

Global Scaling Up Sanitation Project

Introducing SaniFOAM:

A Framework to Analyze Sanitation Behaviors to Design Effective Sanitation Programs

Jacqueline Devine

October 2009

Jacqueline Devine

Senior Social Marketing Specialist
Water and Sanitation Program

With thanks to Yolande Coombes, Craig Kullmann, Eduardo Perez for their critical review and helpful suggestions; to Samantha Austin for research assistance; and a special thank you to Jason Cardosi who authored the concept note that led to the development of the SaniFOAM framework.

The Global Scaling Up Sanitation Project works with national and local governments to learn how to combine the promising approaches of Community-Led Total Sanitation and Sanitation Marketing to generate sanitation demand and strengthen the supply of sanitation products and services at large scale, leading to improved health for people in rural areas. For more information, please visit www.wsp.org.

This Working Paper is one in a series of knowledge products designed to showcase project findings, assessments, and lessons learned in the Global Scaling Up Sanitation Project. This paper is conceived as a work in progress to encourage the exchange of ideas about development issues. For more information please email Jacqueline Devine at wsp@worldbank.org or visit our website at www.wsp.org.

WSP is a multi-donor partnership created in 1978 and administered by the World Bank to support poor people in obtaining affordable, safe, and sustainable access to water and sanitation services. WSP's donors include Australia, Austria, Canada, Denmark, Finland, France, the Bill & Melinda Gates Foundation, Ireland, Luxembourg, Netherlands, Norway, Sweden, Switzerland, United Kingdom, United States, and the World Bank.

WSP reports are published to communicate the results of WSP's work to the development community. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of the World Bank Group concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

© 2010 Water and Sanitation Program (WSP)



Table of Contents

I. Overview	1
Introduction	1
Objectives	1
Behavior Change Frameworks	2
Sanitation Behaviors	2
II. SaniFOAM Framework	3
Focus First	3
Behavioral Determinants	4
Opportunity Determinants	5
Access and Availability	5
Product Attributes	6
Social Norms	7
Sanctions and Enforcement	9
Ability Determinants	9
Knowledge	9
Skills	10
Social Support	11
Roles and Decisions	12
Affordability	13
Motivation Determinants	14
Attitudes and Beliefs	14
Values	15
Emotional, Social and Physical Drivers	16
Intention	18
Willingness to Pay	19
III. Conclusion	20
References	21

List of Figures

1: SaniFOAM Framework	5
2: Perceived Skills to Move Up the Sanitation Ladder in Rural Tanzania	11
3: Household Shopping Process for a Toilet—East Java	13

List of Boxes

1: Who Buys Latrines and Why?	4
2: Attitudes Toward Open Defecation in East Java—a Comparison of Open Defectors to all Others	8

I. Overview

KEY POINTS

- Traditional approaches to improving sanitation, which are aimed at building facilities, have not resulted in significant and sustained sanitation coverage.
 - SaniFOAM is a conceptual framework designed to help program managers and implementers analyze sanitation behaviors to design effective sanitation programs.
-

Introduction

In developing countries today, 2.5 billion people do not have access to basic sanitation services.^a This has a profound effect not only on their health but also on their economic and social well-being. Traditional approaches to improving sanitation, which are aimed at building facilities, have not resulted in significant and sustained sanitation coverage. More promising strategies have focused on creating demand for improved sanitation by changing behaviors while strengthening the availability of supporting products and services.^b

This heightened focus on changing sanitation behaviors necessitates that we first understand them. Why do individuals with latrines continue to defecate in the open? What factors enable individuals or households to move up what is known as “the sanitation ladder”^c—that is, as they progress from open defecation to the use of simple latrines to the use of more improved options such as toilets connected to a sewer? What factors inhibit them from doing so?

SaniFOAM is a conceptual framework designed to assist program managers and implementers in answering some of these questions. It was developed in Durban, in February 2008, at a workshop attended by participants from 6 organizations including UNICEF, the London School of Hygiene and Tropical Medicine, USAID and AED/Hygiene Improvement Project. SaniFOAM is currently being applied by the Global Scaling Up Sanitation Project in three countries, including Tanzania (10 districts), Indonesia (East Java), and India (in two states—Madhya Pradesh and Himachal Pradesh). Most notably, in East Java, the SaniFOAM framework has been successfully used to design qualitative and quantitative surveys, develop communication materials supporting community-led efforts aimed at eradicating open defecation and design a strategy aimed at strengthening the supply of sanitation products and services.

Objectives

This paper introduces SaniFOAM and describes how it was developed. Publications planned for later release will provide a more detailed guide on how to apply SaniFOAM, sharing lessons learned from the field. These publications are intended for use by program managers responsible for the implementation of sanitation promotion interventions as well as members of multilateral and bilateral

^a WHO and UNICEF 2008

^b Water Supply and Collaborative Council and WHO 2005

^c For more details, see Water Supply and Collaborative Council and WHO (World Health Organization). 2005. *Sanitation and Hygiene Promotion, Programming Guidance*. Geneva: WHO

Behavior change frameworks have been used on a range of health behaviors, including vaccination, diet, exercise, HIV/AIDS prevention, and family planning.

agencies, academic institutions and government and nongovernmental organizations (NGOs) that work in water and sanitation.

The objectives of the paper are to:

1. Demonstrate the value of using SaniFOAM to program managers
2. Illustrate how SaniFOAM can be applied at different stages of program implementation
3. Validate SaniFOAM for all types of sanitation promotion programs including both community-led and sanitation marketing approaches

Behavior Change Frameworks

It is important to understand why a framework to explain or analyze sanitation behaviors can be useful. A framework can help to accomplish the following:

- Analyze the results of available formative studies
- Inform the design of new research
- Prioritize the behaviors to be changed and the populations to be targeted
- Understand and consider the range of factors that influence a particular behavior
- Focus and prioritize interventions on particular factors for behavior change
- Improve the effectiveness of interventions aimed at changing the behavior
- Identify the appropriate indicators to monitor

Behavior change frameworks of this kind have been used on a range of health behaviors, including vaccination, diet, exercise, HIV/AIDS prevention, and family planning.

SaniFOAM can assist program managers who work in sanitation promotion at all stages of their interventions, from program design through implementation to monitoring and evaluation.

SaniFOAM can assist program managers who work in sanitation promotion at all stages of their interventions, from program design through implementation to monitoring and evaluation.

Sanitation Behaviors

What is meant by *sanitation behavior*? And which behaviors are to be promoted when carrying out a program aimed at improving sanitation?

There are many sanitation behaviors of interest, and SaniFOAM can be to analyze behaviors such as:

- Ceasing to defecate in the open
- Building a sanitation facility
- Improving (or upgrading) one's sanitation facility^d
- Properly maintaining one's facility (including cleaning and emptying)
- Correctly disposing of children's excreta.

^d Upgrading could be progressing from an unsafe facility to one that is considered hygienic in that it adequately separates human feces from human contact, or it could be moving further up the sanitation ladder. Further criteria apply to UNICEF/WHO Millennium Development Goal definitions as defined by the Joint Monitoring Program (JMP).

II. SaniFOAM Framework

KEY POINTS

In the acronym SaniFOAM, FOAM stands for

- Focus
 - Opportunity
 - Ability
 - Motivation
-

Focus First

Because a critical first step in changing behaviors is to define *what* behaviors should be improved and identify *whose* behavior needs to be changed, the *F* in SaniFOAM reminds us to focus on and define:

- The desired sanitation behaviors, and
- The target population.

Examples of target populations include:

- Rural households
- Urban and peri-urban households
- Urban slum dwellers
- Informal or temporary settlement dwellers
- Households that currently share a facility with neighbors or other families
- Male heads of households
- Mothers or caretakers
- Young children

Research on households in East Java offers an instructive example of the importance of defining the target population. Based on data from Indonesia's 2004 National Social and Economic Survey (SUSENAS), 12.82 percent of households in East Java share a sanitation facility.^e In current sanitation programs, including those supported by the Global Scaling Up Sanitation Project, households can share a facility with their neighbors as a first step along the sanitation ladder. However, in a large study undertaken by The Nielsen Company^f for the project, 30 percent of individuals living in households that share a facility (coined "sharers") reported that they are not currently satisfied and 32 percent also report that they defecate in the open. These findings suggest that targeting this segment for future phases of the intervention based on an understanding of relevant factors will be important for program outcomes to be sustained.

Once we have determined who and what to focus on, we are then ready to examine the factors that may influence the behaviors: these are known as the *behavioral determinants*. These findings suggest that targeting this segment for future phases of the intervention based on an understanding of relevant factors will be important for program outcomes to be sustained.

^e Indonesia National Social and Economic Survey SUSENAS 2004

^f The Nielsen Company 2008

Behavioral determinants are the factors that can facilitate or inhibit a behavior of interest among a certain population.

SaniFOAM uses a classification system commonly used in fields such as consumer behavior, social marketing, and organizational management.

Behavioral Determinants

Behavioral determinants are the factors that can facilitate or inhibit a behavior of interest among a certain population. For sanitation, these determinants can be internal (such as beliefs about feces) or external (such as sanctions for open defecation). The more we know about determinants and understand how they influence behavior, the more evidence-based and effective our interventions can be.

There are many different approaches, models, and frameworks for analyzing human behavior. SaniFOAM uses a classification system commonly used in fields such as consumer behavior, social marketing, and organizational management, to categorize sanitation behavioral determinants under three headings: *opportunity*, *ability*, and *motivation*. (See Box 1) These can be broadly defined as follows:

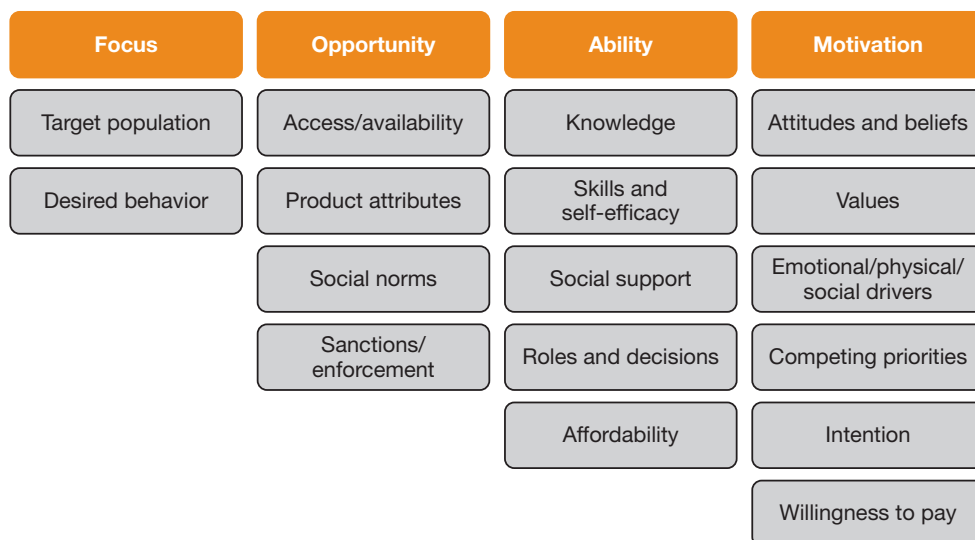
- *Opportunity*: Does the individual have the *chance* to perform the behavior?
- *Ability*: Is the individual *capable* of performing it?
- *Motivation*: Does the individual *want* to perform it?

With the letter *F* for Focus, these categories spell out F-O-A-M. SaniFOAM has been adopted as the name for this sanitation behavior change framework (see Figure 1). The following sections describe the determinants in each category and provide examples from formative research findings and field-based experiences.

BOX 1: WHO BUYS LATRINES AND WHY?

Demand is created when consumers have motivation, opportunity, and ability to purchase sanitation technology which suits their needs. People require motivation to part with hard-earned cash. And there is a considerable body of research which indicates that latrine adoption is rarely motivated by messages about health benefits alone. More important are the immediate and direct benefits of increased convenience, comfort, cleanliness, privacy, safety, and prestige offered by home sanitation. However motivated they may be, consumers also need the opportunity and ability to purchase products or services that suit their household situation. Opportunity means access to good sanitation product information, builders, materials, and operating and maintenance services. Ability refers to the resources consumers must possess to make use of opportunities, including money, knowledge, skill, time, transportation, and control over decisions.

Source: Jenkins 2004

FIGURE 1: SANIFOAM FRAMEWORK

Opportunity Determinants

As stated above, determinants under the Opportunity category influence whether an individual has the *chance* to engage in the desired behavior.

Access and Availability

Access to—and availability of—products and services represents a key external or environmental factor. Here are some examples that illustrate the influence of access and availability in sanitation behavior:

- If a person working in a rice paddy does not have access to a latrine nearby, then chances are he or she will defecate in the open.
- Someone may opt to defecate in the river if there is no water available in a latrine for anal cleansing.
- A household might not build a latrine if there are no masons within the community.
- The type of sanitary platforms available in local market stalls will influence what type of facility a household builds.

Access to—and availability of—products and services represents a key external or environmental factor.

In East Java, “flying toilets” is the term used for the practice of defecating (or urinating) in plastic bags. In a 2008 survey in East Java, 7 percent of 2,009 respondents reported that they have used a flying toilet, almost all of them within the previous month.⁸ When asked why, the majority stated that it was in the middle of the night or while traveling, illustrating how limited access to a latrine can influence behavior.

⁸ The Nielsen Company 2008. Unpublished PowerPoint presentation

In Tanzania, surveys have found that people prefer a water closet because it is easy to clean, modern, and durable. Those who preferred VIP latrines reported “no smell” as the main reason.

Formative research can help identify which attributes are most important for a particular target population.

It should be highlighted, however, that availability of a latrine at home is not sufficient to stop open defecation. In East Java 18 percent of unimproved toilet owners admit to also defecating in the open; the percentage among improved toilet owners is almost the same at 16 percent.^b Clearly, other factors are at play. They are explained in the following sections.

Product Attributes

The products and services mentioned above must not only be available and readily accessible, they must also have the level of quality and other attributes sought after by the target population.

To illustrate the possible influence of product attributes on behavior, consider the following:

- A public toilet may be located near the rice paddy; however, if it is not well maintained but smelly, an individual may defecate in the open instead.
- A mason may be available in the community; however, if he or she does not enjoy a reputation for competence and reliability, a household may hold off on building a latrine.
- A range of sanitation platforms may be available in the local market stall. They have the desirable qualities a female head of household is interested in (such as being easy to clean), so the household decides to improve its latrine.

Comfort, convenience, pleasant (or at least not unpleasant) smell, cleanliness, absence of flies, ease of cleaning and maintenance, durability, and ventilation are just a few examples of product attributes for latrines. Formative research can help identify which attributes are most important for a particular target population. Strengthening of the local private sector’s ability to offer and promote the relevant features can then follow.

Respondents in a survey in Tanzania were asked about the attributes of different types of toilets they had tried. Those who stated that their favorite type of toilet was a water closet said this was because it was easy to clean, modern, and durable. Those who preferred VIP latrines reported “no smell” as the main reason.ⁱ This information was useful in developing effective promotional materials as well as training masons on what attributes and benefits to highlight when proposing options to customers.

It should be noted that for some population segments, open defecation itself has positive attributes. For example, defecation at a river site offers an opportunity to socialize. Interventions aimed at the eradication of open defecation need to take into account the perceived trade-offs that individuals may feel they are making when adopting more hygienic practices.

^b The Nielsen Company 2008

ⁱ WSP and PricewaterhouseCoopers 2008

In East Java, 34 percent of those who habitually open-defecate indicated that they were satisfied with this practice. Only 60 percent agreed with the statement that there are disadvantages to defecating in the open. The qualitative portion of the same study conducted in East Java revealed that the practice of open defecation allowed them to be independent by not having to bother their neighbor and was viewed by some as not being as smelly an experience. It should be noted that 60 percent of the open defecators had never tried using a toilet before, suggesting they did not have a clear appreciation of the possible positive benefits of using one. Interventions using demonstration toilets to incite trial would be appropriate.^j

Social Norms

Social norms are the rules that govern how individuals in a group or society behave. Any behavior outside these norms is considered abnormal. Put simply: *If everyone is doing it, then why can't I? Conversely, if no one is doing it, can I?*

The role of social norms in influencing behavior has been recognized in different fields, ranging from smoking cessation to the use of car seat belts and, more recently, for obesity, which in North America has been qualified as “socially contagious.”^k

Social norms have been recognized to influence open defecation. As a participant in a focus group discussion in East Java said, *“Yeah, I am embarrassed if people pass by, but I think everybody is used to it, everybody also does that ...”*^l Approaches such as Community-Led Total Sanitation (CLTS), which were initiated in Bangladesh^m and have since been replicated in several states in India and elsewhere, use social mobilization techniques to move communities from one social norm (open defecation) to another (universal latrine use).ⁿ

As with many determinants, social norms can be a facilitator or deterrent to a behavior, depending on the situation. They provide *implicit* social permissions or sanctions, not just around open defecation but around all types of sanitation behaviors. For example:

- A toddler sees another child defecate in the field and regards it as a signal that is okay to do it, and so he or she does it as well.
- A shared toilet user does not clean up after using it because the previous user did not.
- A worker in a river paddy opts to use a public toilet because she has seen her coworkers use it.
- A household decides on a particular pour-flush model because they have observed that most households in their community have it.

In East Java, 34 percent of those who habitually open-defecate indicated that they were satisfied with this practice.

Social norms are the rules that govern how individuals in a group or society behave. Any behavior outside these norms is considered abnormal.

As with many determinants, social norms can be a facilitator or deterrent to a behavior, depending on the situation.

^j The Nielsen Company 2008

^k Graham, Young, and Hammond 2007

^l The Nielsen Company 2008. Unpublished PowerPoint presentation (2)

^m Kar and Chambers 2008

ⁿ Dickinson and Pattanayak 2007

These social norms can be objective, based on what can be currently observed. They can also be inferred based on those traditional practices. As a villager in Orissa remarked, “if [open defecation] was good enough for the Maharajas, it’s good enough for me.”^o Similarly, social norms are also influenced by age-old habits as indicated by a man from Soforia village in Bangladesh, who stated: “We have been defecating in open places over the decades. We acquired this habit from our antecedents (bap dada). It has been transforming from generation to generation (bangso porosporay). We haven’t yet given up this habit. I think it will take more time to be habituated with the latrine use.”^p

Social norms were examined in a large study conducted in 2008 in East Java by The Nielsen Company for the Global Scaling Up Sanitation Project. Respondents were asked to state their degree of agreement or disagreement along a four-point scale to a series of eight statements. The table in Box 2 shows the percentage who strongly agreed with statements related to the acceptability of open defecation, and compares the social norms of those who are currently open defecators with those that are not. Statistical analyses showed that social norms were a significant determinant when it comes to open defecation.

**BOX 2: ATTITUDES TOWARD OPEN DEFECATION IN EAST JAVA—
A COMPARISON OF OPEN DEFECTORS TO ALL OTHERS**

	Open Defecators (n = 545)	All Others (n = 1464)
Most of the people I know defecate in the toilet	31	74
If our ancestors defecated in the open, than it’s alright for us to do that	31	11
Defecating in the open is unethical	24	75
Defecating in the open is unacceptable	23	55
Defecating in the open is a proper thing to do because everybody does so	59	17
It’s acceptable if children defecate in the open	60	39
It’s acceptable to defecate in the open if they can’t reach the location of the toilet	69	44
People who defecate in the open won’t be accepted in their community	14	24

Source: The Nielsen Company 2008

It should be noted that social norms around sanitation may not be homogeneous within a target population and may vary across regions or even ethnic groups. A case in point is in rural Tanzania, where social norms around open defecation

^o Dickinson and Pattanayak 2007

^p Choudhury and Hossain 2006

varied considerably across the districts studied.^q Program managers would need to know this when designing their interventions so that communication channels and messages could be tailored accordingly and adequate monitoring planned.

Sanctions and Enforcement

While social norms provide implicit or implied permissions or sanctions for people to engage in a certain behavior or not, formal sanctions and their enforcement provide them in an *explicit way*.

CLTS approaches encourage villages to establish systems for punishing those who continue to defecate in the open. Punishments can involve monetary fines or social sanctions such as mocking or throwing stones at those who continue to practice open defecation. By establishing a set of common expectations about others' actions and establishing informal or formal punishments for deviating from accepted practices, the incentive to conform may outweigh the incentive to defecate in the open.^r Thus, these sanctions (assuming they are enforced) diminish one's opportunity to defecate in the open.

For example, in May 2009, in the district of Wakiso, Uganda, more than 40 people were arrested and fined 50,000 shillings each (around US\$22) by the district magistrates' court for not having pit latrines in their homes. The district chairman, organized the operation because he wanted district residents to change their attitudes to ensure they maintained proper sanitation and hygiene in their homes.^s

Ability Determinants

There are five determinants under *ability* which influence whether a person has the *capacity* to engage in a certain sanitation behavior: knowledge, social support, self-efficacy, roles and decisions, and affordability.

Knowledge

Knowledge is acquired through learning and may pertain to objects or products, behaviors and even outcomes. Inaccurate or incomplete knowledge, as well as lack of knowledge altogether, may prevent individuals from engaging in appropriate sanitation behaviors.

Being aware of the health and environmental risks of unhygienic sanitation is a commonly cited knowledge. For example, transect walks used in CLTS-type approaches serve to generate this knowledge by sensitizing villagers to the volume and location of feces in their community, helping to make them realize that they are, in a sense, eating each other's feces.

While social norms provide implicit or implied permissions or sanctions for people to engage in a certain behavior or not, formal sanctions and their enforcement provide them in an *explicit way*.

Knowledge is acquired through learning and may pertain to objects or products, behaviors and even outcomes.

^q Water and Sanitation Program and PricewaterhouseCoopers 2008

^r Choudhury and Hossain 2006

^s UgaTech USA, May 2009

It is important to emphasize that knowledge, while critical, is not sufficient to generate behavior change.

However, there are many other types of knowledge pertinent to sanitation behaviors of interest. Some examples are:

- A rice paddy worker knows where the closest public toilet is located.
- A rural household knows where to find a qualified mason to build their latrine.
- An urban dweller knows how to contact a company that can empty her septic tank.
- A mother knows where she should dispose of her infant's feces.
- A household is aware of an informal saving scheme that will allow them to get the funds to build a latrine.

A 2007 report on the state of hygiene knowledge in Blantyre and Lilongwe in Malawi found the following: “Though some misinformation among consumers in both Lilongwe and Malawi exist—for example, that a broom is sufficient for cleaning and that a mud floor is ‘good’ sanitation—knowledge of sanitation and hygiene behavior appears to be high. In a recent study, the most commonly cited knowledge included the fact that lack of safe water causes diarrheal diseases, that hands should be cleaned after the toilet, that ash kills latrine odors, that ‘good’ slab prevents diarrheal diseases, and that dirty latrines spread germs . . .”¹

It is important to emphasize that knowledge, while critical, is not sufficient to generate behavior change. The knowledge-behavior gap encountered in smoking cessation and condom promotion campaigns, to name but a few examples, explains in part why individual engage in certain behaviors even when they are aware of the associated risks. This underscores the importance of examining the influence of other factors contained in SaniFOAM.

Skills

There is another type of knowledge that warrants its own category: *skills*. In many communities, households tend to build their latrine themselves rather than hire a mason or retail outlet to do it. For these self-builders, the knowledge needed to go about this is referred to as *skills*. Examples of skills required to build a latrine include:

- How to construct a proper slab
- How to select the most appropriate technology option based on geological and other factors
- How deep to dig the pit
- How to line a pit

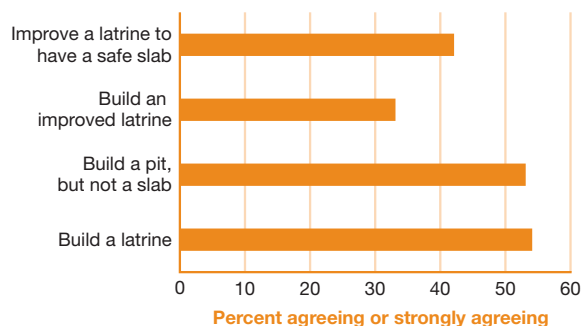
These skills can be acquired from masons, members of the community who may be considered opinion leaders in the area, or neighbors or relatives who may have built a similar facility. (Also, see the next section, “Social Support.”)

Regardless of their actual skill level—high or low—individuals may opt not to build a latrine if they have limited confidence in their ability. This behavior determinant is known as self-efficacy.²

In many communities, households tend to build their latrine themselves. For these self-builders, the knowledge needed to go about this is referred to as *skills*.

¹ Chimulambe, Cogswell, and Stoveland 2007

² For more information on self-efficacy, see A. Bandura, *Social Foundations of Thought and Action: A Social Cognitive Theory* (Englewood Cliffs, NJ; Prentice Hall, 1986)

FIGURE 2: PERCEIVED SKILLS TO MOVE UP THE SANITATION LADDER IN RURAL TANZANIA (N = 978)

Source: Water and Sanitation Program and PricewaterhouseCoopers 2008

Among rural households in Tanzania, the proportion of respondents who felt a member of their household has the skills to improve their sanitation facility was relatively low.

In the survey for the Global Scaling Up Sanitation Project among rural households in Tanzania, the proportion of respondents who felt a member of their household had the skills to improve their sanitation facility was relatively low (See Figure 2).^v

The implication of this finding is that interventions must seek to strengthen households' skills as well as those of a network of easily accessible masons.

It should be mentioned that skills for other sanitation behaviors may also apply, for instance:

- How often, and where to empty a full pit
- How to properly clean a toilet
- How to teach a toddler to use a potty
- How to dispose of a child's feces

Social Support

Social support is the physical and emotional comfort given to individuals by family, community members, friends, coworkers and others. Social support can take several forms: physical, emotional or informational. Some examples include:

- A daughter helps an elderly parent to use a latrine.
- A community health worker praises a household for having added a slab to their pit latrine.
- A villager provides advice to his neighbor on how often he should empty his pit latrine.
- A village is recognized as having reached total sanitation status.

Social support is the physical and emotional comfort given to individuals by family, community members, friends, coworkers and others.

When surveying households who had built a toilet within the previous year, the Global Scaling Up Sanitation Project study in East Java identified neighbors, friends, and relatives as the most important source of information on types

^v WSP and PricewaterhouseCoopers 2008

A better understanding of the various roles and dynamics of decision-making at the household level will lead to more effective targeting and messaging within interventions.

available and how to build them, surpassing masons.^w Based on this finding, the Global Scaling Up Sanitation Project is continuing to build capacity within the community by training opinion leaders on toilet options in addition to training masons and other sanitation providers.

If formative research identifies social support as an important determinant for a certain behavior and population, then the project may strongly consider that peer-education, community outreach or other interpersonal communication should be included in the intervention mix.

Roles and Decisions

Household decisions regarding sanitation behaviors are numerous. Regarding the acquisition of a latrine, the following are examples:

- What type of latrine should be built?
- What features are needed?
- How much will be spent and how will money be saved up?
- Where will it be installed?
- Who will be able to access and use it, that is, will it be shared with neighbors?
- Who will choose the construction materials? Where will they be bought and who will do the actual purchase?
- Who will install the latrine?

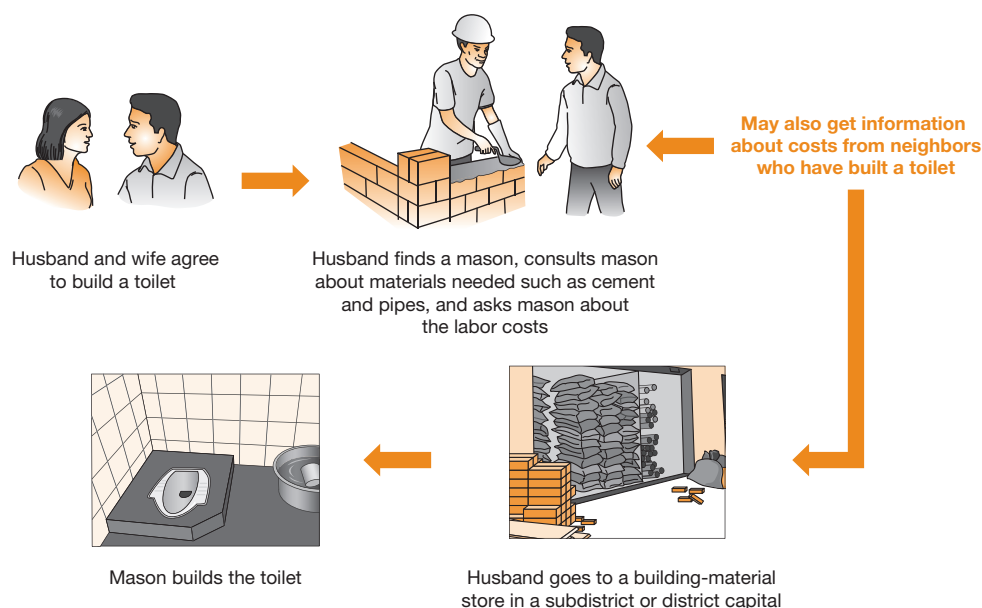
The person(s) within the household who takes the lead on each of these decisions and has some influence will certainly vary across cultures and regions and may also evolve over time. In some regions, such as East Java, female heads of household have the final say in hygiene matters and male heads of household decide on major household expenditures. In other areas, decisions are shared (See Figure 3). Since the decision-making process for a durable good or household improvement such as a latrine can be lengthy and have multiple steps,^x household members other than the heads, such as children and in-laws, may also play an influential role. A better understanding of the various roles and dynamics of decision-making at the household level will lead to more effective targeting and messaging within interventions.

For households that do not own their property, their decision-making role (and power) in major sanitation behaviors, such as upgrading latrines, may be limited, in which case the intervention would also need to target the landlords.

For other sanitation behaviors, roles and decisions can also be important. Stopping open defecation among younger children may not only involve the mother but also the father if he plays a lead role in discipline matters. The female family or household members may take the lead in cleaning the latrine but males may control the budget for the products needed. Again, program managers need to be

^w The Nielsen Company 2008

^x The reader is encouraged to read the works of Jenkins and Scott, who have studied the decision-making process behind latrines. See: Jenkins and Scott. 2007.

FIGURE 3: HOUSEHOLD SHOPPING PROCESS FOR A TOILET—EAST JAVA

Source: The Nielsen Company 2008

aware of gender differences and decision-making dynamics that may ultimately influence sanitation behaviors in order to hone their targeting and strategies.

Affordability

Affordability has certainly been a behavioral determinant that has received a lot of attention from program managers, government agencies, and donors. While the best strategy to address it has been and continues to be the topic of heated debate, there is little disagreement that meeting the sanitation needs of those in the lowest income quintile is challenging.

Affordability in the context of SaniFOAM refers to one's *ability* to pay for a sanitation product or service or to engage in a sanitation behavior. In addition to financial constraints, constraints can be time-related. For example, a mother may be unable to take 10 minutes to bring her child to her neighbor's toilet because she needs to feed her crying infant.

Affordability is influenced by many factors including household income, availability of cash, time of year, access to credit, and availability of accessibly-priced sanitation options in the area. Affordability is different from willingness to pay. A household may be able to afford to purchase a latrine, but if there is a history of subsidies in the region, it may not be willing to pay. While affordability affects a household's *ability* in matters of sanitation, willingness to pay influences at the *motivational* level and will be discussed in the next section.

Affordability in the context of SaniFOAM refers to one's *ability* to pay for a sanitation product or service or to engage in a sanitation behavior.

Perceived affordability can also differ from actual affordability if the household or individual is not aware of lower-cost options or if the lower-cost options are undesirable.

In a qualitative study in Cambodia, respondents were asked whether, if their “ideal” latrine was available at a special price so that it cost US\$100, they would be able and willing to buy it. The majority said they would be willing to pay for this latrine but not straight-away, that they would need time to save. Some respondents felt that they would purchase such a latrine within three to six months. However, several stated that they would not purchase such a latrine at all as they did not have enough money.^y

Perceived affordability can also differ from actual affordability if the household or individual is not aware of lower-cost options (for example, if such options are not offered locally or if none of their neighbors has one) or if the lower-cost options are undesirable. If the research indicates that these are relevant issues, then the intervention needs to focus on broadening awareness and availability of a range of options. Another option is to re-position lower-end latrines, through appropriate communication strategies, so they are regarded as “aspirational.”

In Peru, lower-cost and thus more affordable options have a bad name. Latrines in particular do not enjoy good perceptions. Having one means: *I am poor*.^z The Alternative Pro-Poor Sanitation Solutions Project headed by WSP is seeking to change these perceptions through its marketing efforts.

Motivation Determinants

For a behavior to take place, an individual must also be motivated to engage in it. The following section examines the behavioral determinants that fall under *motivation*: attitudes and beliefs, values, emotional/physical/social drivers, competing priorities, intention, and willingness to pay.

Attitudes and Beliefs

Attitudes and beliefs relate to an individual’s understanding and perceptions of sanitation products and services, of sanitation behaviors themselves, and of those who engage in them. Beliefs may not be factually correct, leading to misconceptions that can impede the adoption of safe sanitation practices. Individuals are often unaware of their beliefs and attitudes which may be positive, negative, or even neutral.

The following are examples of how beliefs and attitudes can influence sanitation behaviors:

- Believing that feces may contain harmful spirits will motivate you to defecate in the open far from your home
- Believing that infant’s feces are harmless will motivate you to dispose of them in the open
- Having a positive attitude toward latrines because of prior pleasant experiences will motivate you to build one

^y Roberts and Long 2007

^z Baskovich 2008

A considerable proportion of people in East Java have misconceptions around the environmental risk of feces, particular among those who defecate in the open. *“I don’t think it is a mistake [to defecate in the open] as I often see that my waste is beneficial to feed the fish in the river. They eat it directly while it is there.”* Says another, *“If the water goes to the paddy field, [my waste] can act as fertilizer; it will help the paddy to grow, using organic fertilizer.”*^{aa}

Whether these are true misconceptions or psychological “refuges” (excuses for one’s behavior), it is clear that to be effective a sanitation promotion program would need to address them. In East Java, many households have toilets with PVC that evacuate waste directly into the river. Almost two-thirds of open defecators agree with the statement that “the flow of the river cleans out the feces.”^{bb} Through the Global Scaling Up Sanitation Project or STOPs, as it is called in Indonesia, WSP and partners aim to correct these dangerous beliefs.

According to researchers Urs Heierli, et al, in some rural areas of India, “there is a taboo that the kitchen is considered as a pure place, whereas latrines are considered as dirty places, and for this reason, a latrine should not be located near the home or the kitchen. Interestingly, this perception differed substantially among users and non-users of latrines: Latrine users had a strong belief that it was not latrines but the open field that was dirty and polluted. Non-users, on the other hand, had the opposite reaction—that it was latrines that were dirty and polluted.”^{cc}

One key belief is an individual’s perceptions about the main causes of events in his or her life: This particular belief is often referred to as *locus of control*^{dd}. Individuals with an internal locus of control have a strong sense of authority over their own lives. By contrast, to possess an external locus of control is to believe that God, fate, poverty, or some other extrinsic force exerts control over one’s circumstances or behavior. Individuals with an external locus of control are less likely to engage in healthy behaviors and may display higher levels of resignation and apathy about the future. These individuals are also more prone to believe that suffering and illness are an inevitable part of life.^{ee} Although locus of control has been studied in fields such as HIV/AIDS, its role in influencing sanitation behaviors remains an area for investigation.

Values

Values are related to beliefs. Whereas attitudes and beliefs lie mostly at the individual level, values operate at the collective level. Values represent important and enduring ideas shared by the members of a community about what is good or desirable and what is not. Values that favor or are consistent with the adoption of safe sanitation practices can motivate individuals to act. A sanitation program

“I don’t think it is a mistake [to defecate in the open] as I often see that my waste is beneficial to feed the fish in the river. They eat it directly while it is there.”

—Survey respondent in East Java

Although locus of control has been studied in fields such as HIV/AIDS, its role in influencing sanitation behaviors remains an area for investigation.

Values are related to beliefs. Whereas attitudes and beliefs lie mostly at the individual level, values operate at the collective level.

^{aa} The Nielsen Company 2008

^{bb} The Nielsen Company 2008

^{cc} Heierli, et al. 2008

^{dd} Julian Rotter introduced this concept in the late 1950s.

^{ee} It is important to note that some people with a high external locus of control may be correct in that assumption—if they are at the bottom of society they will have less power, money and influence to make changes in their lives.

In Peru today, having a sanitation facility at home means modernity and progress, two important values in Peruvian society.

Drivers are strong internal thoughts and feelings that motivate behavior. They can be positive or negative, and can stem from unmet physical, emotional, or psychological needs.

intervention can tap into the relevant values and promote sanitation by strengthening the association between the value and the desired behavior.

In Peru today, having a sanitation facility at home means modernity and progress, two important values in Peruvian society. In addition, it is also believed to add economic value by enhancing the resale value of the home. In its Alternative Pro-poor Sanitation Solutions Project, WSP/Peru and its partners are tapping into the values when promoting improved sanitation and developing communications messages.^{ff}

Emotional, Social and Physical Drivers

Drivers are strong internal thoughts and feelings that motivate behavior. They can be positive or negative, and can stem from unmet physical, emotional, or psychological needs. Such drivers have been identified through research in several countries as motivators to engage in safe sanitation behaviors. CLTS approaches have focused on negative drivers, particularly shame and disgust.^{gg}

Other possible emotional, social and physical drivers to motivate people to cease open defecation are as follows:

- Safety (for example from snakes or other elements, for children and women in particular)
- Comfort
- Privacy (for women in particular)
- Status
- Pride and self-esteem

These same drivers can be motivators to move households up the sanitation ladder (for example by acquiring their own facility or upgrading it). By contrast, the health benefits from improved sanitation have rarely been identified as a primary driver.

A range of biological and emotional drivers to improve sanitation practices were identified among the communities surveyed in rural Tanzania. Shame was a significant driver. In total 89 percent of those surveyed agreed that people in the community would feel ashamed if they did not have a latrine. Privacy and safety were also cited as drivers.^{hh} These drivers should not be assumed to be universal across all populations and regions. They need to be identified or validated through research. The relevant drivers can be built into communication efforts such as mass media campaigns or in the “triggering”ⁱⁱ process at the community level.

For other sanitation behaviors, emotional drivers may be of relevance and warrant further investigation through formative research. For example, pride may drive individuals to clean their facility more often. Being a good mother may motivate mothers to teach toddlers to use the potty and dispose of their children’s feces correctly.

^{ff} Baskovich 2008

^{gg} Kar and Chambers 2008

^{hh} Water and Sanitation Program and PricewaterhouseCoopers 2008

ⁱⁱ Triggering refers to the initial community-level activities which aim to result in a collective awareness of the risks of their sanitation practices and a subsequent social mobilization and commitment to change behavior.

Households and individuals face many competing demands when it comes to spending; the lower the income, the more these competing demands will influence behavior. Financial demands can be for day-to-day necessities (such as food, shelter, water and transportation), occasional or periodic expenses (such as school fees, urgent home repairs, weddings or religious celebrations) or discretionary expenditures (such as home improvements). Households with strong financial pressures will often place a lower priority on sanitation and be less motivated to acquire a facility.

The program manager's challenge is to elevate sanitation in the list of priorities while at the same time being sensitive to the very real demands faced by households and individuals. Intensive CLTS-type approaches, as well as those with community-level incentives for achieving open-defecation-free status (whether a cash or recognition award), help elevate the importance of improved sanitation.

Sanitation may even compete with cell phones. In three of the five districts studied in rural Tanzania, household sanitation did not rate as high a priority as other investments (such as mobile telephones, school fees, bicycles and livestock). However, in two other districts respondents tended to prioritize sanitation above other competing priorities. Given the limited resources at their disposal, households considered that they may derive more long term benefits from consumer goods than from sanitation. For example, animals provide a source of food, a mobile phone or a bicycle may enable the household to hold down a job, school fees may be considered a long-term investment (e.g., for old age, when children obtain better jobs and are able to support their families).ⁱⁱ

Understanding how households prioritize expenditures through high-quality formative research can help program managers be more effective in the following ways:

- If project managers know from research what improved sanitation is truly “competing with,” they are better able to position it in communication intervention. For example, if the research indicates that sanitation competes with cell phones, the benefits that improved sanitation can yield, but a cell phone cannot should be highlighted;
- Competing priorities may have seasonal variation, so planning the timing of an intervention is important. For example, during harvest season, increased availability of cash may allow households to give greater priority to discretionary expenditures and be more receptive to messages on latrine upgrades. Conversely, running a sanitation promotion campaign during Ramadan may not be advised given that households traditionally need to save up and spend on end-of-fast celebrations.

In East Java, a study found a rather complex hierarchy of financial priorities. Once essential expenditures (such as food and rent) have been covered, households will consider more discretionary expenses. These are prioritized in decreasing order as follows: gifts to others (for example for weddings), education (such as school fees or uniforms), children or family needs (such as weddings), and Lebaran or the end

The program manager's challenge is to elevate sanitation in the list of priorities while at the same time being sensitive to the very real demands faced by households and individuals.

ⁱⁱ Water and Sanitation Program and PricewaterhouseCoopers 2008

In East Java, a study found a rather complex hierarchy of financial priorities. Sanitation figures low on this priority list, directly competing with household improvements and goods such as TVs.

Intention represents an individual's plan on whether or not to engage in a certain behavior.

of Ramadan (such as clothing and special foods). If these last expenses have been covered, then others may be considered, in decreasing priority, as follows: repaying debt, acquiring something that can be resold later (such as gold or a goat), buying a luxury good (such as a TV or a fridge) and renovating the home (such as buying or upgrading a latrine).^{kk} Though sanitation figures low on this priority list, directly competing with household improvements and goods such as TVs, the Global Scaling Up Sanitation Project team decided to turn a competing demand into an opportunity. Since paying off debt is a matter of honor in Javanese society and therefore prioritized, the Global Scaling Up Sanitation Project is seeking to facilitate access to informal and formal credit schemes for sanitation.

Intention

Intention represents an individual's plan on whether or not to engage in a certain behavior. Intention is thought to be a powerful motivator of behavior and, according to the Theory of Reasoned Action,^{ll} is a predictor of behavior change.

To understand intention, it is helpful to view sanitation behavior change as a process taking place over time. Models like the Stages of Change model^{mmm} view behavior as a series of steps, beginning with an awareness of a situation or problem (such as that cigarettes cause cancer) and ending with behavioral maintenance (such as continuing to not smoke cigarettes). Roughly speaking, intention represents a midpoint along this continuum. Marion Jenkins and Beth Scott have studied households' decision-making around sanitation in Benin and Ghana, among other countries. They view the process of adopting sanitation as having three stages: households first develop a preference for changing sanitation; they then form an intention to build; and they end by making the choice to install a toilet.ⁿⁿ

In Zambia, a quantitative survey conducted in 2008 showed that around three-quarters of those surveyed in peri-urban settlements of Lusaka had some plans to upgrade. This proportion varied by type of respondent (owners, landlords, tenants, mothers, fathers). Upgrading the roof was mentioned by most, followed by plans to upgrade the door, vent pipe, walls and slab. A further 44 percent of those who had no plans said they would consider upgrading their latrines if they received some assistance (materials, loan or donation).^{oo}

By understanding where individuals or households are in their decision-making process, program managers can be more effective in the following ways:

- **Market segmentation and program differentiation:** Stage of decision-making represents a useful way to segment the market and develop differentiated strategies, resources permitting. For example, individuals or households who have not even begun the process to build a latrine may not be aware of a problem and/or may be satisfied with their current practices.

^{kk} The Nielsen Company 2008

^{ll} Ajzen and Fishbein, eds. 1980

^{mmm} Prochaska 1991

ⁿⁿ Jenkins and Scott 2007

^{oo} Cogswell 2008

Interventions targeting these may focus on awareness-raising through “triggering” or other techniques. For those intending to build a latrine, interventions may concentrate on strengthening knowledge of possible options (the determinants will need to be identified through research);

- **Segment prioritization:** An individual who intends to change his or her sanitation practices is more likely than someone who does not. If limited funds are available, program managers may do well to prioritize households who already have plans to upgrade facilities;
- **Resource allocation:** Related to the points above, quantifying the proportion of households at each stage may help allocate appropriate budgets. It may also help identify which implementing partners are the most appropriate.

Willingness to Pay

Willingness to pay (a motivation) was mentioned earlier under ability to pay (an ability determinant) and is pertinent to several sanitation behaviors, including acquiring a latrine, upgrading an existing one, and maintaining the facility.

Willingness to pay should not be regarded as either a *yes* or a *no*. For example, some households may be willing to pay for materials for a latrine but not the labor. Such households may prefer to self-build, and interventions targeting them may need to focus on strengthening their construction skills and providing information on options at outlets where materials would be sold or referring them to certified masons using a brand-promotion approach.

Willingness to pay should not be regarded as either a *yes* or a *no*.

Willingness to pay can be influenced by numerous factors, including the following:

- **Expectations of subsidies:** If a community has heard of subsidies being offered or planned, households may not be as willing to pay to acquire a latrine.
- **Perceived marginal value:** If a household has an unimproved latrine, it may not upgrade if its members do not perceive much of a gain in benefits compared to costs. Another example is provided by a household that does not perceive any value in hiring a mason if members believe they can do it themselves.

Willingness to pay should also be seen as “how much” households are interested in paying (both in cash and on credit) and for what feature or benefit. If program managers have this information, they can compare it with the actual prices among suppliers. A wide gap between the two would necessitate one or more of several possible strategies, including:

- Improving the enabling environment^{PP} to reduce costs (e.g., advocate to reduce tariffs on imported products)
- Strengthening capacity within the supply chain, again to reduce costs (e.g., improving the production process for slabs)
- Elevating the perceived value of the upgrade or feature through standard marketing approaches, such as advertising and branding
- Expanding financing options.

^{PP} WSP has a framework for measuring and improving the enabling environment for sanitation that includes institutional capacity and policy (e.g., around subsidies) among other dimensions. See www.wsp.org for more information.

III. Conclusion

KEY POINTS

Sanifoam can be applied to do the following:

- Focus interventions
 - Analyze results of available formative studies
 - Inform the design of new research
 - Inform the development of the program
 - Monitor appropriate indicators
-

It is expected that SaniFOAM will evolve as additional research findings are incorporated and new studies are conducted.

SaniFOAM is a framework to help program managers analyze and explain sanitation behaviors of various target populations. More specifically, SaniFOAM can be applied to do the following:

- **Focus interventions:** Prioritize the target populations and behaviors to change.
- **Analyze results of available formative studies:** Findings are mapped into each of the determinants. This may lead to the identification of gaps to be investigated through additional spot research.
- **Inform the design of new research:** A series of questions can be developed to explore all or a subset of the determinants.
- **Inform the development of the program:** Once relevant determinants have been identified, the appropriate interventions can be developed.
- **Monitor appropriate indicators:** Indicators aimed at measuring changes in the determinants can be formulated and tracked (as outcomes or intermediary results) over time.

It is expected that SaniFOAM will evolve as additional research findings are incorporated and new studies are conducted. The adaptation of the framework to different target populations and behaviors, and the emergence of potential determinants are of particular interest.

Anthropological studies have indicated that “mothers fear the use of latrines by younger children for two reasons: first, because they consider them contaminated with adult feces, and second, because they consider them unsafe, fearing that the child may fall in.”⁹⁹ This would suggest adding “threat,” a determinant that is used in HIV/AIDS behavior-change frameworks, to SaniFOAM for children’s sanitation behavior.

This paper introduces SaniFOAM and describes how it was developed. Publications planned for later release will provide a more detailed guide on how to apply SaniFOAM, sharing lessons learned from the field. These publications are intended for use by program managers responsible for the implementation of sanitation promotion interventions as well as members of multilateral and bilateral agencies, academic institutions and government and nongovernmental organizations (NGOs) that work in water and sanitation.

⁹⁹ Gil, et al. 2004

References

- Ajzen, Icek and M. Fishbein, eds. 1980. *Understanding Attitudes and Predicting Social Behavior*. New Jersey: Prentice-Hall.
- Bandura, A. 1986. *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice Hall.
- Baskovich, Malva Rosa. 2008. *Building Inclusive Sanitation Markets for the Poor*. Report developed for the International Water and Sanitation Centre. <http://www.irc.nl/page/44893>.
- Chimulambe, Elias, Lynne Cogswell and Sevin Stoveland. 2007. *Lilongwe and Blantyre Sanitation Marketing and Hygiene Promotion Project*. Market Analysis Report prepared for the Ministry of Irrigation and Water Development, Zambia and the Water and Sanitation Program.
- Choudhury, Nuzhat and Mohammad Awlad Hossain, 2006. *Exploring the Current Status of Sanitary Latrine use in Shibpur Upazila, Narsingdi District*. Unpublished research report, BRAC (Bangladesh Rural Advancement Committee), Dhaka.
- Cogswell, Lynne. 2008. *Development of Sanitation Marketing Strategy and Hygiene Promotion Program for Peri-Urban Settlements of Lusaka, Zambia*. Market Analysis report prepared for the Water and Sanitation Program / Africa Ministry of Local Government and Housing.
- Dickinson, Katherine and Subhrendu K. Pattanayak. 2007. *Open sky latrines. Do social interactions influence decisions to use toilets?* Working Paper, RTI (Research Triangle Institute).
- Gil, Ana, Claudio Lanata, Eckhard Kleinau and Mary Penny. 2004. "Children's Feces Disposal Practices in Developing Countries and Interventions to Prevent Diarrheal Diseases: A Literature Review." *Environmental Health Project Strategic Report 11*. Washington, D.C.: USAID (United States Agency for International Development).
- Graham, Carol, H. Peyton Young, and Ross A. Hammond. 2007. "Obesity and the Influence of Others." *The Washington Post*. August 21, 2007.
- Heierli, Urs, Jaime Frias, Soma Ghosh Moulik and Shafiu Azad Ahmed. 2008. "One Fly Is Deadlier Than 100 Tigers: Total Sanitation as a Business And Community Action in Bangladesh and Elsewhere." *Poverty Alleviation Business Series*. New Dehli: WSP.
- Indonesia Public Health Survey SUSENAS 2004. PREM Unit Data Archive, World Bank Indonesia.

- Jenkins, Marion W. and Beth Scott. 2007. "Behavioral Indicators of Household Decision-Making and Demand for Sanitation and Potential Gains from Sanitation Marketing in Ghana." *Social Science & Medicine*; 64 (12): 2427–42.
- Jenkins, Marion W. 2004. *Who Buys Latrines, Where and Why?* Water and Sanitation Program Field Note. Nairobi: WSP.
- Kar, Kamal and Robert Chambers. 2008. *Handbook on Community-Led Total Sanitation*. UK: IDS (Institute for Development Studies) and Plan UK.
- Prochaska, James O. 1991. "Assessing How People Change." *Cancer*. 67 (S3): 805–807.
- Roberts, Michael and Anthea Long. 2007. *Demand Assessment for Sanitary Latrines in Rural and Urban Areas in Cambodia*. Report prepared for Water and Sanitation Program. International Development Enterprises.
- The Nielsen Company. 2009. *Total Sanitation and Sanitation Marketing Research Report*. WSP Internal Report. The Nielsen Company.
- The Nielsen Company. 2008. Unpublished presentation in PowerPoint. "Total Sanitation and Sanitation Marketing Research in East Java."
- The Nielsen Company. 2008. Unpublished presentation in PowerPoint (2). "Understanding Sanitation Habits, A Qualitative Study in East Java Indonesia."
- UgaTechUSA. 2009. *Uganda Pulse*. www.ugpulse.com.
- Water and Sanitation Program (WSP) and PricewaterhouseCoopers. 2008. *Market Research Assessment in Rural Tanzania for New Approaches to Stimulate and Scale up Sanitation Demand and Supply*. Water and Sanitation Program Final Report.
- Water Supply and Collaborative Council and WHO (World Health Organization). 2005. *Sanitation and Hygiene Promotion, Programming Guidance*. Geneva: WHO.
- World Health Organization (WHO) and UNICEF (United Nations Children's Fund) Joint Monitoring Program for Water Supply and Sanitation (JMP). 2008. *Progress on Drinking Water and Sanitation: Special Focus on Sanitation*. New York: UNICEF and Geneva: WHO.

Global Scaling Up Sanitation Project

Global Learning Strategy

Christiane Frischmuth

May 2008

By Christiane Frischmuth

Water and Sanitation Program

This learning strategy was developed in collaboration with the Global Scaling Up Sanitation Project team. It evolved through a series of team and individual conversations, was validated at a global team meeting and further edited through inputs by Washington DC and country-based team members. The team members involved include, Jason Cardosi, Yolande Coombes, Jacqueline Devine, Ousseynou Diop, Ratna Josodipoero, Ari Kamasan, Craig Kullmann, Ajith Kumar, Jack Molyneaux, Nila Mukherjee, Nat Paytner, Eduardo Perez, Upneet Singh, Alex Orsola Vidal, and Djoko Wartono.

Global Scaling Up Sanitation is a Water and Sanitation Program (WSP) project focused on learning how to combine the promising approaches of Community-Led Total Sanitation and Sanitation Marketing to generate sanitation demand and strengthen the supply of sanitation products and services at scale, leading to improved health for people in rural areas. The project is being implemented by local and national governments with technical support from WSP. For more information, please visit www.wsp.org/scalingupsanitation.

This Working Paper is one in a series of knowledge products designed to showcase project findings, assessments, and lessons learned in the Global Scaling Up Sanitation Project. This paper is conceived as a work in progress to encourage the exchange of ideas about development issues. For more information please email Christiane Frischmuth at wsp@worldbank.org or visit our website at www.wsp.org.

WSP is a multi-donor partnership created in 1978 and administered by the World Bank to support poor people in obtaining affordable, safe, and sustainable access to water and sanitation services. WSP's donors include Australia, Austria, Canada, Denmark, Finland, France, the Bill & Melinda Gates Foundation, Ireland, Luxembourg, Netherlands, Norway, Sweden, Switzerland, United Kingdom, United States, and the World Bank.

WSP reports are published to communicate the results of WSP's work to the development community. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of the World Bank Group concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

© 2010 Water and Sanitation Program (WSP)



Table of Contents

I.	Purpose and Road Map	1
II.	Project Background	2
	Project Goals and Objectives.....	2
III.	Learning Goals and Principles.....	4
	Goals.....	4
	Principles.....	4
IV.	Learning Culture, Tools, and Platforms	5
	Creating a Culture of Learning	5
	Relationship-Building.....	6
	Learning Tools	6
	Emergent Learning Maps	7
	After Action Reviews	8
	Learning Platforms for Sharing and Collaboration	8
V.	Learning Processes.....	10
	Learning Cycle	10
	Generating Knowledge.....	10
	Sharing Knowledge.....	11
	Developing Knowledge Products.....	11
	Capturing Knowledge	14
	Disseminating Knowledge	14
VI.	Organizational Aspects for Learning	16
	Roles and Responsibilities	16
	DC Technical Team.....	16
	Country Teams	16
	Connecting Teams	17
	Connecting Country to Global Level	17
	Connecting Country to Country.....	17
	Connecting to WSP Global Practice and Thematic Groups....	17
	Connecting External Resources to DC and Country Level.....	17
	Connecting DC/Country Teams to World Bank/WSP.....	18
	Recognition of Learners	18
List of Boxes		
	1: Project Objectives	2
	2: Global Learning Goals	4
	3: Global Learning Principles	4
	4: Team Charter.....	6
	5: Emergent Learning Map Process	7
	6: Learning Cycle.....	10
	7: Summary of Global Processes to Generate Knowledge...	11

8: Summary of Activities to Share Knowledge 12

9: Global Processes for Capturing Knowledge 14

10: Proposed Learning Opportunities 18

List of Appendixes

A: Global Learning Goals20

B: Template for Capturing Lessons
from an Emergent Learning Map22

C: Template for Capturing Lessons from
an After Action Review (AAR)23

I. Purpose and Road Map

KEY POINT

- A learning strategy develops a structured process for generating, sharing, capturing, and disseminating knowledge.
-

The purpose of this learning strategy is to develop a structured process of generating, sharing, capturing, and disseminating knowledge about what works in scaling up and sustaining sanitation programs. We are undertaking this learning process in order to enable evidence-based decisions by policy-makers and implementation of large-scale programs. The learning in this project will benefit not only current stakeholders but also future stakeholders interested in and committed to promoting and implementing effective large-scale sanitation programs.

This strategy applies to the entire global team of the Global Scaling Up Sanitation Project, that is, teams based in Indonesia, India, Tanzania, and Washington, DC. It encompasses global learning goals that provide a framework for working and learning together. Only as a team of learners can this project be successful.

The remainder of this strategy paper is divided into five sections: Project Background; Learning Goals and Principles; Learning Culture, Tools, and Platforms; Learning Process; Organizational Aspects of Learning.

This strategy will form the basis for Action Plans to be developed for each country program and the DC Technical Team. Key outputs of the learning are knowledge products that can be used for advocacy as well as for creating operationally effective approaches and tools to facilitate sustainability and replication.

We are undertaking this learning process in order to enable evidence-based decisions by policy-makers and implementation of large-scale programs.

II. Project Background

KEY POINTS

- The Global Scaling Up Sanitation Project will test new approaches to generate sanitation demand at scale and increase the supply of sanitation products and services.
- A learning strategy has been developed to ensure that thoughtful and analytical learning and effective knowledge dissemination and global advocacy all take place.

Project Goals and Objectives

In December 2006, the Water and Sanitation Program (WSP) started implementation of a four-year project, the Global Scaling Up Sanitation Project, also referred to as Total Sanitation and Sanitation Marketing (TSSM), with funding from the Bill & Melinda Gates Foundation. In 2009, the project received a one-year, no-cost extension.

TSSM will test new approaches to generate sanitation demand at scale and increase the supply of sanitation products and services that will result in increased access to hygienic sanitation and improved health for poor households and communities in rural villages, small towns, and informal urban settlements in order to meet the Millennium Development Goals (MDGs) sanitation targets for 2015. It is reasonable to estimate that at least 50 percent of the 2.1 billion people in rural areas that do not have access to basic sanitation could eventually be served by the Community Led Total Sanitation (CLTS) and Sanitation Marketing approaches.

The long-term vision of this effort is to meet the basic sanitation needs of the rural poor who do not currently have access to safe and hygienic sanitation. That aim will be accomplished by developing the practical knowledge for designing sanitation and hygiene programs that are effective at improving health and are sustainable at large scale for rural villages, small towns, and informal urban settlements.

Project activities will test state of the art approaches at scale and have four main objectives (See Box 1).

BOX 1: PROJECT OBJECTIVES

1. Support programs to scale up demand creation for sanitation at the household and community level
2. Support programs to improve and increase the supply of sanitation- and hygiene-related products and services that are appropriate and affordable to the poorest in the communities
3. Create enabling environments for sustaining and replicating large scale sanitation programs
4. Carry out a structured process to develop the practical knowledge and tools to replicate and scale up these programs at a reasonable cost and within the financial and institutional constraints of new countries with different cultures.

As reflected in the project objectives (Box 1), learning is critical to the project's success. This learning strategy has been developed to ensure that thoughtful and analytical learning and effective knowledge dissemination and global advocacy takes place. A structured, disciplined process of generating, sharing, capturing, and disseminating the learning is key in order to further develop evidence, practical knowledge, and tools for effective replication and scaling up of sustainable TSSM. Key elements of the learning strategy include:

- **Thoughtful and Analytical Learning:** This is a global project that will be carried out in three diverse countries and four regions. These countries vary in size, cultures, geography, habits, level of urbanization, level of education, and reach of the formal media. Each of these countries will use the approaches of CLTS and Sanitation Marketing, but these approaches will be adapted based on differences in cultures, conditions, economics, etc. The activities carried out in each country will significantly advance the learning process of how to integrate CLTS and Sanitation Marketing approaches, and determine what are cost-effective sustainable approaches in a variety of settings.
- **Effective Knowledge Dissemination and Global Advocacy:** Insights that are gained and documented will be disseminated through various channels, networks, and communities. Dissemination will contribute to the replication and scaling up of sanitation programs in other countries, refining of methodologies, and informed decision-making by key decision-makers. Developing partnerships with international and national organizations and networks is crucial to achieving not only thoughtful learning but also influencing and contributing to the success of similar efforts in other countries.

During initial years of implementation, the learning strategy and action plan will focus on embedding learning practices in the global team. In subsequent years, the focus will shift to developing and sharing knowledge with stakeholders and ensuring replication. This shift will require dissemination strategies that integrate learning into other program designs, raising questions for others to test, and building capacity of other stakeholders beyond those with whom the current interactions take place.

This strategy is continuously evolving, particularly the learning goals. Since the development of the learning strategy, tools, templates and processes have constantly been updated and as since we learn about learning and receive feedback from partners. Additional support staff has been hired to capture learning and guide the learning processes in the countries, and to capture and disseminate globally. In the country teams, innovative ways for capturing and reflecting have been experimented with and shared both within the teams and with their clients—reinforcing sustainability and replication.

This learning strategy has been developed to ensure that thoughtful and analytical learning and effective knowledge dissemination and global advocacy takes place.

During initial years of implementation, the learning strategy and action plan will focus on embedding learning practices in the global team.

III. Learning Goals and Principles

KEY POINT

- Specific learning goals are designed as a set of questions to be answered over the course of the project.

Goals

Global learning goals establish the basis of the learning strategy and are outlined in the form of questions (See Box 2). In addition, the global team developed sub-questions and goals at a global team meeting in July 2008 (See Appendix A). At the country level, interventions are designed to test and learn about these questions as well as country context specific questions. What is learned at the country level will be consolidated by the DC Technical Team and translated into a cohesive and coherent story that can be disseminated and applied globally.

Principles

A set of global learning principles has been developed to guide choices as learning tools, platforms, and processes are developed (See Box 3).

BOX 2: GLOBAL LEARNING GOALS

1. What are the health and welfare impacts of large-scale sanitation programs on the poor?
2. What are the best practice approaches and designs for creating demand and strengthening supply leading to sustainable, effective large-scale sanitation programs?
3. What programmatic and institutional conditions comprise the enabling environment needed to scale up and sustain large-scale sanitation programs?

BOX 3: GLOBAL LEARNING PRINCIPLES

Learning should:

- Guide implementers (practitioners) in “how to do” skills with a focus on tool kits, scenarios, and case studies
- Move the practice forward, hence, the learning must be shared with practitioners and fellow learners in the field and provide innovative, tested approaches
- Provide just-in-time insights on implementation, challenges, and lessons learned to be available to the person needing the information within a short timeframe
- Be evidence based which means that all learning must show a link to data (ground truth)
- Be field tested or applied where any hypothesis will be verified by implementing the agreed on action steps with the identified stakeholders, especially before developing a knowledge product
- Reflect findings from Impact Evaluation and the monitoring system
- Build on learning from other sectors
- Embedded in the way people work, with the focus on learning-by-doing and on becoming an integral part of the work plan
- Strike a good balance of doing, reflecting, and sharing, and
- Address geographic and temporal differences in that learning conversations must be scheduled to balance time zones and access to Internet and phone.

IV. Learning Culture, Tools, and Platforms

KEY POINTS

- Developing a learning culture within the project team and partners is key to the success of the project.
 - Establishing this culture is a function of tools such as Emergent Learning Maps and After Action Reviews, alongside technical tools such as a Web based communications and sharing tools.
-

Creating a Culture of Learning

In order to achieve the learning goals, we must create a learning culture within and across teams.

Learning takes place through iterative cycles of doing, reflecting, and making meaning, hypothesizing of what to do differently and planning for the next round of doing—testing of the hypotheses. Learning therefore happens before, during and after doing. The process of making assumptions and hypotheses has to be made explicit during the reflection process so that testing and probing can occur. Effective learning is forward looking, so that the application of lessons learned and insights gained is already specified and the intent is clear. This learning process is referred to as action-learning and emergent learning. In addition, this process not only shortens the time between learning and application, making the learning appropriate and timely, but also reduces feelings of fear about sharing what did not work or competition of who is succeeding most. Rather, learning is employed in the service of improving future opportunities and of helping the team improve as a whole.

Effective learning is forward looking, so that the application of lessons learned and insights gained is already specified and the intent is clear.

The most effective learning, revealing, and sharing of knowledge takes place in a Community of Practice (CoP). The TSSM team is a CoP within a larger CoP represented by the WSP Sanitation and Hygiene Global Practice Team (GPT). It also comprises smaller CoPs such as country teams. Beside the global CoP and country CoPs, various CoPs may exist around learning goals and stakeholder groups. Some CoPs might be time-bound and some might exist throughout the life of the project.

The most effective learning, revealing, and sharing of knowledge takes place in a Community of Practice (CoP).

A learning culture must be built on trusting relationships, a continuous practice of facilitated conversations, sharing of learning, and a chance to engage in action-learning. Mentoring and being open to any question are also part of learning. It is critical for members of the CoP to perceive learning as a key identity and a focus of the entire team, and to understand that no one team member and no one sub-team can succeed on their own. In addition, it is important for all team members to recognize that learning takes place in successful and unsuccessful interventions. Cases of failures may offer many lessons.

A tool for building a learning culture is the team charter. The team charter specifies the tenets of team learning. It reflects the values and norms the team agrees to and reinforces the team and holds it accountable as a community of practice. (See Box 4).

Learning takes place in successful and unsuccessful interventions. Cases of failures may offer many lessons.

Experience shows that a virtual team cannot function effectively over time without coming together in person at key moments.

BOX 4: TEAM CHARTER

The Global Scaling Up Sanitation Project team agrees to:

- Commit to positively reinforce those who share information
- See each other as a member of a learning team
- Take time to help colleagues learn
- Commit to sharing information and tools and to positively reinforce those who share
- Encourage open and continuous dialogue with the goal of being productive
- Promote trust, respect, and friendship
- Commit to personal learning to remain cutting edge (such as looking outside, our disciplines in search of ideas, concepts, and approaches)
- Feel free to challenge assumptions
- Learn from other, similar initiatives both with our stakeholders and in other fields.

As undertaken in DC and during a global team meeting in July 2008, this chartering process will take place within each country team and will become the foundation for country Action Plans.

Relationship-Building

As a globally distributed CoP that primarily learns together virtually rather than in person, regular relationship- and trust-building is paramount. Experience shows that a virtual team cannot function effectively over time without coming together in person at key moments. The annual global team meetings serve this purpose. New relationships can be built, existing relationships reinforced, agreements of sharing and mentoring made, team norms and joint purpose—team identity—strengthened and collaboration practiced. The design of the meetings will use the learning processes and tools of the global team and is based on the principles of self-management and local/global ownership.

Other relationship-building activities include the following:

- Joint learning at conferences
- Technical Assistance provided among countries (peer consultation) and DC and countries
- Acknowledgement of support and sharing of information, and
- Site visits and face-to-face peer consultation.

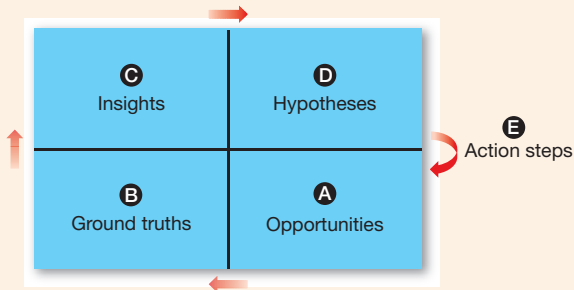
Learning Tools

TSSM will employ Emergent Learning Maps and After Action Reviews to assist project learning. Emergent Learning Maps will be most relevant for when reflection takes place in longer cycles, such as bi-annually or annually. After Action Reviews are useful at very short intervals for continuous improvement.

Emergent Learning Maps

The DC Technical Team is responsible for tracking learning and evidence for specific learning questions and goals. They use the Emergent Learning Map process (See Box 5) to track and check hypotheses and suggest activities on a global level and for country teams.

BOX 5: EMERGENT LEARNING MAP PROCESS



Key:

- A** Focus on one or more concrete events that will take place in the near future related to a framing question (*Opportunities*)
- B** Look back at similar, past events (*Ground Truths*)
- C** Reflect on insights gained from past events such as results and reasons for results (*Insights*)
- D** Formulate hypotheses (a shared theory of success) about what can be done to ensure that upcoming events are successful (*Hypotheses*)
- E** Match hypotheses with upcoming events to create robust and testable actions (*Action Steps*).

Source: © 2007, Signet Research & Consulting, LLC

Emergent Learning Maps (EL Maps) are tools for generating, capturing and tracking learning. EL Maps will be used to organize learning and determine global and national patterns. They have been described as a “blank canvas” on which learning can take place. In TSSM, EL Maps will be based on the learning goals and adjusted over time. Framing questions will take the form of, “What will it take. . . ?” or “How will we. . . ?” to focus the activity.

Emergent Learning Maps are tools for generating, capturing and tracking learning.

An EL Map is built around two axes. The horizontal axis is a timeline. Everything to the left of center refers to the past and everything to the right of center refers to the future. Equal weight is given to past and future, which helps groups avoid getting stuck in painful “post-mortem” analyses of the past. The vertical axis makes a distinction between the world of experience and our thinking about it. Everything below center refers to facts and concrete events and everything above center refers to thinking about these events. This helps groups develop their skills in balancing inquiry and advocacy.

After Action Reviews (AAR) are useful to examine repeated events and processes

As the team continuously circles through an EL Map, today's hypotheses become tomorrow's ground truths. Once a lesson has been learned, EL Maps offer a good transitional device for sharing emerging knowledge. A template has been developed to capture lessons from EL Maps (See Appendix B)

After Action Reviews

After Action Reviews (AAR) are useful to examine repeated events and processes such as workshops, meetings, training, media events, or learning processes themselves. The AAR is the basis for regular team reviews of ongoing activities and insights into process improvement such as knowledge sharing processes and meeting management.

AARs ask the following questions:

- What was supposed to happen? What actually happened? Why the difference?
- What worked? What did not work? Why?
- What would we do differently next time?

A sample template to capture learnings from an AAR is found in Appendix C.

Learning Platforms for Sharing and Collaboration

While we will continue to rely on traditional modes of communication and collaboration such as emails, telephone/audio-video conferences, and face-to-face workshops and meetings, the TSSM team will also use virtual modes such as Wiki and other platforms. Given the learning principles and time and geographical challenges, only a virtual platform will guarantee that knowledge sharing and capturing take place.

The project team will have a primary *internal virtual platform* to which external members will only have selective access, for example to a specific concept paper that is being written collaboratively. This will ensure that members feel free to share draft knowledge products, questions, and initial thoughts, to reveal challenges and what does not work, and to collaborate with each other. The use of *external platforms* will ensure dissemination of knowledge products and accessing expertise. This platform will be used by country teams and individuals invited from the community-at-large, such as members of the WSP Sanitation and Hygiene GPT and the World Bank Sanitation and Hygiene Thematic Group (TG).

The purpose of internal virtual platforms, such as SharePoint and Wiki, are to facilitate the following:

- Building a depository of knowledge
- Ongoing collection of learning that is tracked, summarized, and fed back for further conversation and testing
- On-line conversations about new insights, challenges, and possible solutions

- Tracking and link to ongoing development of knowledge products
- Sharing of learning about each country with regard to the key learning questions
- Emergent learning maps for key questions (learning goals)
- Information about team members
- Questions and Answers (turn-around time of 24 to 28 hours)
- Post learning (cutting edge knowledge from books, attending events, etc).

The purpose of external virtual platforms are:

- Sharing products of a higher quality
- Increasing visibility of the team and various topics
- Engaging other practitioners in finding solutions, and
- Networking.

V. Learning Processes

KEY POINTS

- The learning process is a cycle with four distinct steps; (1) generate, (2) share, (3) capture, and (4) disseminate learning.
- The learning process will take place in each of the country offices and Washington DC.

Learning Cycle

The Learning Cycle captures the process through which the TSSM team will 1) generate, 2) share, 3) capture, and 4) disseminate learning (See Box 6). While a continuous, disciplined practice of learning must be embedded into the way the global team works, the Learning Cycle must be adapted to fit the resources of time and skill available in each country.

In addition to processes, behaviors required for the learning process will only become established practices—a way of doing business—in a team when:

- Learning and sharing take place in the service of a team and for an agreed-upon goal
- The message is reinforced that there are no repercussions for failing
- Supporting colleagues in learning, reflecting, and sharing is as important as the individual country implementation and success, and
- Reflecting and learning are as important as doing.

Generating Knowledge

The global processes for generating knowledge include the following three areas (See Box 7):

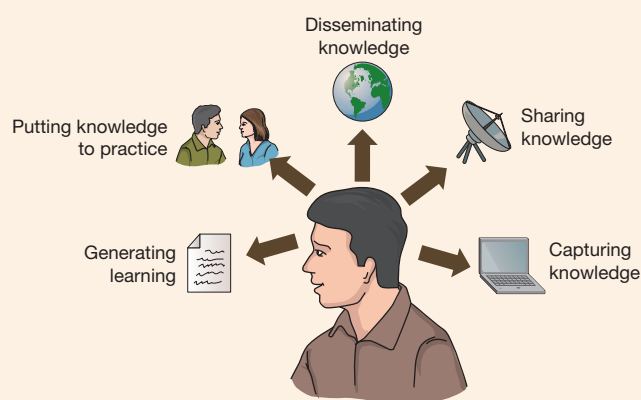
Review of learning goals. Global team members responsible for designated learning goals will come together (virtually, face-to-face, or audio conference) every three to six months to apply Emergent Learning Map and capture learning. These sessions may include outside experts.

Review of learning across the three countries. Every three months the DC team (and country team members if they desire) will reflect on the following questions:

- What is emerging from the learning reviews in all countries with respect to the learning goals we identified?
- Is the same learning taking place? If yes, can we generalize? Do we have enough evidence? If yes—publish, if no, what do we need to do to generate more evidence?
- If different learning takes place, why, what is different in the context? What do we want to probe more and where? What is our hypothesis? How do we want to generate more evidence for our hypotheses?

Review of learning process. Global team members will meet once every three months to reflect on and adjust the following areas: knowledge product development, Emergent Learning Map process, knowledge collection, and knowledge sharing.

BOX 6: LEARNING CYCLE



Source: David Gray, The World Bank

BOX 7: SUMMARY OF GLOBAL PROCESSES TO GENERATE KNOWLEDGE

Any process can be initiated by any team member at any time in addition to the processes and times suggested.

Actions	Participants	Frequency	Platforms
Review learning goals	DC Technical Team, Country Teams, External experts	Every three to six months or annually (depending on the learning goal)	Audio-conference, face-to-face meetings, workshops, Wiki/Sharepoint-supported online discussions
Review learning across the three countries	DC Technical Team, Country Teams, if desired.	Quarterly	Face-to-face team meeting
Review learning process	DC Technical Team, Country Teams	Quarterly	Email, Wiki or other virtual platform

The key to making this work is that there is joint responsibility for sharing and responding to requests for learning.

Sharing Knowledge

Knowledge sharing includes (i) conversations during which insights and evidence are exchanged and the results of testing of hypotheses are reported, (ii) conversations during which new questions arise and new learning emerges, and (iii) conversations during which concrete tips for implementation are exchanged. Knowledge sharing also includes sharing of tools and designs of interventions.

The goal is that as conversations happen, over a distance or in person, the learning is recorded and accessible to the entire community. Various modes of accomplishing this include email, important phone calls that are transcribed, conversations that are summarized and shared in writing and online platforms.

The key to making this work is that there is joint responsibility for sharing and responding to requests for learning. A facilitator can assist to keep conversations going, remind team members of accountability, and track the use and postings of online platforms (See Box 8).

Developing Knowledge Products

The project will deliver a series of print, electronic, and direct capacity-building knowledge and communication products. All main products will be repurposed to reach all target audiences. Both DC and country teams will have knowledge product lists that will be continuously updated and be context and audience specific. In the case of DC, the focus will be on maintaining a knowledge product list

BOX 8: SUMMARY OF ACTIVITIES TO SHARE KNOWLEDGE

Any process can be initiated by any team member at any time in addition to the processes and times suggested.

Actions	How Often	By Whom	Platforms
Post knowledge products to be commented on/developed on the Wiki or other virtual platforms	As needed (minimum once a week)	DC Technical Team, Country Teams, External (including Sanitation GPT)	Wiki or virtual platform
Develop knowledge products jointly/globally and adapt to country context	As needed (minimum once a week)	DC Technical Team, Country Teams, External experts (including Sanitation GPT)	Wiki or virtual platform
Ask questions, ask for tips and support, share insights	As needed	Country Team Task Manager, DC Technical Team, External expert	Email, Wiki, phone calls
Share information that comes from attending conferences, events, reading, etc. to keep the project teams cutting edge	As needed (minimum, request to add information every two months)	DC Technical Team	Email, Wiki, or virtual platform
Connect people with knowledge to people seeking knowledge	As needed	DC Technical Team, Country Teams, External experts	Email, Face-to-face meetings
Review of learning and community building	Annually	DC Technical Team and Country Teams	Face-to-face meeting (i.e. global meeting)

that will be continuously updated, developing global knowledge products, and ensuring the quality of knowledge products to be shared with a global audience.

The development of knowledge products can be done collaboratively with or without the assistance of consultants (researchers, writers) and media experts (i.e., for videos, stories, press kits). While it countries, suggest knowledge products, and identify needs for further research. is everyone's responsibility to participate and contribute, it is the primary responsibility of the DC team to continuously harvest the learning from all.

Potential knowledge products include:

- *Flagship Reports*: Flagship reports are expected to 1) present original research or major product, 2) move the field forward on sanitation programming as well as understanding of the impact of sanitation, and 3) be highly analytical. These products

are written in a technical language and will go through rigorous quality review and editing prior to publication. Flagship reports will be high-quality publications. They will be available in print and electronic format. Primary target audiences for these products include WSS and health sector professionals World Bank task team leaders, and sanitation programmers. Primary target audiences for repurposed products include high-level policy and decision makers and high-level staff in bilateral and multilateral donor agencies.

- *Academic Publications*: Publications in peer reviewed health and WSS sector journals (e.g., The Lancet) are a key knowledge product, which will lend credibility to the project and its results/findings. The articles will be developed from the original research carried out by the project and submitted for publication in highly visible and credible sector publications. They

are expected to 1) present original research, 2) move the field forward on sanitation programming as well as effectiveness, and 3) be of high analytical quality. Articles in peer reviewed sector journals will form an important component of the project's advocacy strategy by lending credibility and visibility to the research results as well as the approach per se. The project team will have less control over the publication process and timing of this specific product line. Primary target audiences include academics/expert community, WSS and health sector professionals, and World Bank Task Team Leaders. Primary target audiences for repurposed products include high-level policy and decision makers, and high-level staff in bilateral and multilateral donor agencies.

- *Field Notes:* This product features evidence-based best practices, lessons learned, and case studies in scaling up sanitation springing from the project. Field notes tell the story of the project and its findings in an easily accessible and appealing manner. They are written in a non-technical language and include a large number of visual elements: photographs, tables, graphs, charts, figures, etc. They will be available in print and electronic format. Primary target audiences include WSS and health sector professionals, World Bank task team leaders, national counterparts, and sanitation programmers.
- *Working Papers:* Working papers are longer (30–60 page) publications that showcase work in progress, project findings, and lessons learned to date in specific topic and/or geographic areas (e.g., enabling environment assessments). In the majority of cases, working papers will be (a) consultant reports that have been reworked (re-written and copy-edited as needed) to be brought up to a publishable level, or (b) syntheses the findings of multiple consultant reports. Primary target audiences include WSS and health sector professionals and sanitation programmers. Primary target audiences for repurposed products include high-level policy and decision makers, high-level staff in bilateral and multilateral donor agencies, and World Bank task team leaders.
- *Guidance Documents:* Guidance documents will provide implementers of sanitation programs with resources to guide and strengthen their efforts in all

stages of a sanitation program cycle (planning, design, implementation, monitoring, and evaluation). All guides and tools will have been tested by the project as part of their development. They should be written in a clear language with minimal use of technical jargon. Guidance documents will typically be published electronically, but may in some cases be printed. Primary target audiences for these products include sanitation programmers and their national counterparts. WSS and health sector professionals and World Bank task team leaders, who are interested in engaging in sanitation, comprise a secondary target audience.

- *Project Web site:* The WSP Web site (www.wsp.org) will include a section to communicate news about the Global Scaling Up Sanitation Project and disseminate project outputs. This section will follow the look and feel of the WSP website. It should be designed to allow for timely updates about project activities with minimal staff time requirements.
- *Direct Capacity Building and Promotional Activities:* New programming and lessons learned can be disseminated through direct capacity building and promotional activities such as workshops. Materials for the workshops can be repurposed into digital learning modules which can be archived and shared. Learning modules might consist of a recorded workshop session, PowerPoint presentations, and recommended readings and resources.

Quality Assurance Process

A process will be put in place to ensure that the knowledge products are accurate and of high quality. All products in the knowledge product pipeline will undergo review prior to publication and dissemination. Quality assurance steps should include:

- Development of a concept note
- Concept note peer review and revisions
- Concept note approval by Task Team Leader and Technical Specialist
- Drafting of product
- Internal and external peer review and revisions
- Editing
- Desk top publishing, and
- Dissemination.

Capturing Knowledge

Capturing knowledge means turning the emerging insights and evidence-based learning into products that are available to a wider audience and appropriate for specific target audiences. Knowledge products will be identified through stakeholder reviews and needs expressed during interactions with stakeholders. Learning sessions using Emergent Learning Maps and participation in conferences, as well as virtual communities of practice, will also identify new products, which can be adapted from existing products or are newly developed.

Both DC and country teams will have knowledge product lists that will be continuously updated and be context- and audience-specific. In the case of DC, the focus will be on maintaining a knowledge product list that will be continuously updated, developing global knowledge products, and ensuring quality of knowledge products to be shared with a global audience. The development of the knowledge products can be done collaboratively with or without the assistance of consultants (researchers, writers) and media experts (such as for videos, stories, and press kits).

The project team will have a virtual platform where emerging learning, ongoing conversations, and knowledge products under development will be housed. While it is everyone's responsibility to participate and contribute, it is the primary responsibility of the DC team to continuously harvest the learning from all countries, suggest knowledge products, and identify needs for further research. Box 9 summarizes the global processes for capturing knowledge.

Disseminating Knowledge

All knowledge products should to be viewed as global products. This means that products developed in DC will also be disseminated in each country and that products developed in countries are disseminated in other countries, DC, and worldwide. Some of the global products will have to be adapted to fit the cultural context and language of each country.

The global team may also rely on external experts, as well as knowledge and learning managers in other organizations, to disseminate knowledge products. For example, within the World Bank, regional learning coordinators are critical for disseminating knowledge products and arranging learning conversations. Within countries, country managers or directors can assist with dissemination.

Each knowledge product that needs dissemination will follow a plan that considers all appropriate channels for reaching the target audience identified during product development.

Potential audiences include:

- *Water Supply and Sanitation (WSS) and health sector professionals (possibly education)*: This audience group consists of WSS and health sector professionals at international and local levels. This group shares the objective to reduce child mortality and morbidity owing to diarrheal disease and is potentially interested in scientific evidence, tools, impacts, and approaches that can help them achieve this objective. Communication outputs should make it easy to

BOX 9: GLOBAL PROCESSES FOR CAPTURING KNOWLEDGE

Any process can be initiated by any team member at any time in addition to the processes and times suggested.

Actions	By Whom	How Often	Platforms
Review of knowledge products: What is under development? What is being disseminated? Any adaptations across countries possible? What has been disseminated and impacts?	DC Technical Team; Country Teams	Quarterly	Audio-conference, virtual platforms, Email, face-to-face meetings
Identification of new knowledge products	DC Technical Team	Quarterly	Audio-conference, virtual platforms, Email, face-to-face meetings

envision how a sanitation program might be implemented in their sector.

- *World Bank and other WSP sector specialists—including the WB Sanitation and Hygiene Thematic Group.* A sub-segment of the above target audience, this group gets particular mention due to the special access the project and its staff has to World Bank sector specialists and Task Team Leaders due to the physical location of the project in the World Bank and established working relations. The segment would comprise task team leaders in the WSS, health, education, and environment sectors. This audience segment would be relatively easily reached through personal meetings and events in the World Bank. They would be interested in highly credible information (scientifically) and tools that will make it easier for them to include large-scale sanitation into their project work.
- *WSP Sanitation and Hygiene GPT members and other WSP country staff involved in sanitation activities.* Sanitation related efforts—including many CLTS and Sanitation marketing activities are currently being carried out in many countries in addition to the three Global Scaling Up Sanitation countries.
- *High-level staff in bilateral and multilateral donor agencies:* High-level staff in bilateral and multi-lateral agencies should be targeted to generate political support and funding for large-scale sanitation programs.
- *High-level decision and policymakers:* High-level decision and policymakers in developing and donor nations have the power to place large scale sanitation programs at the top of the political agenda, paving the way for long-term funding and sustainability. This audience segment would be interested in highly

credible and rapidly digestible information on the impact and cost-effectiveness of large-scale sanitation programs.

- *Academic/expert community:* Recognition of the validity and value of project findings within the academic/expert community will lend overall credibility to project findings.
- *Media:* Mass media outlets can play a significant role in dissemination and advocacy efforts.

During the latter part of the project duration, the focus of learning will shift to replication by others. Knowledge dissemination will then increasingly have elements of interpersonal sharing of knowledge, mentoring and coaching and integration of others into project activities, such as study trips, joint learning workshops, input into strategy workshops of other projects etc.

Presentations to be delivered in institutions and at international WSS and health sector conferences will disseminate key findings and lessons learned from the TSSM Project to a forum of decision makers and programmers within the sector. Presentations will often be repurposed from other core knowledge products, including working papers and academic publications. Special events that will be organized and/or targeted include:

- Stockholm World Water Week (annual)
- Donor conferences
- Istanbul World Water Forum (March 2009)
- International Year of Sanitation Conferences
- Brown Bag Lunches (BBLs)
- WSP Hygiene and Sanitation/Handwashing Global Practice Team events.

VI. Organizational Aspects for Learning

KEY POINTS

- Due to the global nature of the project, role clarity is highly important
 - Linkages to Washington DC, between the country offices, and to other organizations must be maintained.
 - Recognition, along with continuous mentoring and facilitation, is a key aspect
-

Roles and Responsibilities

In a globally dispersed team, it is easy to lose track of the wider team and focus on country-specific learning or on the relationship with DC instead of sharing across countries and with wider CoPs. Role clarity is one of the most important aspects of a well functioning team. As learning activities increase, so will the amount of time spent on these activities. Therefore, knowing the roles and responsibilities in detail will not only prevent confusion and conflict but also ensure that additional resources can be brought on board if the required time exceeds a particular person's capacity.

DC Technical Team

The role of the DC Technical Team will be as stewards of the overall learning process. This includes:

- Identifying and developing global knowledge products,
- Harvesting the learning that is taking place,
- Providing and maintaining a tool for global knowledge sharing,
- Supporting the development of country-specific knowledge products, such as peer reviewing and identification of peer reviewers (including tools and guides relevant to countries),
- Providing translations for country products,
- Ensuring quality control,
- Developing global dissemination strategy and feedback systems,
- Providing translations for country products, and
- Capturing learning in a central location, accessible to all.

To ensure dissemination of knowledge products and recognition of learners, the DC Technical Team will network with other organizations and connect country teams to outside resources. They will also provide/broker ongoing technical support and technical assistance to the country teams.

The DC Technical Team will be assessing learning processes, facilitating global conversations and cross-country learning, bringing in relevant external knowledge, and determining and providing capacity-building to country teams. In particular, active participation, encouragement, and support using a virtual platform will be key to the success of using such a platform by the entire global team. This includes ensuring that recognition of learners takes place, as was agreed upon by the global team.

Each DC-based technical team member has the responsibility to develop the global knowledge products within the learning goal they are accountable for, which includes managing tasks, tracking the quality assurance process, determining whether the knowledge product should be developed internally through collaboration (Wiki) or outsourced, and developing and implementing the dissemination plan.

If it is collaboratively developed, the task manager of the product facilitates this through use of Wiki technology. The task manager determines who from outside the team has access and at which times.

Responsibility for a particular learning goal also includes answering the following:

- What do we know with enough evidence to move to a knowledge product for a particular stakeholder group? What more do we need to move forward?
- What do we know without enough evidence but want to share in order to solicit ideas or evidence that we might not be aware of from a particular stakeholder group?

Country Teams

The role of the country teams is to

- Learn by doing, both *from* and *with* their stakeholders,
- Develop country-specific learning products, and
- Share learning with other countries and the technical team in DC.

Some country team members might also take the lead for specific thematic areas, which might include actively facilitating conversations virtually, contributing to and developing global knowledge products, and hosting workshops, conferences and site visits. Thankfully, all country teams provide rich learning venues for annual meetings and the logistics and organization for the annual global meetings, as was exemplified in Senegal and Peru.

Country task managers will provide time and attention to capture learning by doing with stakeholders, including feedback from stakeholders. They will develop country-specific learning products, document initial learning from country programs, including previous activities in Senegal and Peru, and review global products. Country task managers will share learning (ideas, successes, failures, issues) across countries and with the DC team and implement and regularly review learning action plans. As managers, they will maintain and use the Management Information System (MIS) to ensure successful implementation.

To their country team members, they will provide feedback to their work and technical leadership and provide clear direction related to information and documentation.

Country team members will provide technical support (gathering, processing, and consolidating information) and administrative support and handle specific learning tools, such as Wiki and blogs. They will play a back-up role to the country task managers and contribute proposals/initiatives and analytical thinking.

WSP communication specialists will provide support in product development and dissemination and give advice on specific issues.

Connecting Teams

It is critical to ensure that connectivity exists among all members of the global team and also with the external community of experts and practitioners. Opportunities to connect the project team via email, audio-visual conferencing, virtual platforms, and face-to-face meetings include monthly meetings, quarterly meetings, and global annual meetings (See Box 8).

Various types of connections and activities are proposed below.

Connecting Country to Global Level

Opportunities to connect the project team via email, audio-visual conferencing, virtual platforms, and face-to-face meetings include monthly meetings, quarterly meetings, and global annual meetings (See Box 10).

In addition to one-on-one phone calls on specific topics, a monthly meeting will be available to the entire community (through use of a bridge line, same number/same time every month). The purpose of the meeting will be to focus on concerns and insights, to flag new learning, and to request support. The global team meetings will take place annually. The purpose of these meetings is to build community, learn from one another, and discuss emerging issues and challenges.

Connecting Country to Country

As a parallel process, countries will share learning with each other. The conversations and posting of products will be facilitated either by DC or through a country-based team member who is interested in a particular learning goal. Various platforms for sharing and capturing learning have been outlined above. The intent is for the learning process to be both facilitated and self-managed by the entire team.

Connecting to WSP Global Practice and Thematic Groups

The Sanitation and Hygiene Global Practice Teams and Thematic Groups have a good track record of working with each other (many WSP staff participate in both) and of sharing relevant and useful information. Many TSSM team members are members and specific efforts should be made to share lessons from TSSM as well as to learn from these two groups. This will largely be done through Brown Bag Lunches (BBLs), future Water Weeks and, electronic sharing of information. At the WDC level, the TSSM team will maintain close contact with the WB Water Anchor sanitation specialists.

Connecting External Resources to DC and Country Level

It is the responsibility of all team members to bring in external knowledge. This can be done through workshops, brown-bag lunches, or use of the virtual platform, by making personal networks available or attending conferences,

BOX 10: PROPOSED LEARNING OPPORTUNITIES

Opportunities	Participants	Agenda	Learning Process
Monthly meetings	DC and Country Teams	Updates Emerging concerns and insights Request technical assistance	Sharing knowledge
Quarterly Learning Meetings	DC and Country Teams	Review learning across the four countries; learning process; knowledge products under development and new knowledge products	Generating and capturing knowledge
Ongoing Meetings with WSP Sanitation GPT and the WB Sanitation TG	DC, GPT, TG members	To review current learnings and activities and seek opportunities for synergy	Generating and sharing knowledge
Annual Global Team Meetings	DC, Country Teams	Review of learning goals	Generating and sharing knowledge

and by sharing the results and resources from those conferences with the global team.

Connecting DC/Country Teams to World Bank/WSP

The objective of connecting DC/country teams to the Bank is to ensure that the sector is being moved forward, cross-fertilization of ideas and products is occurring, and learners are being recognized. Possible ways of connecting include:

- Invitation to TSSM learning events such as workshops, BBLs, and Emergent Learning Map sessions
- Invitation to collaborate on development of TSSM knowledge products
- Personal networking
- Planning study tours, and
- Incorporating knowledge products into regional medias and newsletters.

Recognition of Learners

Recognition, along with continuous mentoring and facilitation, is a key aspect in establishing learning behaviors within a team. Recognition can take place through formal

systems such as acknowledgement in the OPE process. “Learning” can be designed to be a part of the TTLs and Task Managers Results Agreement in order to create a performance incentive. Providing awards in recognition of learning and building trust among the team is another possibility. The process for determining the awards needs to be one where the team CoP determines the criteria and makes decisions.

Recognition can also be done informally, through feedback and publicly. Possibilities include featuring “the best knowledge sharer” on the virtual platform and making visits to conferences.

Another important factor in ensuring participation in learning and sharing is the participation of senior managers in the learning processes, such as posting comments, sharing learning from the international community, and acknowledging the work the team is doing. Senior managers can also provide links to external experts, thus promoting networking. When team members are connected with an

external community of practice, the international or national recognition, which goes beyond the entire project team, is often motivating and can benefit the team member in their professional career.

The following mechanisms for recognizing one another as learners were agreed upon by the global team:

- Exploring the new VP team award—become one of the learning teams recognized
- Leveraging good learners through study tours, international forums, and technical assistance opportunities
- Enabling and encouraging training opportunities
- Ensuring the acknowledgment of contributions (by authors, reviewers, feedback-givers, and posters of information)
- Using knowledge products
- Using Wiki
- Encouraging networking (such as by joining professional associations)
- Creating a space in meeting agendas for recognizing learning and learners within the project, within the country, within the region, and globally within the wider expert community
- Using Results Agreements (RA) or Overall Performance Evaluation (OPE) (where applicable) process
- Recognizing a Learner of the Month, and
- Post profile on website, soapbox

Recognition, along with continuous mentoring and facilitation, is a key aspect in establishing learning behaviors within a team.

Appendix A: Global Learning Goals

1. What are the health and welfare impacts of large-scale sanitation programs on the poor?

- a. What are the health impacts of achieving 100% Open Defecation Free (ODF) communities and improved coverage to sanitation (measured through the Joint Monitoring Programme (JMP), some level of coverage?
- b. What are the economic benefits of improved coverage to sanitation?
- c. What are the educational and social benefits of improved coverage to sanitation?
- d. Is there a relationship between health and other impacts and the level of sanitation service?
- e. What are the marginal health impacts of handwashing with soap (HWWs) and handling of children's feces on top of TSSM?

2. What are the best practice approaches and designs for creating demand and strengthening supply leading to sustainable, effective large-scale sanitation programs?

- a. What are the most effective approaches to increasing use of safe sanitation in rural areas in terms of 1) cost, 2) time, 3) sustainability, and 4) scalability?
- b. Can TSSM be adapted across different environments, and if so how?
- c. How does environment influence TSSM approach?
- d. What are the roles of private and public sector (separate and together) in generating supply and sustaining demand at scale?
- e. What are effective components, common challenges and solutions to the establishment and growth of a sanitation market supply?
- f. How does the availability of affordable supply and service affect demand?
- g. How can private sector be encouraged to serve the poorest segments?
- h. What government policies are effective for scaling up demand and supply for sanitation?
- i. What is an effective use of external fiscal incentives to enable poor families to gain access to a level of safe sanitation?
- j. What is effective financing to enable poor families to gain access to a level of safe sanitation?
- k. To what extent do "triggered" communities have the opportunity, ability, and motivation for short and long-term maintenance of their latrines?
- l. What is the durability of behavior change achieved under TSSM? Under what circumstances are these behaviors most likely to be sustained?
- m. What are the key determinants of sanitation behavior that influence communities to become ODF, and that influence people to either move up and down the sanitation ladder or maintain their position, once improved sanitation has been attained?
- n. Do communities that achieve ODF go on to access safe latrines and improve their sanitation status (i.e., move up the sanitation ladder)?
- o. What are effective strategies for marrying CLTS approaches and sanitation marketing?
- p. What are opportunities and strengths, and constraints or limits to applying commercial sector marketing practices to sanitation and what are promising practices to overcome them?
- q. How can TSSM be used to address HWWs and safe handling and disposal of children's feces?

3. What programmatic and institutional conditions comprise the enabling environment needed to scale up and sustain large-scale sanitation programs?

- a. What does it take to measure a supportive enabling environment (EE)?
- b. How do you prioritize among the EE interventions?
- c. Policy, Strategy, and Direction: What does it take to develop a national policy and strategy, and or direction for scaling up and sustaining sanitation? Are legal instruments necessary or would a set of regulatory instruments be adequate, or perhaps a program issued under a ministerial decree or government initiative be the best?
- d. Institutional Arrangement: Are roles and responsibility clearly defined (mandate, accountability)? Does sanitation need an institutional home and if so what would be the appropriate institution? What are the effective coordination mechanisms? What are the appropriate levels of the dedicated sanitation units, and what should their functions be (national, district)? What are effective strategies and practices in integrating sanitation into other programs/sectors?
- e. Implementation Capacity: What does it take to build ownership and capacity at the local level (i.e., local authorities, NGOs) to coordinate, implement, and monitor sanitation programs? What should the functions of local sanitation units be?
- f. Cost-effective implementation: What is the best way to track costs associated with project activities, outputs, and impact?
- g. Financing: What will it take to finance scaled-up, sustainable sanitation programs?
- h. Monitoring and Evaluation (M&E): What does it take to adapt/put in place a well-defined M&E system and to use the M&E data for policy, budget, and program decisions?
- i. Program Methodology: How do we gain widespread acceptance and adoption of the project's approach/methodology among government and stakeholders? How large a staff is needed and what skills do staff people need? What are the different implementation models that districts use to carry out the social intermediation and outreach roles needed for TSSM?

Appendix B: Template for Capturing Lessons from an Emergent Learning Map

- The situation and challenge we faced was: [describe what led to the need to learn together]
- Therefore, the Framing Question we asked was:
- What we have learned so far is: [describe key insights from successes and failures]
- Based on this, our current hypothesis about what it will take to succeed is:
- Opportunities to apply and further test this hypothesis are: [describe situations to which this might apply]
- Our own plan to continue to test this hypothesis includes: [describe the team's action plan based on its own upcoming opportunities]

Appendix C: Template for Capturing Lessons from an After Action Review (AAR)

- Name of event:
- Date of event:
- One or two sentences giving the background/scope to the experience:
- Key player (individual(s) who called the AAR):
- Key story (maximum of 10 words per story that would enable future users to re-find this learning):
- Key AAR participants:
- Specific actionable recommendations (SARs):
Quotes:
- Storing/Sharing of this AAR:
- This AAR was shared with (indicate website, email list sent to, name of person sent to):
- Stored where and under which title:
- Any knowledge product you see emerging?

