at the SaniFOAM workshop included: a review of behavior change models, frameworks, and concepts; and a discussion on behavior change theory so participants would have a common vocabulary. These sessions were followed by participant presentations and group work to immerse the participants in the BCF and understand the determinants of sanitation behavior. The last sessions focused on how to apply the BCF.

**Step 1: Review of Sanitation and Behavior Change**

Participants formed teams and were asked to come up with a team name and logo. Each team was asked to define one of the following terms: sanitation marketing, marketing, social marketing, and Community Led Total Sanitation. The purpose of this exercise was to ensure a shared understanding of the definitions among all participants. The following definitions were agreed upon:

*Social Marketing:* The systematic application of marketing techniques to achieve behavioral goals for a social good.

*Marketing:* Understanding and meeting consumer’s needs through an exchange process.

*Sanitation Marketing:* Involves increasing demand and adaptation of sanitation goods, services, ideas, and behaviors. It also involves the improvement of supply of sanitation goods and services and optimizing the overall enabling environment. Both components ensure people are able to choose what they want and are willing to pay for what is financially sustainable and cost effective.

*Community Led Total Sanitation:* Key characteristics are:
- Emphasis is on creating demand vs. supply driven
- Collective action/change/communal benefits
- Aim is Open Defecation Free communities
- Triggers first step on sanitation ladder
- Method of facilitation uses participatory methodologies/PRA
- Community led needs to be emphasized
- Requires outside facilitation
- Social pressure

**Step 2: Review of Behavior Change Models and Frameworks**

Participants reviewed behavior change models, frameworks, and concepts with the aim to have all participants sharing a common vocabulary. The objectives for the session included:

1. Define frameworks and models
2. Discuss the importance of models and frameworks
3. Provide an overview of approaches to models and frameworks for behavior change
4. Make recommendations for a framework for sanitation behavior change

The purpose of using models and frameworks is to help guide research and practitioners to plan behavior change interventions in a structured manner. Behavior change models make assumptions about variables and the relationship between them and attempt to test a causal link between behavioral determinants and the behavior. Frameworks are more of an umbrella structure. They capture known variables about a behavior and are used to outline possible courses of action, but they do not make assumptions or attempt to be precise about causal relationships or the direction of causation.

Models and frameworks are useful tools to inform evidence-based programming because they help strategically focus resources, identify target behaviors and populations, provide a common language, inform monitoring and evaluation systems, and help identify research questions and information needs.

There are more than 130 different models and frameworks of behavior change, and typically they build on one another. Models and frameworks may be based on one behavior change theory, but are generally informed by a mix of theories such as the Health Belief Model, Theory of Reasoned Action, Stages of Change, Diffusion of Innovation. Participants were shown examples on the application of models and frameworks to help them understand how the theoretical concepts are applied in practice. This session also reviewed determinants of behavior that are common across many different behavior change models and frameworks. (Table 1)

<table>
<thead>
<tr>
<th>Determinant</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>The conviction that one can successfully execute the behavior required to produce the outcomes</td>
</tr>
<tr>
<td>Perceived susceptibility or threat</td>
<td>One's belief regarding the chance of being harmed by performing or not performing the behavior</td>
</tr>
<tr>
<td>Perceived barriers</td>
<td>One's belief about the tangible and psychological costs of the desired behavior (e.g. time, money, social status, ) or maintaining the existing behavior</td>
</tr>
<tr>
<td>Perceived benefits</td>
<td>One's belief in the efficacy of the advised action to reduce risk or seriousness of impact</td>
</tr>
<tr>
<td>Social Norms</td>
<td>Norms that indicate the way most people act</td>
</tr>
<tr>
<td>Behavioral intentions</td>
<td>Perceived likelihood of performing the behavior</td>
</tr>
</tbody>
</table>

Based on a review of various models/frameworks by the facilitator, and the recent application of the Ability, Opportunity, and Motivation Framework (OAM) for

3 ibid
4 ibid
6 Ibid (pp. 69)
handwashing behaviors, the facilitators recommended that the OAM framework be used for sanitation.

OAM is widely used in the fields of marketing and social marketing to explain behaviors among target populations. The framework is based on three basic psychological concepts that facilitate behavior change:

*Motivation:* The impetus or drive toward carrying out a behavior;

*Ability:* Skills and capabilities needed to perform a behavior;

*Opportunity:* Contextual and situational constraints relevant to the performance of the behavior.

**Step 3: Program and Research Presentations**

The purpose of this session was to share knowledge and information and to orient participants to behavioral determinants. As part of the workshop planning, participants were asked to prepare a presentation covering the behavior they are trying to change in their sanitation projects; a description of their target group(s); the methodological approach they are taking e.g. CLTS, Social marketing, TSSM, PHAST; and, based on their research, a list of the three most important behavioral determinants that affect sanitation behavior. Presentations were made by: Martin Gauss, Beth Scott/Mimi Jenkins, Jason Cardosi, Sara Fry, Ajith Kumar, Therese Dooley, and Jan Willem Rosenboom (Annex 5).

**Step 4: Define Behavioral Determinants**

The purpose of this session was to define sanitation behavioral determinants by marrying the concepts presented in the morning with facts and observations of sanitation behavior from existing literature. Participants worked in teams and were given cards containing facts/observations about sanitation: Having your own latrine reduces discomfort and embarrassment; Installation requires many decisions: toilet type, location, design, time of installation. Participants were asked to categorize the facts/observations into common themes and give the theme a label. Participants were also encouraged to add facts based on their experience in the sector. These groupings were the basis for defining the sanitation behavioral determinants: Benefits, Beliefs, Threats.

The teams spent an hour categorizing facts and coming up with determinants which were presented to the group. Based on the findings and categorization by each team, the group refined the determinants that were generated and arrived at a common set, which is the foundation for the sanitation OAM framework. The themes identified were:

- Availability
- Affordability
- Beliefs/Attitudes
- Perception of Control,
- Self-Confidence
- Roles/Decisions
• Emotional Drivers (Sub-categories: Disgust, Comfort, Self Esteem, Pride, Being Modern)
• Social Support & Influence
• Social Norms
• Skills
• Threats (e.g. Safety, Health, Snakes, Spirits)
• Access/Availability
• Product Attributes
• Enforcement
• Knowledge
• Competing Priorities
• Practical Benefits/Advantages
• Intention (whether you intend to carry out)

Participants asked thought provoking questions as the group tried to refine the framework.

• There was discussion as to whether this framework could be applied to schools because sanitation access and use may be very different than at the household level. There was some concern that schools were just being thrown into the mix, but the consensus was to agree on the framework and apply it to a school setting to see how it would work.

• One issue raised was that building a latrine is not just a technical issue, but that it is a complex decision making process, and the participant recommended that “complexity” could be a strong determinant; however the general agreement among the group was that “complexity” is intertwined in all of the determinants and therefore it should not be isolated on its own.

• A question was raised as to whether this framework could work for target populations on the supply side of sanitation (masons or pit emptying service providers). The consensus was that the framework could help identify the determinants that suppliers of sanitation goods and services need to address, but this would need to be tested.

• A question was raised if “tenancy” and “land” were stand alone determinants or if they should fall under access/availability or threat? The group consensus was that “tenancy” and “land” will be under access/availability and enforcement.

• Someone asked whether a change agent (i.e. external force) or stakeholders was a determinant. The group agreed that the determinant “Social Support/Influence” would cover these external forces.

• The question of where “time” fits in the framework was raised, and the group agreed that “time” would be included under the determinant – Affordability.

• Someone proposed “habit” as a determinant, but the group did not come to agreement on it, so it was not included in the framework.
“Previous experience” with a latrine was proposed and the group decided that this concept would go under “attitude”. “Value of a latrine” to the household, would fall under the determinant “Practical Benefits”, but personal “Values” would be a stand alone determinant.

Some terms such as “Self-efficacy” and “Locus of Control” were not commonly understood among all participants, so the group re-titled them “Self Confidence” and “Perception of Control” respectively.

Based on the group’s experience, they felt strongly about isolating emotions such as “Self-Esteem/Pride” as its own determinant. The end result was a determinant called Emotional Drivers which captures a range of emotions including: disgust, purity, comfort, respect, embarrassment, being modern, being part of society, and a first class citizen.

**Step 5: Categorize Determinants Within OAM**

This session focused on categorizing the determinants identified in the previous step and placing them into the OAM framework. This session was the last session of the day and the group agreed that it would be better for the facilitators to categorize the determinants and review them with the group the following day. The end result of the first day was a sanitation framework as shown in Table 2.

<table>
<thead>
<tr>
<th>Focus</th>
<th>Opportunity</th>
<th>Ability</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Attributes</td>
<td>Social Support &amp; Influence</td>
<td>Intention (to carry out behavior)</td>
<td></td>
</tr>
<tr>
<td>Access &amp; Availability</td>
<td>Affordability</td>
<td>Emotional Drivers</td>
<td></td>
</tr>
<tr>
<td>Enforcement</td>
<td>Roles &amp; Decisions</td>
<td>Beliefs/Attitudes</td>
<td></td>
</tr>
<tr>
<td>Social Norms</td>
<td>Skills</td>
<td>Threats</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Knowledge</td>
<td>Perception of Control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self Confidence (I can do it)</td>
<td>Values</td>
<td></td>
</tr>
</tbody>
</table>

**Step 6: Review of Opportunity, Ability, and Motivation (OAM) Framework**

This session reviewed the concepts of the OAM framework. The facilitators reviewed examples of what OAM means in everyday life to help participants relate the concept to reality. The main points that this session conveyed were that in order to do any behavior you have to:

- **Want to do it = Motivation**
- **Be able to do it = Ability**
- **Have the opportunity to do it = Opportunity**
After the OAM review, the group validated how the facilitators categorized the determinants in OAM. The group agreed with the sanitation framework and requested that examples of each determinant be provided for future use. (Annex 2)

**Step 7: Prioritize Determinants**

The teams were assigned a target group and behavior change objective, which constitutes the Focus part of the FOAM framework. Using the newly developed sanitation FOAM framework (SaniFOAM), the teams were asked to prioritize the determinants that they thought would be most important to their target group and behavior change objective. The three scenarios were:

<table>
<thead>
<tr>
<th>Target Group</th>
<th>Desired Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Households</td>
<td>Upgrade facility</td>
</tr>
<tr>
<td>Rural households</td>
<td>Stop open defecation</td>
</tr>
<tr>
<td>School children</td>
<td>Use school latrines</td>
</tr>
</tbody>
</table>

The teams prioritized each of the SaniFOAM determinants by “low priority for this target group”, “evidence gap to know whether it is high priority”, and “high priority”.

This session produced rich discussions about determinants in each of three scenarios.

**Target Group #1 (Urban Households)**

The urban household group focused on tenant population i.e. non owners and found that all of the determinants were important.

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Ability</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>High priority</td>
<td>Product Attributes</td>
<td>Emotional Drivers</td>
</tr>
<tr>
<td></td>
<td>Access &amp; Availability</td>
<td>Competing Priorities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Practical Benefits/Advantages</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Threats</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Perception of Control</td>
</tr>
<tr>
<td>Evidence gap to know whether it is</td>
<td>Social Norms Enforcement</td>
<td>Self Esteem/Pride</td>
</tr>
<tr>
<td>high priority</td>
<td></td>
<td>Beliefs/Attitudes</td>
</tr>
<tr>
<td>Low priority for this target group</td>
<td>N/A</td>
<td>Values</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>Intention (to carry out behavior)</td>
</tr>
</tbody>
</table>

This group reported that perception of control was a big issue for them because of the landlord/tenant relationship. The fact that tenants do not have control of their situation is
a significant issue for tenants. Tenants feel that landlords are responsible for latrines. If tenants decide to build a latrine, they will wait until they have their own land. Another comment was that landlords are scared to build latrines because if they have to raise the rent to pay for the latrine, the tenants will leave.

One participant noted that this points out the need to address the enabling environment and look at policy issues. The group discussed how this framework can help identify the problems at the household level to determine what policies need to change at the macro level.

**Target Group #2 (Rural Households)**
One point that came out of this discussion was that each of the determinants in the framework has both positive and negative sides. For example, “social norm” could be open defecation free, or the norm could be to defecate in the open. Another example is practical benefits - if a latrine keeps someone out of the rain, away from snakes and has a lockable door for privacy, then it is a benefit. However the converse if also true, if you have a facility which has a cloth superstructure with no roof then none of the practical benefits mentioned above would be met and would continue to be barriers.

<table>
<thead>
<tr>
<th>Rural Households</th>
<th>Opportunity</th>
<th>Ability</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>High priority</td>
<td>Social Norms, Access/Availability,</td>
<td>Social Support and Influence, Self-Confidence</td>
<td>Belief/Attitudes/Values, Practical Benefits, Self Esteem/Pride, Emotional Driver</td>
</tr>
<tr>
<td>Evidence gap to know whether it is high priority</td>
<td>Product Attributes, Enforcement</td>
<td>Role/Decisions, Affordability, knowledge</td>
<td>Intention, Perceptions</td>
</tr>
<tr>
<td>Low priority for this target group</td>
<td>N/A</td>
<td>Skills</td>
<td>Competing Priorities</td>
</tr>
</tbody>
</table>

**Target Group #3 (School Children)**
A participant pointed out that these determinants may change depending if the target audience is children or school teachers. This is why it is important to keep the framework broad enough to capture various segments of the population.
Table 6

<table>
<thead>
<tr>
<th>School Children</th>
<th>Opportunity</th>
<th>Ability</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High priority</strong></td>
<td>Access/availability Product Attributes Enforcement Social Norms</td>
<td>Social Support and Influence Roles/Decisions</td>
<td>Beliefs/Attitudes/Values; Social Support; Role/Decisions, Practical Benefits, Threats, Emotional Drivers Self Esteem/Pride</td>
</tr>
<tr>
<td><strong>Evidence gap to know whether it is high priority</strong></td>
<td>N/A</td>
<td>affordability</td>
<td>perceptions of control</td>
</tr>
<tr>
<td><strong>Low priority for this target group</strong></td>
<td>N/A</td>
<td>Skills Affordability</td>
<td>competing priorities</td>
</tr>
</tbody>
</table>

Because this framework is a first draft, it will change as evidence is generated from the sector. The framework is a living document and will change as new evidence refines our understanding of the different determinants. Over time new determinants might be added and others might be removed. Participants were reminded that this exercise demonstrates that not all determinants are applicable to all segments or target groups.

**Step 8: The Marketing Mix**

This session discussed the concepts of the marketing mix (4 p’s) through examples of communication and promotional campaigns and strategies (public and private). The analogy used to describe the relationship between the marketing mix and the OAM framework is that the OAM framework provides the ingredients and the marketing mix provides the recipe for implementation.

The marketing mix (4P’s) is defined as:

- **Product** – good, service, idea, behavior. It is not just a tangible product but can be emotional. In sanitation behavior change, products might include latrines, emptying services, financial services or the idea of sanitation as a household necessity.
- **Price** – any cost associated with product (non-monetary: time,) and (monetary: $)
- **Place** – where and when the target audience will perform the desired behavior and/or acquire campaign tangible objects, or receive services associated with the campaign [distribution]7
- **Promotion** – 1. *what* you want to communicate (key messages), 2. *who* will be the messenger i.e. who will deliver the message (spokesman, sponsors, partners), 3. *where* will messages appear i.e. what are the communication channels (Advertising via TV, radio, print; promotional events such as street drama; promotional items such as t-shirts, hats, pins)8

8 Ibid (pp.42)
Each team took two of their high priority determinants from the previous session and mapped out an intervention using the 4 Ps. This exercise proved to be challenging for the teams, however, they did a remarkable job given the short exposure to the topic.

The point of the exercise was to practice applying the framework using the marketing mix. Participants were reminded that they don’t need to come up with the 4 P’s for every determinant.

**Step 9: Review Objectives/Expectations and Conduct Evaluation**

The facilitators reviewed objectives of the workshop and participant’s expectations. The group agreed that the objectives of the workshop and most of their expectations were met. There were a few expectations that were not addressed and are listed below. Overall, the response to the workshop was positive. Given the vast expertise and experience of the participants plus the introduction of new concepts and ideas for many participants, and the short time period, the group covered an enormous amount of ground in two days.

*Expectations and unanswered questions*

- The application of SaniFOAM to monitoring and evaluation was not addressed.
- Is moving to the second step of the sanitation ladder, a collective or individual action?
- What are the affects of animal excreta on human health?
- Do we need to re-name the determinants of Benefits and Enforcement?

**Step 10: Next Steps**

WSP will use the participants’ inputs and workshop proceedings to further refine the framework and produce an operational guide on its use. This will include specific guidance on engaging expertise to carry out formative research and various aspects of program implementation.

A workshop format will be developed for country sanitation stakeholders to apply SaniFOAM. With these tools, WSP hopes to help practitioners design, implement, and monitor behavior change activities within sanitation interventions.
## ANNEX 1: PARTICIPANTS IN THE WORKSHOP

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Organization</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Anthony Waterkein</td>
<td>Consultant</td>
<td>South Africa</td>
</tr>
<tr>
<td>2</td>
<td>David Kuria</td>
<td>Ecoplast</td>
<td>Kenya</td>
</tr>
<tr>
<td>3</td>
<td>Beth Scott</td>
<td>London School of Hygiene &amp;Tropical Medicine</td>
<td>UK</td>
</tr>
<tr>
<td>4</td>
<td>Chris Cormency</td>
<td>Unicef</td>
<td>Senegal</td>
</tr>
<tr>
<td>5</td>
<td>Sophie Hickling</td>
<td>Unicef</td>
<td>Nairobi</td>
</tr>
<tr>
<td>6</td>
<td>Therese Dooley</td>
<td>Unicef</td>
<td>USA</td>
</tr>
<tr>
<td>7</td>
<td>Mimi Jenkins</td>
<td>University of California Davis</td>
<td>USA</td>
</tr>
<tr>
<td>8</td>
<td>Merri Weinger</td>
<td>USAID</td>
<td>USA</td>
</tr>
<tr>
<td>9</td>
<td>Odile Randriamananjara</td>
<td>USAID</td>
<td>Madagascar</td>
</tr>
<tr>
<td>10</td>
<td>Sara Fry</td>
<td>USAID – HIP</td>
<td>USA</td>
</tr>
<tr>
<td>11</td>
<td>Ajith Kumar</td>
<td>WSP</td>
<td>India</td>
</tr>
<tr>
<td>12</td>
<td>Andreas Knapp</td>
<td>WSP</td>
<td>Ethiopia</td>
</tr>
<tr>
<td>13</td>
<td>Barbra Senkwe</td>
<td>WSP</td>
<td>Zambia</td>
</tr>
<tr>
<td>14</td>
<td>Belete Muluneh</td>
<td>WSP</td>
<td>Ethiopia</td>
</tr>
<tr>
<td>15</td>
<td>Chris Nsubuga</td>
<td>WSP</td>
<td>Uganda</td>
</tr>
<tr>
<td>16</td>
<td>Craig Kullmann</td>
<td>WSP</td>
<td>USA</td>
</tr>
<tr>
<td>17</td>
<td>Eddy Perez</td>
<td>WSP</td>
<td>USA</td>
</tr>
<tr>
<td>18</td>
<td>Geeta Sharma</td>
<td>WSP</td>
<td>India</td>
</tr>
<tr>
<td>19</td>
<td>Jan Willem Rosenboom</td>
<td>WSP</td>
<td>Cambodia</td>
</tr>
<tr>
<td>20</td>
<td>Japheth Mbuvi</td>
<td>WSP</td>
<td>Kenya</td>
</tr>
<tr>
<td>21</td>
<td>Jacqueline Devine</td>
<td>WSP</td>
<td>USA</td>
</tr>
<tr>
<td>22</td>
<td>Jason Cardosi</td>
<td>WSP</td>
<td>Kenya</td>
</tr>
<tr>
<td>23</td>
<td>Martin Gauss</td>
<td>WSP</td>
<td>Peru</td>
</tr>
<tr>
<td>24</td>
<td>Nat Paynter</td>
<td>WSP</td>
<td>Tanzania</td>
</tr>
<tr>
<td>25</td>
<td>Nila Mukherjee</td>
<td>WSP</td>
<td>Indonesia</td>
</tr>
<tr>
<td>26</td>
<td>Ousseynou Diop</td>
<td>WSP</td>
<td>Kenya</td>
</tr>
<tr>
<td>27</td>
<td>Yolande Coombes</td>
<td>WSP</td>
<td>Kenya</td>
</tr>
</tbody>
</table>
Annex 2: Definitions of Determinants

Opportunity

Access and availability: ease of obtaining or upgrading or using a sanitation facility, e.g.
- Access to masons or providers
- Availability of components (eg. cement, slabs)
- Availability of water for anal cleansing and flushing
- Availability of space for latrine
- Tenancy and tenure
- Access to finance and credit

Product attributes: perceived or actual characteristics of sanitation facilities and services e.g.
- Ease of cleaning/maintenance
- Attractiveness
- Odor
- Flies
- Lockable door

Social norms: standards which exist in the community or household for an individual to follow e.g.
- Open/river defecation
- Use of flying toilets
- Sharing household facilities
- Cleanliness

Enforcement: rules and regulations e.g.
- Every house must have a latrine
- Every latrine must have a HW station
- No emptying latrines into public spaces

Ability

Social support and influence: physical, emotional, or informational assistance given or received for an individual or community e.g.
- Advice from relatives, friends, religious and opinion leaders, community workers, neighbor, health provider, media, NGO, facilitator
- Assistance in getting materials for latrine building, water for anal cleansing, cleaning facility, etc.
- Physical assistance for children or elderly to use latrine

Affordability: time, resources and monetary costs of products and services e.g.
- Cost of cement
- Barter for digging of pit
➢ Time taken to get information on sanitation options

Roles and decisions: who plays what role in the decision making process e.g.
➢ Wives chose type of latrine and husbands chose amount money
➢ Responsibility for ensuring separate facilities for girls in schools
➢ Community members’ role in maintaining ODF status

Self-confidence: self-belief that you can perform a behavior effectively or successfully e.g.
➢ Perceived self-confidence to construct a latrine
➢ Perceived self-ability to convince male head of household to upgrade facilities

Skills: required skills and competence to selecting, building, upgrading and maintaining a facility e.g.
➢ Skills for deciding where to site a latrine
➢ Skills for building a latrine sub-structure
➢ Skills for deciding which facility is appropriate
➢ Skills for sourcing emptying services

Knowledge: facts gained through learning about objects, actions, and events eg.
➢ Prevention of diarrhea
➢ Previous experience using sanitation facilities
➢ Previous experience in construction

Motivation

Intention to carry out behavior: your plan to perform or facilitate a behavior e.g.
➢ Plan to upgrade facilities
➢ Plan to build a latrine

Emotional drivers: internal thoughts, drives, perceptions, feelings that motivate behavior e.g.
➢ Comfort from defecating in river
➢ Disgust from dirty toilet
➢ Being modern
➢ Respect and being a “first class citizen”
➢ Embarrassment

Beliefs, attitudes and values: perceptions or positions about a product or behavior. Evaluations or assessment of a product or behavior which may or may not be true. Important and enduring ideas shared by the members of a community about what is good or desirable and what is not e.g.
➢ Perceived benefits of open defecation vs using a facility
➢ Perceived benefits of owning vs sharing a facility
➢ Attitudes towards others who practice open defecation
➢ Taboos surrounding feces

Competing priorities: household or other expenditures that sanitation is vying for resources with e.g.
➢ School fees
➢ Television

Practical benefits and advantages: tangible or physical benefits from behavior e.g.
➢ Shelter from rain
➢ Physical comfort
➢ Value (economic) added to home

Threats: perceived danger or harm associated with performing or not performing the behavior e.g.
➢ Spirits
➢ Snakes
➢ Physical assault

Perceptions of control: whether you believe you have control or whether control is held by external forces e.g.
➢ I control my own destiny (internal)
➢ We are poor so it’s out of my hands (external)
➢ It’s in God’s hands (external)

Self-esteem and pride: degree to which one values oneself (self-esteem) degree to which one values others’ perceptions of you (pride) e.g.
➢ Latrine will allow family to hosts guests with dignity
➢ Outside reputation of being unhygienic community affects our pride
### ANNEX 3: WORKSHOP AGENDA

#### Agenda

**Sanitation Behavior Change Workshop**  
Durban, February 21-22, 2008

**Workshop Objectives:**  
(1) review the determinants of sanitation behavior  
(2) develop a model or framework for sanitation behavior change  
(3) determine how to operationalize the model/framework

#### DAY ONE: Thursday, February 21st

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 8:30 – 9:30 | Welcome and Introductions  
|         | Objectives and Expectations                                             |
| 9:30 – 10:15 | Background: Sanitation and Behavior Change  
|         | Reviewing definitions and reaching a common understanding              |
| 10:15 – 10:30 | BREAK                                                                  |
| 10:30 – 11:15 | Behavior Change Models and Frameworks  
|         | Clarifying what conceptual models and frameworks can and cannot do      |
| 11:15 – 1:00 | Program and Research Presentations  
|         | Emerging behavioral determinants for sanitation                        |
| 1:00 – 2:00 | LUNCH                                                                  |
| 2:00 – 4:00 | Developing the Sanitation Behavior Change Model, Part 1  
|         | Grouping determinants                                                  |
| 4:00 – 4:15 | BREAK                                                                  |
| 4:15 – 5:45 | Developing the Sanitation Behavior Change Model, Part 2  
|         | Defining groups of determinants                                         |

#### DAY TWO: Friday, February 22nd

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 – 8:45</td>
<td>Day 1 Review</td>
</tr>
</tbody>
</table>
| 8:45 – 10:45 | Developing the Sanitation Behavior Change Model, Part 3  
|         | Prioritizing determinants                                               |
| 10:45 – 11:15 | BREAK                                                                  |
| 11:15 – 11:45 | The Sanitation Marketing Mix  
|         | Reviewing Product, Price, Place, and Promotion                          |
| 11:45 – 1:00 | Operationalizing the Model, Part 1  
|         | Using determinants to develop the marketing mix                         |
| 1:00 – 2:00 | LUNCH                                                                  |
| 2:00 – 2:45 | Operationalizing the Model, Part 2  
|         | Reporting on the marketing mix                                          |
| 2:45 – 3:15 | Review and Next Steps  
|         | Reviewing objectives and expectations, workshop evaluation, and next steps |