

**Scaling Up Rural Sanitation**

# What Does It Take to Scale Up Rural Sanitation?

**Eduardo Perez with Jason Cardosi, Yolande Coombes, Jacqueline Devine, Amy Grossman, Craig Kullmann, C. Ajith Kumar, Nilanjana Mukherjee, Manu Prakash, Amin Robiarto, Deviariandy Setiwan, Upneet Singh, and Djoko Wartono**

July 2012

**By Eduardo Perez with Jason Cardosi, Yolande Coombes, Jacqueline Devine, Amy Grossman, Craig Kullmann, C. Ajith Kumar, Nilanjana Mukherjee, Manu Prakash, Amin Robiarto, Deviariandy Setiwan, Upneet Singh, and Djoko Wartono.**

Scaling Up Rural Sanitation is designed as an evidence-based learning project with an explicit goal to test and document new approaches, reflect on challenges, and develop knowledge products to share lessons learned. Testing innovative approaches implies taking risks and learning from successes and failures. Scaling Up Rural Sanitation would not be possible without the support of Water and Sanitation Program's management team including Jaehyang So, Christopher Juan Costain, Wambui Gichuri, and Almud Weitz.

This Working Paper draws on evidence from fieldwork and knowledge products developed to support WSP's learning objectives. WSP is grateful for the contributions of Barbara Evans, Kebede Faris, Suzanne Hanchett, Laurie Krieger, Mohidul Hoque Kahn, Derko Kopitopoulos, Patrick Mwakilama, Julia Rosenbaum, Fred Rosenweig, David Schaub-Jones, Christine Sijbesma, Sophie Tremolet, and Trying Xuan Truong. Special thanks also to Louis Boorstein, Oliver Jones, Pete Kolsky, and Susanna Smets for their contributions to the learnings found in this document and for comments on earlier drafts of this report.

Please see Annex B for a complete list of publications. All publications are available at [www.wsp.org/scalingupsanitation](http://www.wsp.org/scalingupsanitation). For more information regarding the project, please contact Eduardo Perez at [wsp@worldbank.org](mailto:wsp@worldbank.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. Some sources cited may be informal documents that are not readily available. The findings, interpretations, and conclusions expressed herein are entirely those of the author and should not be attributed to the World Bank or its affiliated organizations, or to members of the Board of Executive Directors of the World Bank or the governments they represent. The World Bank does not guarantee the accuracy of the data included in this work. The material in this publication is copyrighted. Requests for permission to reproduce portions of it should be sent to [wsp@worldbank.org](mailto:wsp@worldbank.org). WSP encourages the dissemination of its work and will normally grant permission promptly. For more information, please visit [www.wsp.org](http://www.wsp.org).

© 2012 Water and Sanitation Program



**Scaling Up Rural Sanitation**

# What Does It Take to Scale Up Rural Sanitation?

**Eduardo Perez with Jason Cardosi, Yolande Coombes, Jacqueline Devine, Amy Grossman, Craig Kullmann, C. Ajith Kumar, Nilanjana Mukherjee, Manu Prakash, Amin Robiarto, Deviariandy Setiwan, Upneet Singh, and Djoko Wartono**

July 2012



## Rural Sanitation: A Forgotten Issue No Longer

At the historic United Nations Millennium Summit held in 2000, 189 heads of state formed a global partnership with the aim of ending extreme poverty by 2015. They announced eight Millennium Development Goals (MDGs) against which efforts to slash hunger, poverty, and disease would be measured and countries held accountable. Sanitation—a fundamental means for preventing disease and elevating quality of life—was not explicitly included until two years later—reflecting its status as the “forgotten stepchild” of the Water Supply and Sanitation sector. The goal established in 2002 is to halve the number of people without access to and use of improved sanitation by 2015.<sup>1</sup>

Since 2002, sanitation activists and practitioners have expanded global awareness of the critical role sanitation plays in improving human health and overall well-being. Speaking before Ministers of Finance and other government officials at the First Annual High Level Meeting of Sanitation and Water for All, held in April 2010 at the World Bank in Washington, D.C., Dr. Maria Neira, Director of the Department of Public Health and Environment at the World Health Organization, stated that “the economic case for sanitation and drinking water is no longer in doubt,” that they are “the key to development, human progress, and dignity.”

However, after many years of advocacy and increasing political willingness, sanitation remains one of the developing world’s most intractable challenges. Yet, with less than three years left to achieve the MDG target, sanitation remains poorly resourced and poorly understood, resulting, at best, in limited progress (see box). To get back on track, roughly 200 million people per year need to begin using improved sanitation facilities.

The greatest sanitation shortages exist in South Asia, with serious shortfalls in East Asia and Sub-Saharan Africa. On

## BOX 1: PROGRESS ON IMPROVING GLOBAL SANITATION

- **2.5 billion:** Number of people without access to improved sanitation. The vast majority live in Asia and Sub-Saharan Africa.
- **1 billion:** At the rate of current progress, the world will miss the MDG for sanitation by this many people.
- **1.7 billion:** Number of people who lack access to improved sanitation facilities even if the MDG for sanitation is met.
- **40%:** Percentage decline in open defecation worldwide between 1990 and 2010 (from 25 percent to 15 percent).
- **1.1 billion:** Number of people who still defecate in the open. Most live in rural parts of South Asia and Sub-Saharan Africa.

Source: Progress on Sanitation and Drinking Water—2012 Update, WHO/UNICEF. Available at [www.wssinfo.org/fileadmin/user\\_upload/resources/JMP-report-2012-en.pdf](http://www.wssinfo.org/fileadmin/user_upload/resources/JMP-report-2012-en.pdf).

average, just half of the population in these regions uses improved sanitation facilities. In all, about 2.5 billion people worldwide lack access to improved sanitation,<sup>2</sup> including 1.1 billion who have no facilities at all and practice open defecation. However, the percentage of the population using improved sanitation contrasts sharply between urban and rural areas. An estimated 76% of urban dwellers use improved sanitation, compared to 45% of people living in rural areas.<sup>3</sup>

It is difficult to overstate the dire impact of poor sanitation, particularly among young children, the poor, and those living in rural areas. Poor sanitation causes millions of people worldwide to contract fecal-borne illnesses, the most common of which are diarrhea and intestinal worms. An estimated 1.7 million people die each year because of unsafe water and sanitation and unhygienic practices. About

<sup>1</sup> The JMP defines “improved sanitation” as facilities that are used and ensure hygienic separation of human excreta from human contact. They include a flush or pour-flush toilet/latrines to piped sewer system, septic tank, pit latrine, ventilated improved pit (VIP) latrine; a pit latrine with slab; and a composting toilet.

<sup>2</sup> WHO/UNICEF, 2010, *Progress on Sanitation and Drinking Water—2010 Update*, available at [www.unicef.org/eapro/JMP-2010Final.pdf](http://www.unicef.org/eapro/JMP-2010Final.pdf).

<sup>3</sup> Ibid.

90 percent of those who die are under age five.<sup>4</sup> Nearly all deaths occur in the rural regions of developing countries, where sanitation problems are most acute.

A World Health Organization report states that the impact of diarrheal disease on children under the age of five is greater than the combined impact of HIV/AIDS, tuberculosis, and malaria, and is the second leading contributor to the global burden of disease.<sup>5</sup> Improvements to sanitation and access to clean drinking water could reduce diarrheal diseases by nearly 90 percent, according to a recent United Nations report.<sup>6</sup>

WSP's *Economics of Sanitation Initiative* (ESI) is revealing the many costs of poor sanitation. This research indicates, for example, that poor sanitation costs the equivalent of 1% of Gross Domestic Product (GDP) in Tanzania and over 6% of GDP in India.<sup>7</sup>

Yet, ESI research also shows that sanitation investments in both rural and urban contexts generate substantial economic returns. In rural Indonesia, economic returns of improved pit latrines outweigh the costs by more than six times. In urban Philippines, the economic returns outweigh the costs by at least three times—and this does not even count the significant value of environmental benefits from wastewater management. In both countries there are major impacts on hard-to-value social indicators, such as dignity, gender equality, and quality of life. Large gains can also be made from increased tourism and business revenues from improved sanitation.<sup>8</sup>

While sanitation is no longer “forgotten,” there is much to be done—and learned. For example, how can governments design and carry out sustainable large-scale rural sanitation programs? What are the most effective programmatic approaches and what are at-scale service delivery models? What is the evidence of what works? And what factors influence the long-term sustainability of rural sanitation program interventions?

WSP has been working with partners and governments to address these questions and learn how to design and operationalize sustainable rural sanitation at scale. It is a work in progress: much has been learned, and more learning is needed.

This Working Paper synthesizes this work and shares lessons learned. Key components are introduced and illustrated with examples from the field:

**Chapter I. Overview** shares the sector context that shaped WSP's approach to rural sanitation; the status of rural sanitation in countries where the program was initially implemented; and introduces the programmatic and operational approaches that have been tested at scale.

**Chapter II. Programmatic Approaches to Create Demand, Change Behaviors, and Increase Supply** offers an overview to programmatic approaches that have been combined and tested to create demand, change behaviors, and improve supply chains: Community-Led Total Sanitation, Behavior Change Communication, and Sanitation Marketing. Sections introduce the basic methodology for these approaches, illustrated by examples from fieldwork.

**Chapter III. Operationalizing the Programmatic Approach for Service Delivery at Scale** looks at the roles of national and local government and the local private sector, and discusses strategies to strengthen the enabling environment and build capacity to achieve and sustain improvements in rural sanitation.

**Chapter IV. From Learning to Knowledge to Action** highlights some of the strategies that were used to generate, disseminate, and apply evidence-based learning, and key lessons to date.

**Chapter V. Conclusion** reflects back and looks ahead to next-generation learning questions.

<sup>4</sup> United Nations, 2010, *Global Annual Assessment of Sanitation and Drinking Water*; see [www.unwater.org/activities\\_GLAAS2010.html](http://www.unwater.org/activities_GLAAS2010.html).

<sup>5</sup> UNICEF/WHO, 2009, *Diarrhoea: Why Children Are Still Dying and What Can Be Done*; available at [whqlibdoc.who.int/publications/2009/9789241598415\\_eng.pdf](http://whqlibdoc.who.int/publications/2009/9789241598415_eng.pdf).

<sup>6</sup> Economics of Sanitation Initiative; see [www.wsp.org/wsp/content/economic-impacts-sanitation](http://www.wsp.org/wsp/content/economic-impacts-sanitation).

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

# Contents

Preface.....	iii
Acronyms.....	vii
I. Overview .....	1
II. Programmatic Approaches to Create Demand, Change Behaviors, and Increase Supply .....	4
2.1 Background .....	4
2.2 Community-Led Total Sanitation.....	5
2.3 Behavior Change Communication .....	6
2.4 Sanitation Marketing .....	8
III. Operationalizing the Programmatic Approach for Service Delivery at Scale.....	13
3.1 Background .....	13
3.2 A Framework to Assess and Monitor the Enabling Environment .....	13
3.3 Measuring Progress in the Enabling Environment.....	15
3.4 Role of Local Governments.....	18
3.5 Capacity Building .....	20
3.6 Financing Approaches: Who Pays for What, When, and How? .....	26
3.7 Scaling Up Rural Sanitation: Program Financing .....	28
IV. From Learning to Knowledge to Action .....	30
4.1 Learning.....	30
4.2 Key Learnings.....	31
V. Conclusion.....	37
<b>Annexes</b>	
A: Global Learning Goals .....	39
B: Publications, Video, and Toolkits .....	41
<b>Figures</b>	
1: Changing Behaviors, Increasing Demand and Supply .....	4
2: Fecal Oral Transmission (“F Diagram”) .....	5

3: SaniFOAM Behavior Change Framework ..... 7

4: At-Scale Rural Sanitation Service Delivery Model ..... 13

5: Sample “Spider” Diagram ..... 16

6: Sample Benchmarking Results, Himachal Pradesh ..... 22

7: Proposed Workshops, Materials, and Tools to Support  
Training of Trainers in Tanzania ..... 25

8: Public and Private Investment in Rural Sanitation  
in Initiative Areas (January 2007–June 2010) ..... 28

9: Who Pays an Average Cost for Household Latrines in  
Implementation Areas ..... 29

**Tables**

1: Sample Research Questions Related  
to Behavioral Determinants ..... 9

2: Sumadi’s Range of Products—East Java ..... 10

3: Sample of Country-Specific Indicators  
from Tanzania ..... 15

4: Rating Dimensions at Baseline and Endline ..... 17

5: Three-Country Comparison of Organizational  
Models ..... 20

6: Potential Financing Approaches for On-Site  
Sanitation ..... 27



# Acronyms

---

APL	Above the poverty line
BCC	Behavior Change Communication
BPL	Below the poverty line
CBO	Community-Based Organization
CLTS	Community-Led Total Sanitation
DCC	Direct Consumer Contact
DWST	District Water and Sanitation Team
EOP	End of Project
GDP	Gross domestic Product
GOI	Government of India
HIP	Hygiene Improvement Project
HWWS	Global Scaling Up Handwashing with Soap
IDE	International Development Enterprise
IDS	Institute of Developmental Studies
IEC	Information, Education, Communication
IPC	Interpersonal Communication
ITS	Institute of Technology of Surabaya
JMP	Joint Monitoring Program
JPIP	Java Pos Institut Pro-Otonomi
HP	Himachal Pradesh
Laos PDR	Laos People's Democratic Republic
M&E	Monitoring and evaluation
MDGs	Millennium Development Goals
MIS	Monitoring information system
MOHSW	Ministry of Health and Social Welfare
MP	Madhya Pradesh
NGO	Non-Government Organization
NGP	Nirmal Gram Puraskar (award program)
ODF	Open Defecation Free
RA	Resource agency
SaniFOAM	Sanitation behavior change framework: Focus, Opportunity, Ability, Motivation
SO	Support organization
SSIP	Small-scale independent providers
SWAP	Sector Wide Approach Program
TOT	Training of Trainers
TSC	Total Sanitation Campaign
TSSM	Total Sanitation and Sanitation Marketing
VIP	Ventilated improved pit
WHO	World Health Organization
WSP	Water and Sanitation Program



# I. Overview

## KEY POINTS

- Most rural sanitation projects have been small in scale and few have been sustained beyond the original project area.
- Starting in 2007, WSP has provided technical assistance to governments to help design, plan, implement, and monitor national rural sanitation programs that start at scale and are sustainable.
- Increased demand and supply will increase access to hygienic sanitation and sustain sanitation of poor households in rural communities.

## 1.1 Background

Over the last 30 years, most rural sanitation projects have had pockets of success, but were small in scale and could not be scaled up. Learning how to expand on the successes of small-scale projects to increase access at large scale has been an enduring challenge. Project outcomes often fail the sustainability test once external funding ceases, and the benefits, even if sustained, remain limited to project areas. Despite growing political will to do more about rural sanitation, the lack of evidence and examples of effective and sustainable large-scale rural sanitation programs has constrained governments and development partners.

In an attempt to help address these issues, starting in 2007, the World Bank's Water and Sanitation Program (WSP) provided technical assistance to help governments design, plan, implement, and monitor national rural sanitation programs that start at scale and are sustainable. This initiative was carried out in three countries, India, Indonesia, and Tanzania.

In 1999, the Government of India (GOI) launched the Total Sanitation Campaign (TSC) to improve rural sanitation using demand-driven, community-led approaches to achieve total sanitation. WSP worked with the GOI and local governments to support TSC in two states, Himachal Pradesh and Madhya Pradesh. Although TSC policy-level initiatives were on the right track, support was provided to translate these objectives on the ground to ensure sustainable sanitation outcomes at scale.

Himachal Pradesh (HP) is a mountainous state in north-west India where 5.5 million people, or nearly 90 percent of the population, live in rural areas. While significant progress has been made on key human development indicators

such as infant mortality (36 deaths per 1,000 live births) and literacy (77 percent), progress in rural sanitation coverage lagged behind. The 2001 census found that one out of three rural households had a toilet. Between 2006 and 2009, TSC expanded rapidly across the state and the number of rural households with access to improved sanitation rose from 28 percent to over 80 percent.<sup>9</sup>

Madhya Pradesh (MP) has a population of almost 60 million people and occupies an area of 31 million square kilometers, making it the second largest and seventh most populous state in India.<sup>10</sup> Nearly 75 percent of the population live in rural areas (45 million people), of which 37 percent are classified as living below the poverty line. Based on the 2001 census, only 9 percent of the rural population had sanitation coverage.<sup>11</sup>

Indonesia, with a total population of 228.8 million people, is one of the most densely populated places on earth. East Java Province, with a total population of 37.4 million, is home to 20 percent of Indonesia's poor. In 2006, 67 percent of the urban population and 38 percent of the rural population had access to improved sanitation.<sup>12</sup> Population growth coupled with a lack of effective large-scale rural sanitation programs led to a decline in rural access to sanitation at the national level from 42 to 37 percent between 1985 and 2008.

Tanzania is home to a large rural population. About 75 percent of its 41.9 million residents live in rural areas and more than 15 percent of the population is nomadic. The country suffers from very poor human development indicators, with under age five mortality at 108 per 1,000 live births and a gross domestic product (GDP) per capita at US\$1,237, based on the latest available data from the United Nations' International Human

<sup>9</sup> Government of India Census of 2001; see [hprural.nic.in/Status%20Note%20\\_Media%20Kit.pdf](http://hprural.nic.in/Status%20Note%20_Media%20Kit.pdf).

<sup>10</sup> Ibid.

<sup>11</sup> A. Robinson and R. Raman, 2008, *Enabling Environment Assessment for Scaling Up Sanitation Programs: Madhya Pradesh, India*; available at [www.wsp.org/wsp/sites/wsp.org/files/publications/EEMP\\_TSSM.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/EEMP_TSSM.pdf).

<sup>12</sup> Based on data from WHO/UNICEF Joint Monitoring Programme.

Development Indicators.<sup>13</sup> Although Tanzania reported a high level of sanitation coverage—over 80 percent—only 21 percent meets the JMP definition of improved sanitation. An estimated 62 percent of the population use shared or unimproved facilities and 17 percent of the population practice open defecation (or 2 percent more than are nomadic).<sup>14</sup> Unimproved latrines tend to lack covers, are poorly maintained, and are unsafe for children. These factors likely contribute to the relatively high diarrheal rates (15 percent) among children under five.<sup>15</sup>

Looking across all three countries, there were some common characteristics. Yet, each country offered a unique set of circumstances and thus the starting point was different in each country:

- India had TSC, an existing national-level, total sanitation program. Here, the focus was on supporting the GOI to make TSC more effective and the benefits more sustainable.
- In Indonesia, the national government had spent almost five years piloting and learning about Community-Led Total Sanitation (CLTS) and sanitation marketing. There was also a national rural sanitation strategy and policy—but insufficient capacity to operationalize this strategy at large scale.
- And, in Tanzania, work with the government on reforming its sanitation policy had only been going on for about a year, so both the enabling environment and the operational capacity to implement a sustainable large-scale rural sanitation program were minimal.

In each country, programmatic approaches were led by governments, communities, and the local private sector, with technical support from WSP to help overcome bottlenecks to scaling up access to rural sanitation products and services.

## 1.2 Generating Demand, Increasing Supply, Strengthening the Enabling Environment

Within the broader framework of learning how to work at scale, other learning was necessary, such as learning how

to generate demand at the household and community level, how to increase the supply of affordable, aspirational sanitation products and services, and how to strengthen local and national governments to lead large-scale sanitation programs. In practice, these elements interrelate and overlap.

*To generate demand for sanitation and hygiene by households and communities*, local government agencies and resource agencies implemented CLTS activities and behavior change communication. Local government agencies included departments of health, public works, community development/home affairs, education, and culture, and community-based organizations. Resource agencies helped create demand through a variety of promotional activities.

*To increase the supply of sanitation products and services*, efforts were made to build the capacity of local builders, manufacturers, and suppliers of sanitation products and services. Sanitation marketing strategies were applied to expand consumer awareness of product options and costs, strengthen business skills, and improve the design, availability, and affordability of sanitation products and services.

An unnecessary polarization sometimes exists between proponents of CLTS and sanitation marketing. Positive responses to sanitation marketing in Indonesia occurred in areas where CLTS had already sparked demand. Research also showed that ODF communities in Indonesia and India were more likely to sustain ODF behavior change when the local market provided affordable and consumer-responsive sanitation facilities and services. Increased demand for sanitation improvements generated little sustainable change when the supply of sanitation products and services did not grow simultaneously. Achieving a totally sanitized community requires that consumers have access to a range of affordable product options at convenient locations when demand is generated. By implication, supporting the growth of local markets to supply products and services through private entrepreneurship is

<sup>13</sup> United Nations Development Program International Human Development; see [hdrstats.undp.org/en/countries/profiles/TZA.html](http://hdrstats.undp.org/en/countries/profiles/TZA.html).

<sup>14</sup> WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation; see [www.wssinfo.org/data-estimates/graphs](http://www.wssinfo.org/data-estimates/graphs).

<sup>15</sup> National Board of Statistics, Tanzania Health and Demographic Survey 2010; see [hdptz.esealtd.com/fileadmin/documents/DPGH\\_Meeting\\_Documents\\_2011/2010\\_TDHS\\_FINAL\\_REPORT.pdf](http://hdptz.esealtd.com/fileadmin/documents/DPGH_Meeting_Documents_2011/2010_TDHS_FINAL_REPORT.pdf).

a key requirement for sustainability. CLTS and sanitation marketing are not only mutually compatible, but mutually complementary. In short, there is increasing evidence that both approaches are needed to scale up sustainably and impact poverty and health.

Thirdly, to create a *strong enabling environment* capable of sustaining service delivery at scale, technical guidance was provided to sector institutions and local stakeholders to strengthen capacity across multiple dimensions, including:

- Policy, strategy, and direction;
- Institutional arrangements;
- Program methodology;
- Implementation capacity;
- Availability of products and services;
- Financing and incentives;
- Cost-effective implementation; and
- Monitoring and evaluation.

### 1.3 Promising Results: Working at Scale Is Possible

When governments work with the local private sector and communities to lead rural sanitation programs at scale, thousands of communities can achieve open defecation free status and millions of people can gain access to and use improved sanitation as a result. While different countries represent different contexts, drawing on experience and lessons from three countries—India, Indonesia, and Tanzania—makes it possible to detect common patterns and challenges of working at scale and determine how to accelerate the rate of increased access.

In India, as a result of technical assistance and evidence-based learning, the national government's TSC guidelines have been revised to offer states the option of disbursing post-construction incentives to poor families only after the entire community becomes ODF. In East Java,

Indonesia, local governments budgeted US\$650,000 to conduct CLTS activities in more than 2,600 new communities, and the programmatic approach used for scaling up rural sanitation has been adopted as Indonesia's national rural sanitation strategy (*Sanitasi Total Berbasis Masyarakat*, or STBM), which is being operationalized with national and local government funding in all provinces. In Tanzania, US\$13 million has been earmarked to implement a national sanitation and hygiene campaign using the programmatic approach.

In addition, in all three countries, national governments have developed, reformed, or improved national sanitation policies to become demand-responsive, and local governments have strengthened their capacity to facilitate community-led efforts to stop open defecation and to support the local private sector to build improved sanitation facilities. National and local government funding for rural sanitation continues to increase, policymakers are adopting and adapting the programmatic approach, and service delivery models have been made more effective.

Experience to date also proves the adage that it is possible to learn as much, if not more, from challenges as successes. For example, among local governments, there are significant differences in terms of quality and effectiveness of performance; there are significant challenges related to building the capacity of the local private sector to meet increasing demands for household sanitation; and there have been limited impacts on health at scale.

Meanwhile, replication efforts are underway. The World Bank, African Development Bank, Asian Development Bank, and UNICEF are financing further scale up of the programmatic and service-delivery models in Indonesia and Tanzania, and governments and development partners in Laos People's Democratic Republic (PDR), Madagascar, Bangladesh, Cambodia, Ethiopia, Ghana, and Uganda have begun to replicate and adapt this approach.

## II. Programmatic Approaches to Create Demand, Change Behaviors, and Increase Supply

### KEY POINTS

- Efforts to improve sanitation should target community-wide behavior change, stimulate demand for sanitation products and services, and increase supply to ensure that new demands are met.
- Community-Led Total Sanitation, behavior change communication, and sanitation marketing are complementary approaches that can contribute to sustainable behavior change and facilities.

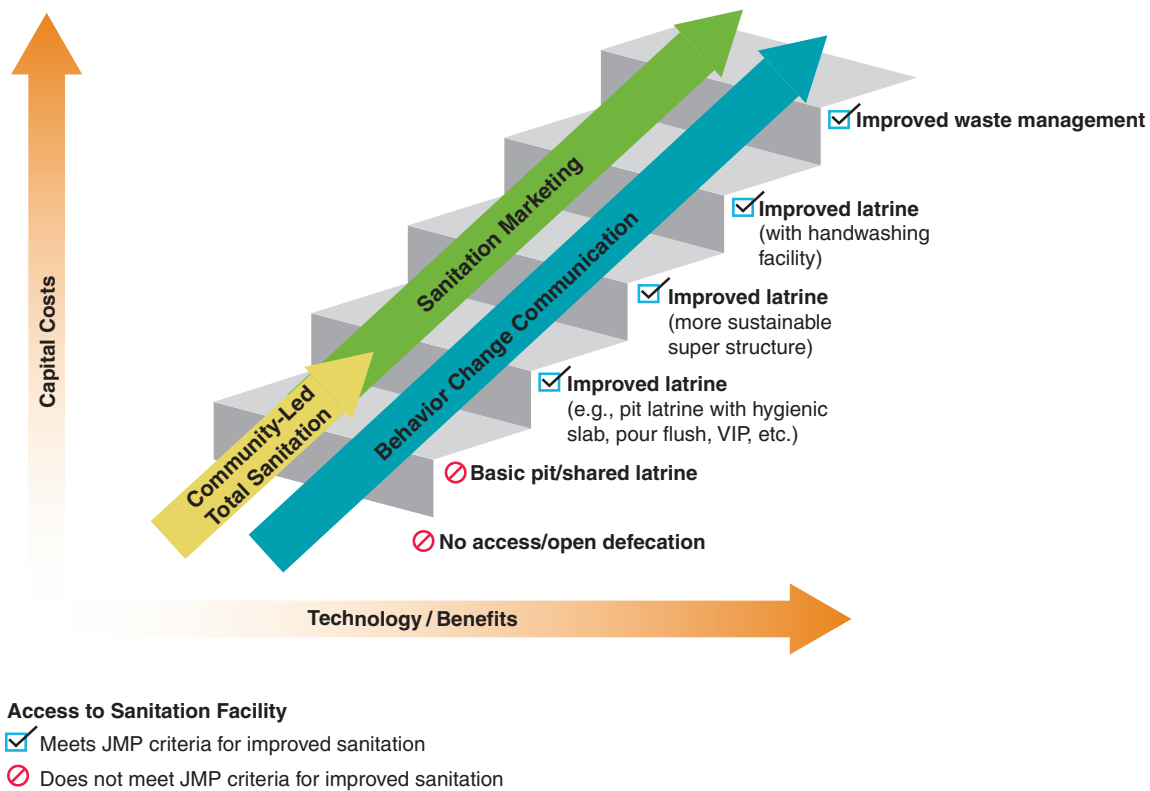
### 2.1 Background

For many decades, top-down programming that focused on building and giving away or subsidizing latrines without first creating demand often resulted in the latrines not being used.<sup>16</sup> In recent years, the sector has revised this approach, recognizing that ownership begins when people invest time, effort, and resources into building a latrine. The importance of changing behaviors, and the multiplicity of factors that influence behaviors—often referred to as *behavioral determinants*—such as pride, convenience, shame, guilt, well-being, and status is now widely recognized. Development organizations and governments are increasingly using approaches such as Community-Led

Total Sanitation (CLTS), behavior change communication (BCC), and sanitation marketing, to target these factors and change sanitation-related behaviors. Figure 1 shows how these approaches can be combined to change sanitation behaviors and increase the demand and supply for improved sanitation products and services.

The programmatic strategy had two primary objectives: first, to motivate community-wide behavior change to stop open defecation; second, to stimulate demand for sanitation products while developing a reliable, affordable, and consumer-responsive supply stream. These approaches were adapted in each country to fit the size, culture, geography,

**FIGURE 1: CHANGING BEHAVIORS, INCREASING DEMAND AND SUPPLY**



<sup>16</sup> See for example, Water and Sanitation for Health Project, *Lessons Learned in Water, Sanitation and Health* (USAID, 1993), and A. LaFond, *A Review of Sanitation Program Evaluations in Developing Countries* (UNICEF).

habits, education levels, and reach of communication channels such as mass media.

## 2.2 Community-Led Total Sanitation

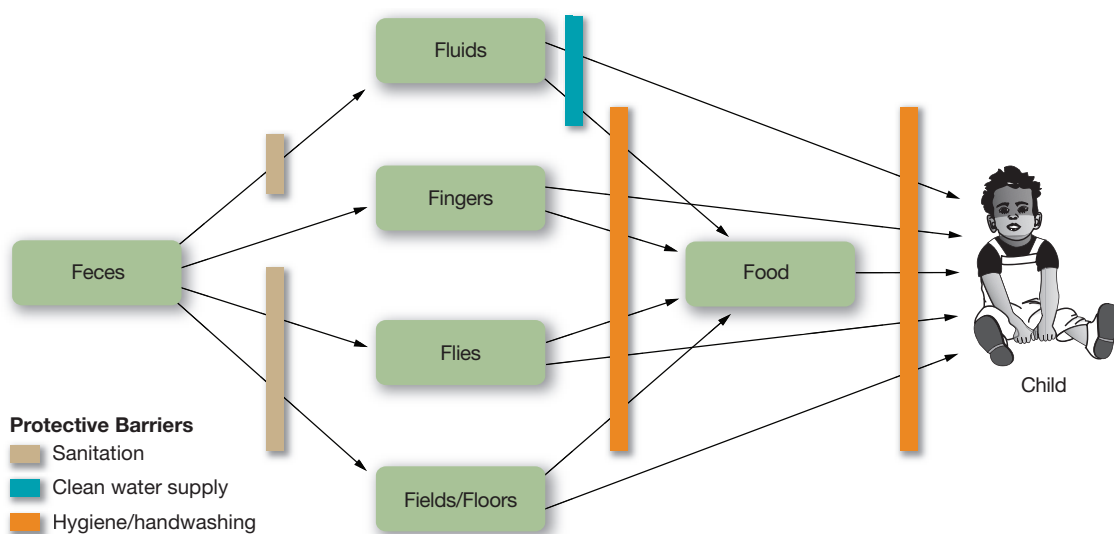
Community-Led Total Sanitation (CLTS) utilizes emotions, participatory approaches, and visual tools to enable communities to analyze their sanitation conditions, thereby internalizing the reasons to initiate behavior change, changing social norms and increasing the chances that the behavior change will be sustained.

The fecal-oral mechanism, in which human feces that contains pathogens is ingested by a new host, is the most significant means of transmission, and accounts for most diarrheal and a large proportion of intestinal worm infections (see Figure 2). CLTS typically evokes feelings of shame and disgust to move a community from defecating in the open to fixed-point defecation and to improved sanitation.<sup>17</sup> Consequently, CLTS can elicit strong emotions and may even shock communities that have become immune to traditional information, education, communication (IEC) approaches, which focus on more rational, less emotional messages. Once a community has been ignited, CLTS uses additional positive messages to motivate communities to change and sustain good sanitation behaviors.

In CLTS, trained local facilitators develop a rapport with a community and enable an organized behavior-change process. Activities such as community mapping are driven by community participation and help community members analyze their own situation. In this mapping exercise, villagers create a map of their community, indicating resources such as water points and places where they defecate (see Illustration 1). Villagers soon realize that they are contaminating their own and their neighbors’ food, water, and living spaces with fecal matter. Using other participatory tools, the facilitator helps the community understand the fecal-oral link—how feces contaminates the household and community environment and is ingested by household members. At this point, the community is “triggered” and will generally make a collective decision to eliminate open defecation at a community-wide level.

Next, the community acts to confine feces in sanitation facilities and improve their sanitation practices. Social solidarity and cooperation among households in the community are crucial elements in CLTS. In communities where CLTS has triggered community-wide behavior change, households take action to stop defecating in the open by digging a

**FIGURE 2: FECAL-ORAL TRANSMISSION (“F-DIAGRAM”)**



<sup>17</sup> K. Kar and R. Chambers, 2008, *Handbook on Community-Led Total Sanitation*; available at <http://www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/cltshandbook.pdf>.

**ILLUSTRATION 1: PARTICIPATORY MAPPING**



During a participatory mapping activity such as these conducted in Tanzania (left) and Indonesia (right), community members conduct a walking tour of their village and create a sanitation map that shows access, coverage, and points of open defecation.

simple pit latrine, sharing other people’s latrines, or building improved sanitation facilities.<sup>18</sup>

Communities that successfully change their sanitation behavior are verified open defecation free and this achievement is typically recognized through a ceremony, a sign, or in some countries such as India, an award and a monetary prize.<sup>19</sup>

While CLTS has proven effective to trigger communities to commit to ending the practice of open defecation, experience implementing CLTS in different countries and contexts has uncovered some insights. The role of shame and the degree to which it can be effectively used to trigger behavior change or to achieve open defecation free status is complex and dependent upon the cultural context. In Tanzania, for example, there were reports that embarrassing community members went against prevailing social norms and a concern that this approach might even be counterproductive over the long run. Fieldwork indicated that communities responded more positively to behavior change that was positioned as an extension of ongoing efforts to improve well-being. In addition, there were indications that traditional CLTS did not go far enough to motivate and support households to move up the sanitation ladder to a hygienic facility, which is

why the combination of CLTS and sanitation marketing was recommended.

In Indonesia, CLTS at small scale increased demands for sanitation in communities where it had been introduced; however, local providers of sanitation products and services were not yet ready to support increased demand and, in particular, poorer consumers who were interested to improve their sanitation facility could not find options that they both liked and could afford. National policymakers became convinced that CLTS needed to be supplemented with a sanitation marketing component to improve service delivery and expand sanitation options for the poor.

**2.3 Behavior Change Communication**

Behavior change communication (BCC) is best described as the strategic research and development of communication materials to promote positive health, social, or economic outcomes. BCC builds on formative research to understand both the factors or behavioral determinants that are influencing demand among households, and constraints and opportunities within the sanitation supply chain.

While relevant data may be available through secondary sources such as national demographic and health surveys,

<sup>18</sup> For a more detailed discussion of CLTS, see K. Kar, 2008, *Practical Guide to Triggering Community-Led Total Sanitation* (2005) and *Handbook on Community-Led Total Sanitation*.

<sup>19</sup> For more information on monitoring and verification in India, see C. Kumar, U. Singh, and M. Prakash, *Monitoring Systems for Incentive Programs: Learning from Large-scale Rural Sanitation Initiatives in India*, available at [www.wsp.org/wsp/sites/wsp.org/files/publications/wsp-monitoring-systems-incentive-programs.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/wsp-monitoring-systems-incentive-programs.pdf); in Indonesia, see N. Mukherjee, *Managing the Flow of Monitoring Information to Improve Rural Sanitation in East Java*, available at [www.wsp.org/wsp/sites/wsp.org/files/publications/WSP-Monitoring-Information-TSSM.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/WSP-Monitoring-Information-TSSM.pdf).



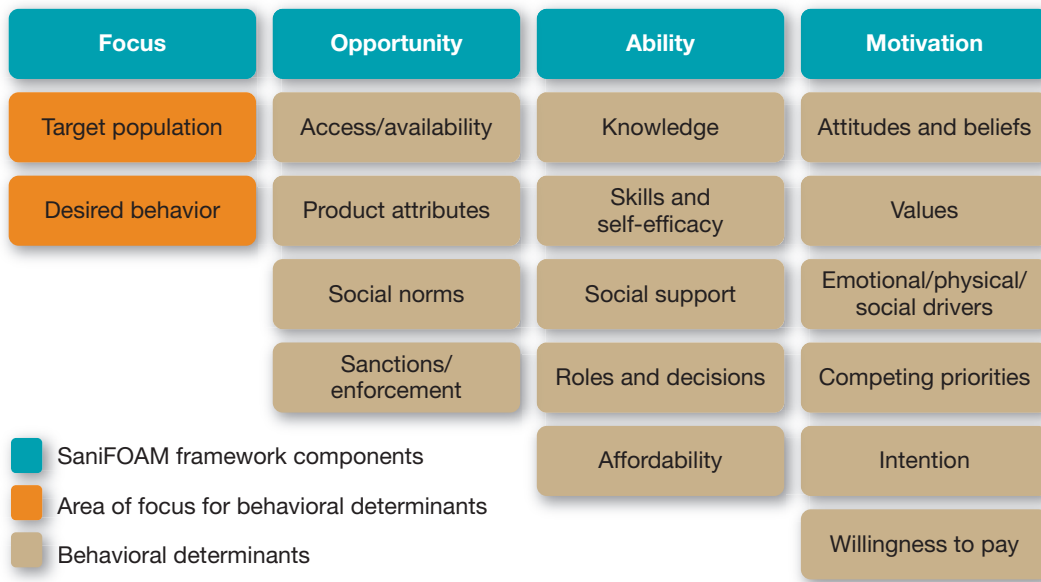
gathering the evidence needed to develop an effective sanitation marketing program will often require primary research. Primary research involves collecting information directly from the source. For example, in Indonesia, data from the 2004 *Susenas National Socioeconomic Survey* was analyzed to determine the extent of open defecation by district in East Java.

A conceptual framework called “SaniFOAM” was developed to guide both the formative research and develop behavior change communications that target the behavioral determinants most relevant for sanitation behavior change (see Figure 3).<sup>20</sup> “FOAM” stands for *focus*, *opportunity*, *ability*, and *motivation*. Behavioral determinants<sup>21</sup> that are important to consider are grouped under three of these

headings (opportunity, ability, and motivation), while the “F” in FOAM serves as a reminder to *focus* on the target population and desired behavior change.<sup>22</sup>

In Tanzania, for example, the SaniFOAM framework was used to analyze formative research. This analysis showed that, to be effective, sanitation improvements needed to be linked with improvements in status, convenience, and child safety. The research also showed that household heads perceived improved sanitation as too costly to prioritize, and revealed a link between sanitation and a deep emotional need to fit in with their communities and be seen as modern. These insights were used to develop a behavior change communications campaign around a positive message—

**FIGURE 3: SANIFOAM BEHAVIOR CHANGE FRAMEWORK**



<sup>20</sup> The SaniFOAM framework was developed in Durban, South Africa, in February 2008, at a workshop attended by participants from six organizations including UNICEF, the London School of Hygiene and Tropical Medicine, USAID, and AED/Hygiene Improvement Project. It is based on Population Services International’s PERForM framework.

<sup>21</sup> Behavioral determinants can be internal (such as beliefs about feces) or external (such as sanctions for open defecation). A deeper understanding of determinants and how they influence behavior can lead to more effective interventions.

<sup>22</sup> For a more detailed discussion, see J. Devine and Y. Coombes, *Introducing SaniFOAM: A Framework to Analyze Sanitation Behaviors*, available at [www.wsp.org/wsp/sites/wsp.org/files/publications/GSP\\_sanifoam.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/GSP_sanifoam.pdf).

**ILLUSTRATION 2: APPLYING FORMATIVE RESEARCH TO DEVELOP BEHAVIOR CHANGE COMMUNICATION MATERIALS**



Behavior change messages were country specific and, as a result, messages varied widely. Communication materials developed in Tanzania (left) featured a positive image and message to tap aspirational values. *Choo Bora Chawezekana! Tumeamua Maendeleo Hadi Chooni* roughly translates to “A Good Toilet is Possible! We’ve Taken Development All the Way to the Toilet!” Communication materials developed in Indonesia (right) featured *Lik Telek* (“Uncle Shit”) to remind people that open defecation was socially irresponsible and that people who defecated in the open would feel shame and become a subject for gossip.

*Choo Bora Chawezekana! Tumeamua Maendeleo Hadi Chooni*, which roughly translate to “A Good Toilet is Possible! We’ve Taken Development All the Way to the Toilet!” (see Illustration 2).

In Indonesia, a market research agency conducted quantitative and qualitative formative research to identify norms that were key determinants of sanitation behavior (sample research questions related to behavioral determinants are shown in Table 1). For example, open defecation, particularly into rivers or other flowing water bodies, was not only common and socially accepted, but also personally satisfying: people felt it was effortless, odor-free, clean, and free of cost. In addition, people remained unconvinced about links between poor sanitation and disease. As a result, health was not a driver of sanitation behavior change and sanitation was low on consumers’ lists of economic priorities, ranked lower than televisions and cell phones. If additional funds were available, respondents ranked buying a cell phone or television

ahead of improving their sanitation. CLTS was used to spark collective realization of the implications of open defecation and build social pressure to end this practice. Research-based BCC materials featured—and stigmatized—an open defecator to reinforce the pressure. In these materials, *Lik Telek* (“Uncle Shit”) was shown as a socially irresponsible character whom nobody would want to resemble (see Illustration 2).

### 2.4 Sanitation Marketing

Sanitation marketing incorporates BCC with best practices from social and commercial marketing.<sup>23</sup> Sanitation marketing employs what is called the “marketing mix” or “Four Ps”—*product, price, place, and promotion*—to scale up the demand and supply for improved sanitation, particularly among the poor.

*Product* refers to a physical product, a service, or even an idea that spurs a behavior change. Conventional wisdom in the water and sanitation sector has been that the more

<sup>23</sup> For more information on sanitation marketing, including formative research, see J. Devine and C. Kullmann, 2011, *Introductory Guide to Sanitation Marketing*; available at [www.wsp.org/sanmarketingtoolkit](http://www.wsp.org/sanmarketingtoolkit).

**TABLE 1: SAMPLE RESEARCH QUESTIONS RELATED TO BEHAVIORAL DETERMINANTS**

Determinant	Research Questions
Access/availability	How does the availability of reliable masons in the community influence a household’s ability to improve its sanitation facility? Are cement and other supplies easily available to households wishing to self-build?
Product attributes	Do available sanitation options have the features and benefits desired by households? What advantages/benefits does open defecation offer?
Social norms	Under what circumstances is open defecation considered acceptable in rural communities? At what age are children expected to start using a toilet?
Sanctions/enforcement	What are negative consequences, if any, for those who defecate in the open? To what extent are sanctions enforced and effective in influencing behaviors? Who are the community whistle-blowers and how influential are they?
Knowledge	What do people consider a safe or sanitary toilet? Do they know where to go to get quality sanitation services? What sanitation products are they aware of?
Skills/self-efficacy	Among individuals who intend to build a toilet themselves, how confident are they in their skills/ability to build a good one?
Social support	To what extent in the community are disabled, elderly, or children assisted to go to a toilet? To what extent do people let neighbors use their toilets and under what circumstances?
Roles/decisions	Who initiates the discussion about sanitation in rural households? Who decides on the budget? Who influences decisions on features? Who “shops” for the toilet? How does gender affect decision making?
Affordability	What can the household afford to pay for a toilet all at once? In multiple installments? How is affordability influenced by seasonality? How does perceived affordability differ from actual?
Beliefs and attitudes	At what age is children’s excreta considered harmful? What beliefs might explain this? What taboos and beliefs exist with respect to feces and menstruation that would influence behavior?
Values	Which social or cultural values, if any, does sanitation support (such as modernity and progress)? To what extent is improved sanitation seen to increase a home’s value?
Drivers	What are the principal drivers (social, physical, or other) that motivate people to stop defecating in the open, stop sharing, or to improve their facility? How do these vary by gender and life stage?
Competing priorities	What is sanitation’s closest “competitor” (for example, cell phone, TV, refrigerator)? How are household expenditures prioritized when extra money is available?
Intention	Does the household intend to build a toilet in the next year? Have they starting saving? Have they chosen a toilet model yet? <sup>24</sup>
Willingness to pay	To what extent are expectations of subsidies affecting willingness to pay? How much are households willing to pay and/or borrow for their preferred model?

<sup>24</sup> See questionnaire on decision-making process in M. Jenkins and B. Scott, “Behavioral Indicators of Household Decision-Making and Demand for Sanitation and Potential Gains from Social Marketing in Ghana,” *Social Science & Medicine*; available at [www.unicef.org/wash/files/Jenkins\\_Scott\\_2007.pdf](http://www.unicef.org/wash/files/Jenkins_Scott_2007.pdf).

products available, the better. But too many options can confuse and overwhelm consumers, while complicating the buying process and supplier training. When making product decisions, the team working with the local private sector should focus on products that have features and benefits that consumers consider both desirable and useful. Because consumers will likely have different preferences and value different benefits, sanitation marketing strategies should favor a demand, need-responsive array of products, and identify features or benefits that consumers believe are important, such as status or quality. In Tanzania, for example, households were encouraged to upgrade from a pit latrine to a concrete slab that was branded the *Sungura* slab, (*sungura* means “rabbit” in Swahili) which is smooth, washable, and safe for children.

*Price* focuses on providing households and sanitation entrepreneurs access to financing options that make producing and purchasing products and services affordable. Sanitation marketing generally targets the rural poor, given that the commercial sector serves the middle and upper classes. Although poorer households, particularly in agrarian communities, might not have the liquidity at all times of the year to buy their ideal toilet, formative research on supply and demand reveals that some rural householders are willing to borrow to get their ideal latrine. The research has also shown a strong household preference for paying in installments. Likewise, suppliers are often willing to sell their products on an installment payment basis if they have sufficient capital to manage their cash flow.

In Indonesia, market research showed that the ideal sanitation facility that Indonesian consumers were willing

to pay for was one that was easy to clean (for example, scratch-resistant ceramic pans on cement platforms), free of smell (for example, a pour-flush closet with water seal), and would incur no further costs for the next three to four years (for example, a pit does not need emptying before then). Such systems were available but cost more than twice as much as what poor consumers could spend for a latrine. Technical innovation led to reduced-cost design options with the desired features. Local masons and sanitation entrepreneurs were encouraged to work out a range of product options and payment options that would be affordable to the poor.

Modularization involves standardizing the product in a way that allows for upgrading over time as needs and budget evolve. In East Java, a sanitation entrepreneur named Sumadi developed four products to support incremental upgrades by households (see Table 2). Other sanitarians are now replicating his model.

*Place* (commonly referred to as *distribution*) refers to where a product or service is sold or obtained and the means and channels through which it is distributed. In rural areas, sanitation marketing to develop or strengthen the supply chain is often necessary to ensure that products and goods are accessible.

Reputable and qualified service providers and suppliers should be easily accessible. Masons and hardware stores serve as entry points for households interested in sanitation products and therefore need to know how to build or sell hygienic and sustainable sanitation facilities. They should also have basic business skills and, ideally, can help uncover needs and benefits sought by customers and match them

**TABLE 2: SUMADI'S RANGE OF PRODUCTS—EAST JAVA**

WC Tumbuh Sehat	WC Tumbuh Sehat	WC Ekonomis	WC Sehat Murah Sumade
180,000 Rp. (US\$18)	260,000 Rp. (US\$26)	600,000 Rp. (US\$60)	850,000 Rp. (US\$85)
Branded ceramic closet, slab, one day labor (does not include ring), upgradable to WC Ekonomis	Branded ceramic closet, slab, concrete ring, 1M, one day labor (does not include cover), upgradable to WC Sehat Murah Sumade	Branded ceramic closet, slab, concrete ring, 1M, cover, two days labor	Branded ceramic closet, slab, concrete ring, 1M, cover, two days labor
Introduced October 2008	Introduced October 2008	Introduced October 2008	Introduced 2005

with appropriate products and services, including financial services. Transportation is related to place and is another factor to consider. First, in many rural areas, people have limited means of transportation and transportation costs can be prohibitive. Also, a lack of reliable transportation among villages can impact not just access but supply. For example, in Tanzania, a lack of reliable transportation made it difficult for district personnel to transport molds and supplies. As a result, sanitation-related goods and services were not readily available in many communities. A possible solution may be to use visits by district vehicles to transport sanitation supplies directly to villages. In places where the sanitation supply chain is fractured and confusing, consumers may experience an additional barrier to purchasing a latrine.

Accreditation can increase consumers' levels of trust in competent suppliers and servicers in rural areas. In addition to ensuring that national standards are being used, accreditation opens up marketing and branding opportunities used successfully by suppliers to reach scale in the social and commercial marketing sectors.

*Promotion* (also referred to as communication) is, in many ways, the glue that ties the marketing mix together. Innovation and entrepreneurship might result in a lower-cost, well-functioning toilet, but few consumers could or would purchase one without understanding its benefits or how to get one. Promotion of sanitation products or services, including branded advertising, forms a critical link between consumers and suppliers.

Branded advertising and promotion aims to create awareness of a particular product, point-of-sale, or brand. Branding standardizes products, embeds aspirations or desired benefits identified through research, and enables economies of scale. Branded materials may be incorporated into activities such as posters developed to promote sanitation behavior change or accredited masons or suppliers (see Illustration 3). Branded promotion created awareness of these brands among targeted audiences and included advertising (e.g., radio commercials), point-of-sale materials (e.g., banners and signs), and collateral (e.g., hats and t-shirts), to name but a few channels.

Advertising agencies and local governments developed integrated communication products for dissemination across integrated communication channels, including community-wide direct consumer contact events; interpersonal communication at the household level; and mass media, including posters and radio soap operas. In each country, teams worked to ensure that messages delivered across all channels were consistent, reinforced one another, and resulted in repeat exposure.

An important consideration to note is that developing communication messages and materials tailored to every segment of the target audience in countries where there are large populations with distinct linguistic or cultural characteristics can be prohibitively expensive. Centralizing the development of communication messages, based on formative research at the local level, can result in economies of scale.

**ILLUSTRATION 3: SAMPLES OF BRANDED SIGNAGE**

A poster developed in Himachal Pradesh, India (top), included a logo and branding to convey that consumers could choose between an embarrassing practice—open defecation—or pride and dignity through the use of a toilet; below, a sign displayed by accredited providers in East Java, Indonesia, featured the *WC-Ku Sehat* (“Safe Toilet”) slogan and logo.



**ILLUSTRATION 4: UPGRADING HOUSEHOLD SANITATION IN TANZANIA**



In Tanzania, community-wide events promoted sanitation behavior change and affordable, child-safe options such as the *Sungura* slab (left). Masons received training in latrine construction (middle) to strengthen the quality and availability of products that consumers preferred and could afford (right).

Lower tiers of government can then replicate and disseminate messages and communication products. Messages can also be centralized at different levels—national, regional, state, or provincial. This approach has been used in East Java, for example, where a communication toolkit facilitated local implementation. The toolkit included an overview of communication options and files for replication. During the workshop, officials were given an orientation to the toolkit and training on how to develop promotion plans and budgets.

While it is useful to consider each of the Four Ps, in practice they are complementary. For example, in Tanzania, low-cost sanitation options were not readily available in rural communities (*price, place*) and local masons had little access to credit and limited business and marketing skills (*product, promotion*). Further, households had not been targeted

to make the relatively large investment needed to upgrade their latrine (*product, promotion*). To address this situation, the *Sungura* slab, an affordable and child-safe option, was promoted and masons were trained in latrine construction and basic business and marketing skills (see Illustration 4). New financing strategies were piloted so that masons could access molds and raw materials even if they did not have sufficient capital, and business networks were developed or strengthened to link masons with local hardware stores.

The story of the *Sungura* slab, above, also highlights the need to ensure that the local private sector, including suppliers, masons, and entrepreneurs, have the necessary construction, business, and marketing skills to keep pace with increasing demand. Strategies to build this capacity are discussed in Chapter III.

# III. Operationalizing the Programmatic Approach for Service Delivery at Scale

## KEY POINTS

- At-scale service delivery includes all stakeholders—national, state, and local governments, communities, the local private sector, and development partners, with local government positioned at the center to manage implementation.
- A strong supportive enabling environment should be developed and maintained at national and sub-national levels. Progress can be measured against indicators.
- Capacity-building efforts may include work with local government, the local private sector, and resource agencies.
- Private investments by households and public investments by governments account for the majority of funds required for infrastructure construction, behavior change, and program management costs in large-scale rural sanitation programs.

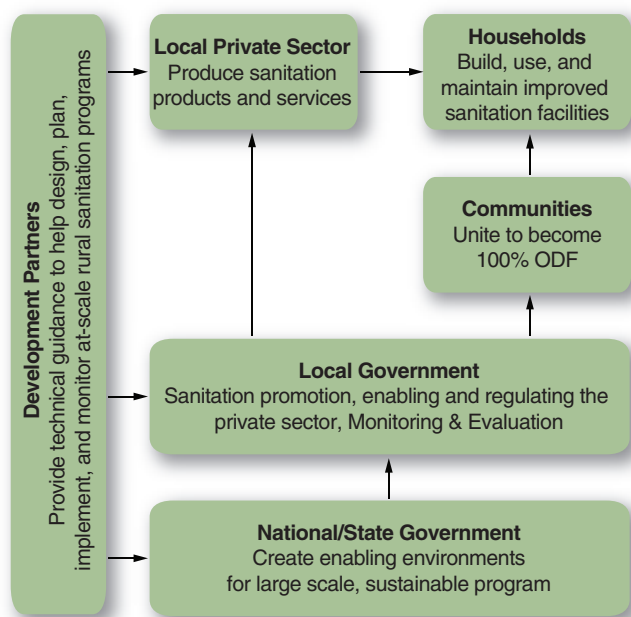
### 3.1 Background

To implement an innovative programmatic approach at scale, an effective and sustainable service delivery model is needed. Figure 4 shows one possible model. In this model *national and state governments* create the enabling environment needed to support large scale, sustainable rural sanitation programs; *local governments* promote sanitation behavior change, enable and regulate the private sector, and lead ongoing, systematic monitoring and evaluation activities; *communities* end the practice of open defecation and unite to become open defecation free

(ODF); *households* build, use, and maintain improved sanitation facilities; the *local private sector* produces affordable, reliable goods and services at a pace sufficient to keep up with increasing demand; and *development partners* contribute technical guidance to facilitate research, planning, design, capacity-building, implementation, and monitoring activities.

To work at scale, service delivery requires policy reform and a strong, supportive enabling environment. Experience shows that developing such an environment takes time; does not emerge automatically; and requires commitment from national and sub-national stakeholders to address systemic conditions that would constrain scaling up and replication.

**FIGURE 4: AT-SCALE RURAL SANITATION SERVICE DELIVERY MODEL**



### 3.2 A Framework to Assess and Monitor the Enabling Environment

Based on a literature review and discussions with stakeholders, a conceptual framework was developed to systematically assess, strengthen, and monitor progress in the enabling environment at national and sub-national levels. There are eight dimensions in the framework (see Box 1) and all are essential. However, depending on the country, one or more of these components could act as a key bottleneck to reaching sustainable, at-scale service delivery and would therefore need to be prioritized.

**Policy, Strategy, and Direction.** Policy is the “set of procedures, rules, and allocation mechanisms that provide the basis for programs and services. Policies set the priorities and often determine the allocation of resources for implementation. Policies are reflected

**BOX 1: ENABLING ENVIRONMENT DIMENSIONS**

- Policy, Strategy, and Direction
- Institutional Arrangements
- Program Methodology
- Implementation Capacity
- Availability of Products and Services
- Financing and Incentives
- Cost-Effective Implementation
- Monitoring and Evaluation

in laws and regulations, economic incentives, and the assignment of rights and responsibilities for program implementation.”<sup>25</sup>

Establishing a shared vision and strategy among stakeholders and securing the political will to implement them is the first step in scaling up sanitation. Developing this shared vision and strategy in a collaborative manner also sets a foundation for coordination and creates motivation at all levels.

**Institutional Arrangements.** Before CLTS and sanitation marketing can be scaled up, institutional arrangements should be in place, and all key roles and functions covered. Institutions at all levels should understand their roles, responsibilities, and authorities, and have the resources to perform these roles. In addition, mechanisms should exist for actors at all levels to coordinate their activities and establish partnerships between the public, private, and NGO sectors and between communities and local governments.

**Program Methodology.** CLTS and sanitation marketing are complementary programmatic approaches to scaling up sanitation, but they are not detailed program methodologies. A methodology consists of rules, specific activities, and these activities’ timing and sequence. Each country should develop a methodology that is specific and appropriate to its context and covers all phases of implementation, including demand creation.

**Implementation Capacity.** Although clearly defined and workable institutional arrangements are necessary,

they are not sufficient to operate at scale. Institutions at all levels—including government staff and contracted organizations—should have adequate human resources with the full range of skills required to perform their functions; an “organizational home” within the institution overseeing the program; mastery of the agreed-upon program methodology, systems, and procedures required for implementation; and the ability to monitor effectiveness and make adjustments. In addition, key players in national- and local-level government institutions should have the responsibility and capacity for carrying out capacity-building programs.

**Availability of Products and Services.** A key element of an at-scale sanitation program is the existence of a robust local private sector that meets the needs of the rural poor with consumer-responsive and affordable sanitation products and services, where household demand is determined through formative research. When creating an enabling environment for the private sector, the government does not contract directly with the private sector, but helps create a market for sanitation products and services and provides the enabling environment needed to support private-sector providers.

**Financing and Incentives.** Financing costs include social mobilization such as training, staff salaries, transportation, office equipment and supplies, and the development of BCC materials. In addition, programs should establish mechanisms that enable communities to achieve total sanitation and ensure that individual households can pay for on-site sanitation facilities. It is especially important to ensure that the community’s poorest members can afford sanitation facilities, which will help communities achieve ODF status. Helping the poor could include incentives for communities to reach ODF as well as financing mechanisms for poor households.

**Cost-Effective Implementation.** The potentially high costs of social intermediation at scale make cost-effective implementation a key element. It is essential to understand how unit costs change as activities are scaled up. To assess the approach’s cost-effectiveness and determine how best to achieve economies of scale, cost data should be collected throughout the implementation.

<sup>25</sup> M. Elledge, F. Rosensweig, and D. Warner, 2002, *Guidelines for the Assessment of National Sanitation Policies*, EHP Strategic Report 2.



**Monitoring and Evaluation.** A large-scale sustainable sanitation program requires regular performance monitoring and, perhaps more importantly, team members’ willingness and ability to use the monitoring process to make adjustments to improve and strengthen the program. Effective monitoring will identify strengths and weaknesses in the program methodology, implementation arrangements, and cost efficiencies. Overall monitoring responsibility should be at the highest government level of the program but should be based on information collected at the community level and channeled through the local-government or district level.

Effective monitoring will identify strengths and weaknesses in the program methodology, implementation arrangements, and cost efficiencies.

### 3.3 Measuring Progress in the Enabling Environment

While a common framework was developed and used across all three countries, country-specific indicators were developed to ensure that the indicators were appropriate for the country. In each country, the enabling environment was periodically assessed using the indicators and a scoring system. The six indicators noted under *Institutional Arrangements* (see Table 3), for example, were each given a score of one. The total score for *Institutional Arrangements* could thus range from 0 to 6, with 6 representing the ideal environment, to ensure that progress could be sustained. Scores for each dimension were summed and diagrammed (see Figure 5). Although the diagrams (referred to as “spider” diagrams) were not a precise tool, they were used to help track changes, compare districts and countries, and were useful as district-level planning tools.

The scales for each dimension were initially designed for national-level assessments; however, the scales were adapted in Indonesia and Tanzania to assess

**TABLE 3: SAMPLE OF COUNTRY-SPECIFIC INDICATORS FROM TANZANIA**



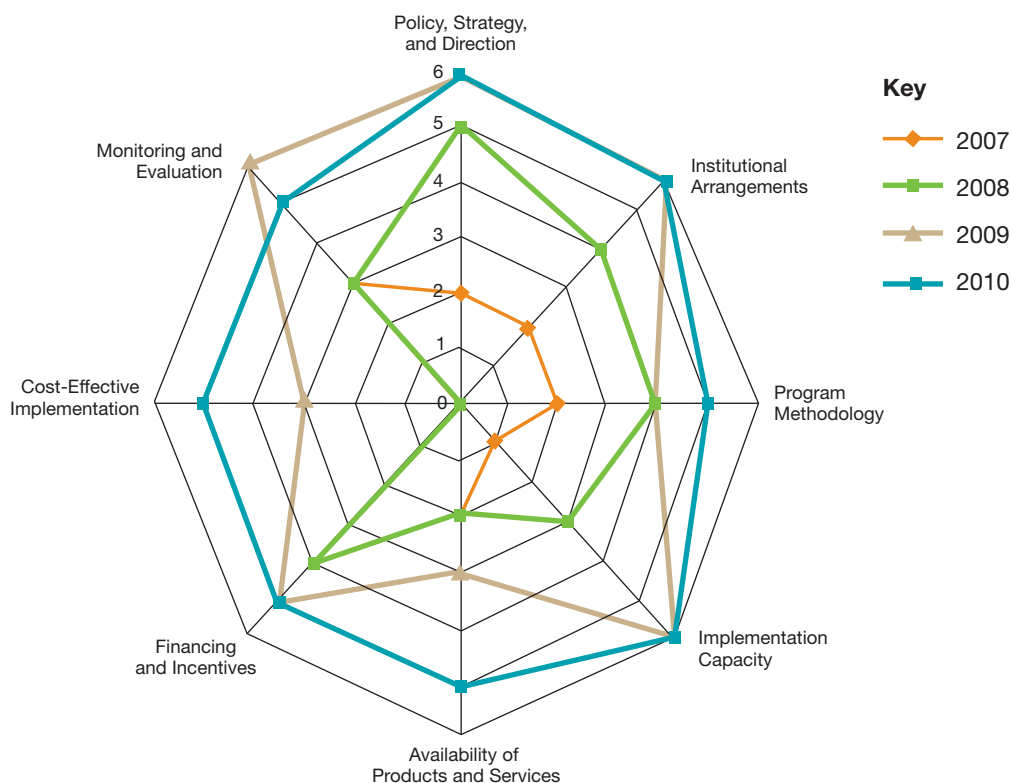
Dimension	Indicator
<p data-bbox="207 1241 367 1297"><b>Institutional Arrangements</b></p> 	<ul data-bbox="464 1241 1333 1423" style="list-style-type: none"> <li>• National home/lead institution/ministry identified/established for rural sanitation</li> <li>• Roles and responsibilities for sanitation are clear</li> <li>• Coordination mechanisms established</li> <li>• Dedicated budget line</li> <li>• Clear links established with other sectors</li> <li>• Clear operational structure</li> </ul>
<p data-bbox="207 1465 367 1549"><b>Availability of Products and Services</b></p> 	<ul data-bbox="464 1465 1455 1654" style="list-style-type: none"> <li>• Available products and services don’t respond to consumer preferences</li> <li>• Products and services respond to consumer preferences</li> <li>• Improved supply chain</li> <li>• Products and services available and affordable for all economic categories of consumers</li> <li>• Products and services available with appropriate marketing and quality-assurance controls</li> <li>• Innovative products and services developed in response to programming</li> </ul>
<p data-bbox="207 1703 367 1759"><b>Financing and Incentives</b></p> 	<ul data-bbox="464 1690 1357 1906" style="list-style-type: none"> <li>• Funding plan developed</li> <li>• Adequate funding available to support triggering demand, improving supply, and strengthening the enabling environment</li> <li>• Funding available from national government</li> <li>• Funding available from local government</li> <li>• Funding sources being utilized effectively for at-scale rural sanitation</li> <li>• Budgeting and funding for expansion and sustainability of at-scale rural sanitation</li> </ul>

FIGURE 5: SAMPLE “SPIDER” DIAGRAM



district-level institutions; and in India, they were adjusted to assess state- and provincial-level institutions.

Using this framework, conditions in each enabling environment dimension were benchmarked by country-based teams and through baseline and endline assessments conducted by an independent consultant in 2007 and 2010, respectively. For example, baseline analysis of the *Implementation Capacity* in East Java showed that most stakeholders were unsure how the initiative was going to work, given its dependence on district governments that previously lacked the finance, experience, and capacity to undertake many of the tasks devolved to them. The research also showed that district governments were still coming to terms with their responsibilities. The endline analysis of this dimension showed that most districts had sufficient funds and resources for the implementation of rural sanitation interventions but that they were still learning to use these resources effectively. The research also found that

the initiative had provided much of the required knowledge and had assisted in building local capacity, with the result that many districts were now confident in their ability to continue the rural sanitation program without external support.<sup>26</sup> Table 4 rates each project site at baseline and endline in each of the eight dimensions of the enabling framework. The table highlights the low starting position in Tanzania as well as the different scale of the challenges in Madhya Pradesh and Himachal Pradesh due to the more difficult context in Madhya Pradesh. Overall, the most significant progress was made in four areas of the enabling environment: *Program Methodology*, *Implementation Capacity*, *Availability of Products and Services*, and *Monitoring and Evaluation*. These dimensions were directly and strongly influenced by technical support and capacity building activities, whereas the other dimensions proved more difficult to strengthen during the relatively short three-year period between the 2007 baseline and the 2010 endline assessments.

<sup>26</sup> A. Robinson, 2011, *Enabling Environment Endline Assessment: Indonesia*, available at [www.wsp.org/wsp/sites/wsp.org/files/publications/WSP-Indonesia-Enabling-Environment-Endline.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/WSP-Indonesia-Enabling-Environment-Endline.pdf). Additional baseline and endline assessments conducted for the initiative are available at [www.wsp.org/scalingupsanitation](http://www.wsp.org/scalingupsanitation).

**TABLE 4: RATING DIMENSIONS AT BASELINE AND ENDLINE**

2007 BASELINE	India-HP	India-MP	Indonesia	Tanzania
Policy, strategy, and direction	Medium	Low	Medium	Low
Institutional arrangements	High	Medium	Low	Low
Program methodology	Medium	Low	Low	Low
Implementation capacity	Medium	Low	Low	Low
Availability of products and services	Low	Low	Low	Low
Financing and incentives	High	High	Low	Low
Cost-effective implementation	Low	Low	Low	Low
Monitoring and evaluation	Low	Low	Low	Low

2010 ENDLINE	India-HP	India-MP	Indonesia	Tanzania
Policy, strategy, and direction	High	Low	High	Low
Institutional arrangements	High	Medium	Medium	Medium
Program methodology	High	Low	High	Medium
Implementation capacity	High	Medium	High	Medium
Availability of products and services	High	Low	High	Medium
Financing and incentives	High	High	Medium	Low
Cost-effective implementation	Medium	Low	Medium	Low
Monitoring and evaluation	High	Medium	High	Low

**Key:**

**Low** Needs improvement

**Medium** Progress made, but still not high performing

**High** Performing at a high level

The enabling environment framework, scoring system, and assessment results were shared with stakeholders and used to help formulate action plans with short-, medium- and long-term goals. The system also helped build consensus about what constitutes progress in each dimension. Annual enabling environment progress reviews with stakeholders were also beneficial. In Indonesia, where decentralization devolved all executive power to the district level, progress reviews were held with district-level stakeholders, and a consolidated review was held at the province level. In India, progress reviews were held at the state level, reflecting that country’s governance structure. In Tanzania, reviews were held with district-level stakeholders.

### 3.4 Role of Local Governments

The at-scale service delivery model positions local governments at the center, managing implementation to ensure that rural communities and households improve their sanitation situation. Local governments can work—especially initially—with the support of resource agencies, local NGOs, and private sector firms that have experience and skills in critical areas such as research, CLTS triggering, and sanitation marketing. In addition, local governments can enable and regulate the involvement of local private sector masons and entrepreneurs who build sanitation facilities and provide sanitation-related services such as pit emptying.

An alternative model for implementing demand-creation activities is through NGOs. In this model, CLTS experts directly train NGOs to trigger communities, and the local government is, at most, a stakeholder. However, this model is not scalable in most countries—there are simply not enough NGOs to scale up. In addition, the NGO model is not institutionalized, generally relies on donor funding, and does not systematically build the capacity of local governments at national scale. The exception may be in circumstances where national NGOs are contracted by government at the national or sub-national level to implement activities at the local level.

Scaling up through local governments is a logical choice because functioning local government administrations exist throughout most countries, and with increased

#### BOX 2: ROLES AND FUNCTIONS OF LOCAL GOVERNMENTS

- Coordination
- Strategy and Planning
- Advocacy and Promotion
- Capacity Building
- Supervision
- Monitoring and Evaluation
- Regulation

decentralization, many have been delegated the mandate for rural sanitation. Although local governments lack capacity in some areas, they are the only structure in a country with the legal mandate, staff, and physical infrastructure required to implement rural sanitation programs at scale.

An agreed-upon set of roles provides a framework for ensuring that the local government has the capacity to perform a full range of roles and responsibilities. There are a number of potential roles for local government (see Box 2):

**Strategy and Planning.** Local governments oversee the overall framework, which includes objectives, targets, issues and challenges, implementation arrangements, and resource requirements. Detailed implementation plans include specific tasks, timelines, and responsible persons.

**Advocacy and Promotion.** In order to scale up in highly decentralized settings, local governments implementing rural sanitation programs should advocate with local political leaders at other administrative levels, such as sub-districts, to obtain budget allocations for activities such as CLTS and behavior change communications. Promotion and advocacy with local administrators, community leaders, and NGOs is also essential to ensure consistent financing and programmatic approaches.

**Capacity Building.** Local governments require financing (an annual budget allocation aligned with the implementation plan), equipment to carry out sanitation-related activities, and the knowledge and skills to carry out the programmatic approaches. Local governments (with guidance from national government)

have lead responsibility for both institutional capacity building and for hands-on community capacity building, including choosing, planning, and managing community-based services.

**Supervision.** Local governments follow up with service providers, trainers, and others to determine how well they performed their responsibilities and to provide coaching and other forms of support. Follow-up to assist communities after CLTS triggering is an essential local government role. Tasks can include facilitating interactions between communities and service providers, supporting progress monitoring, reinforcing behavior change communication messages, and organizing ODF verification, when appropriate. This role needs to be adequately funded in annual budgets.

**Monitoring and Evaluation/Reporting.** Local governments collect information based on common indicators and reporting formats and preferably captured in a management information system, demonstrating ODF verification procedures. After resource agency support is over, local governments train and supervise field staff to continue data collection, reporting, and community-level capacity building in progress monitoring.

**Regulation.** Local government regulation can involve enforcing standards for products from the private sector and enforcing appropriate behaviors in jurisdictions that allow fines for open defecation.

**Coordination.** Local governments coordinate activities across departments, within local hierarchies, and among stakeholders at the district level.

Local governments should also have resources in three areas to plan and implement at scale rural sanitation programs:

- **Financing.** An annual budget allocation for rural sanitation that is aligned with the implementation plan.
- **Human resources.** An adequate number of qualified staff to carry out activities related to demand and supply-side strengthening, as well as its planning, supervision, and capacity-building roles.
- **Supplies/equipment.** Availability of supplies (such as promotional materials) and equipment to conduct

rural sanitation activities, especially transport for district officials and facilitators.

The institutional arrangement, role, and capacity of local government varied by country. In general, local government in all three countries is a multitiered structure below the state/province level. In India, this structure consists of *districts* that develop plans and manage activities, *blocks* that implement these plans, and *villages* that implement village-level plans. In Tanzania, these three levels are called *districts*, *wards*, and *villages*; and in Indonesia they are *districts*, *subdistricts*, *villages*, and *hamlets*. The multitiered structure requires that roles and responsibilities be clearly defined for each level (see Table 5).

In Indonesia, at the local government level, a regional planning agency led the provincial coordinating team, developed the sanitation program in all districts, provided technical guidance, and supervised monitoring and evaluation. The Environmental Sanitation Sub-Division within the Provincial Department of Health Services implemented these functions.

The regional agency also led a district coordinating team. This team developed and monitored total sanitation marketing activities at the district level, and prepared and proposed funding requests. The Environmental Health Division within the Department of Health Services had primary responsibility for implementation at the district level. At the subdistrict level, a coordinating team prepared the budget, and trained motivators and monitors. At the village level, an elected committee was responsible for triggering and monitoring.

Indonesia's service-delivery model represents a new paradigm that involves local governments in promoting rural sanitation. This approach charges local governments with the responsibility of rural sanitation and positions the central government as a facilitator of institutional change, strategy formulation, and capacity building, as well as the provider of incentives. By August 2011, local government had taken over program implementation in 29 of 29 project districts and they were implementing CLTS activities using their own funds.

**TABLE 5: THREE-COUNTRY COMPARISON OF ORGANIZATIONAL MODELS**

	India	Tanzania	Indonesia
<b>National coordination</b>	Ministry of Rural Development, Department of Drinking Water and Sanitation provides national-level coordination	Ministry of Health & Social Welfare and Ministry of Water and Irrigation provides national-level coordination	Ministry of Health provides national-level coordination
<b>State or regional coordination</b>	State-level unit supervises resource agencies and provides guidance to districts	Prime Minister’s Office of Regional and Local Government provides regional/district coordination	Regional committees coordinate technical guidance, monitoring and evaluation
<b>Resource agencies (RA)</b>	Two national NGOs provide training, monitoring, and reporting	Two national NGOs provide training, monitoring, and reporting	Specialized regional, private sector consulting firms provide training, and assist with planning and monitoring
<b>Districts</b>	Primary implementation unit	Primary implementation unit	Primary implementation unit
<b>Local support organizations (SO)</b>	Implement programming at block level	None	None
<b>Sub-districts (blocks or wards)</b>	Monitor local SOs and report to districts	Triggering, reporting	Trains facilitators, monitors
<b>Villages</b>	Village committee monitors	Village committee monitors	Village committee monitors

Because Indonesia lacked a strong national sanitation program (unlike India), it was important to support the national government to build capacity. Technical assistance and advisory services were provided while the government invested staff time and integrated CLTS and sanitation marketing approaches into existing institutions. Cost-sharing took precedence over donor aid. Over time, the national government has taken over capacity-building activities.

In Tanzania, the Ministry of Health and Social Welfare has overall responsibility for protecting public health by ensuring that local authorities provide adequate sanitation and hygiene education, while the Prime Minister’s Office–Regional Administration and Local Government is responsible for implementation at the local levels. Other concerned ministries include the Ministry of Finance and the Ministry of Education and Vocational Training, which have financial and educational relations with regional administration and local government authorities. Local governments, which have been mandated for decentralized service delivery for water and sanitation, develop their own plans and budgets. District water and sanitation teams at

local government level led service delivery for rural areas. These teams, comprised of the heads of all relevant district departments, held formal positions in every district and were responsible for developing action plans for CLTS and sanitation marketing, training at the ward level, supervising ward-level CLTS facilitators, and monitoring and reporting progress. Wards implemented district initiatives and were responsible for triggering CLTS in villages, monitoring village activities, and reporting to the districts.

### 3.5 Capacity Building

#### 3.5.1 Capacity Building of Local Governments

Initially, technical advisors and resource agencies worked with local governments to develop implementation plans, training activities, and supervisory roles. The emphasis on implementation aimed to demonstrate that local governments could produce good results at scale. After proving the worth of the programmatic approach, local governments began working to develop key functions with longer-term impact, including internal advocacy, regulation, monitoring and evaluation, and strategy development.

Resource agencies were initially contracted to build the capacity of local government but, over time, resource agencies were phased out as local government capacity was strengthened. In some countries, such as Tanzania, the pool of potential resource agencies may be limited, with only one or two agencies with the requisite experience and skills. In this situation, additional training is likely needed.

In countries where decentralization is relatively recent, local governments will often have relatively weak capacity and therefore limited absorptive capacity in local-level policy making, strategic planning, management, and monitoring and evaluation. Still, working *with* local governments rather than *around* them is as a long-term investment that will pay dividends over time. Capacity building is an integral and essential component of scaling up rural sanitation, and training is the cornerstone of the approaches used to build local government capacity.

Key points related to building the capacity of local government include the following:

- Develop the capacity of local government in the full range of roles required to implement and sustain at scale, rural sanitation improvements;
- Develop local government strategic plans for scaling up and sustaining and sustaining improvements in rural sanitation.
- Develop a package of standardized tools and training materials for each level in the cascading TOT model;
- Produce training materials with a separate trainer's guide and participant manual that are adapted for use at each level;
- Develop a more rigorous approach to training master trainers and increase the emphasis on training skills.
- Institutionalize mechanisms for districts to share experiences and lessons learned with one another; and
- Identify an institutional home(s) for capacity building and then develop its capacity to play this role effectively.

Initially, training is likely to be financed by external donor funds and implemented by development partners. But, in order to achieve more sustainable sanitation programs, financing for training needs to be taken over by local or national governments, while implementation can be led by local government and/or training institutes or universities.

### 3.5.2 Performance Monitoring to Support Capacity Building of Local Governments

No matter how effective and comprehensive a capacity-building program is, actual local government capacity will vary. Measuring and monitoring performance on scaling up of rural sanitation and using the results from these measurements to strengthen local government capacity in real time as implementation is underway is critical to developing rural sanitation and balancing scale with quality. However, the monitoring systems in most countries focus on inputs and outputs (for example, budget spent and toilets constructed) rather than outcomes such as ODF communities.

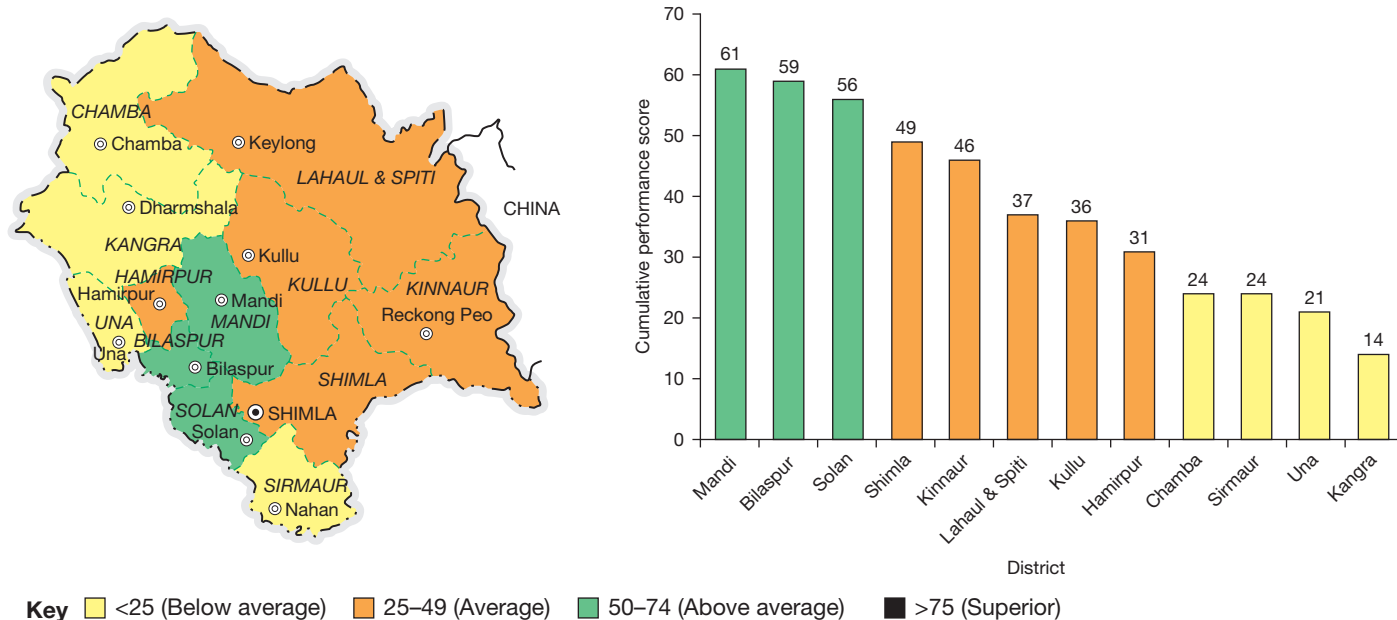
One way to improve performance monitoring is to use benchmarking. Benchmarking allows districts to understand their performance and motivates them to improve. Providing an analysis of inputs, outputs, processes, and outcomes at a glance helps to flag areas of strength, areas that need improvement, and linkages between these areas. Unlike current monitoring systems, benchmarking highlights the efficacy of resources being invested and the corresponding results on the ground (for example, by comparing spending across districts per ODF local government).

A comprehensive benchmarking model should: Use objectively verifiable data on performance that can be triangulated; assign weights to best practice indicators in such a way as to prioritize areas for improvement; present data in a user-friendly way; and be applied regularly and shared widely.

In India, a performance monitoring and benchmarking model was developed and adopted by the state government in Himachal Pradesh to benchmark and monitor performance on a monthly basis.<sup>27</sup> Benchmarking was undertaken

<sup>27</sup> For additional information on designing and implementing a performance benchmarking system in India, see A. Kumar and U. Singh, 2010, *Benchmarking Local Government Performance on Rural Sanitation: Learning from Himachal Pradesh, India*, available at [www.wsp.org/wsp/sites/wsp.org/files/publications/WSP\\_BenchmarkingSanitation\\_TSSM.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/WSP_BenchmarkingSanitation_TSSM.pdf); and A. Kumar, U. Singh, and M. Prakash, 2010, *Monitoring Systems for Incentive Programs: Learning from Large-scale Rural Sanitation Initiatives in India*; available at [www.wsp.org/wsp/sites/wsp.org/files/publications/wsp-monitoring-systems-incentive-programs.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/wsp-monitoring-systems-incentive-programs.pdf).

**FIGURE 6: SAMPLE BENCHMARKING RESULTS, HIMACHAL PRADESH**



by an agency one level above the level being benchmarked, typically the nodal agency for rural sanitation. The higher-level agency used the analysis and results to compare performance and channel resources to address weaknesses and to build on learning opportunities and strengths. The model followed a five-step process:

*Step 1: Select indicators and collect data from existing data sources, where possible.* In India, data was collected from the Government of India monitoring systems. Indicators spanned inputs, outputs, processes, and outcomes; these were developed in consultation with the state government.

*Step 2: Assign scores to each indicator.* In collaboration with the government, each indicator was assigned a weighted score, giving higher priority to outcomes and processes than to inputs and outputs. For example, the number of Nirmal Gram Puraskar (NGP) *Panchayats* (local government) awards received was scored higher than the percentage of budget spent to construct toilets.

*Step 3: Total scores.* Scores for each indicator were added to determine a cumulative performance score.

*Step 4: Benchmark districts based on score achieved.* In collaboration with the government, districts were ranked in descending order on the basis of the cumulative performance score achieved. Scores were divided into four color-coded performance bands based on the scores received. These were presented as a graph and on a map to compare district performance (see Figure 6).

*Step 5: Disseminate results at periodic intervals.* The state-level Rural Development Department sent out a monthly and a quarterly benchmarking results cumulative performance trend analysis. Similar reports were prepared at six months, nine months, and annually.

### 3.5.3 Capacity Building of the Local Private Sector

Strengthening the supply of sanitation products and services is one aspect of sanitation marketing which has proven more challenging than strengthening the capacity to implement CLTS, in part because it requires overcoming supply chain constraints such as availability of materials in rural areas; recruiting and training hardware storeowners and masons; and improving access to credit so that suppliers can expand their business.



As service providers, storeowners and independent masons introduce interested households to sanitation products. Service providers should learn to discern the needs and benefits sought by customers and match these to appropriate products and services. They should also learn how to build safe sanitation facilities and develop basic business skills. Reputable and qualified service providers should be easily accessible to customers.

An accreditation process was introduced to build the capacity of suppliers and service providers, and strengthen the supply of quality goods and services. This strategy increased the availability of trustworthy, competent latrine businesses. In addition to ensuring that providers used appropriate standards, accreditation opened up marketing and branding opportunities, which suppliers used to increase their customer base. A cascading training model also helped to ensure that local masons received appropriate training in latrine installation and maintenance.

In India, the local private sector in both Himachal Pradesh and Madhya Pradesh were fairly advanced. Villagers could obtain sanitation products at their traditional marketplace without having to travel far. However, latrine installers often tried to sell the more expensive latrine models to people who could not afford them. Activities were undertaken to alert both communities and suppliers that buying sanitation products in bulk could result in lower unit costs. In Himachal Pradesh, the supply was strong and products were readily available. The key challenges involved ensuring good quality construction, operation, and maintenance services, and convincing consumers that a safe toilet need not be expensive.

In Madhya Pradesh, the state government moved from a centralized procurement of sanitation material to supporting policies that strengthen the capacity of the local private sector to supply affordable sanitation options to the poor. To support these efforts, stakeholder workshops were held for senior government representatives, including political and administrative heads, to discuss technology options and strategies. Additional workshops were held for key suppliers and state officials to discuss strategies to strengthen the supply stream and the quality of sanitation materials.

In Indonesia, one challenge was the lack of quality masons. Many masons were migrant workers who often left after

their training. In response, districts held trainings for master masons and engineers. The pool of individuals applying to become master trainers included civil servants from rural development or other departments, villagers, natural leaders, volunteers, and members of local support organizations. In addition, ongoing supply issues included the need for improved construction, operation, and maintenance services. To strengthen supply, sanitation marketing helped to network masons and wholesalers, some of whom provided volume discounts. Networking also helped masons and storeowners grow their customer base and sanitation business in addition to helping control costs through referrals.

Staff of local subdistrict health centers expressed interest in becoming entrepreneurs, masons, and managers of masons. Because these individuals were inexperienced in marketing, or selling sanitation products and services, the Institute of Technology of Surabaya (ITS) held five-day workshops to improve basic business skills. Some 1,700 small providers, including masons and sanitarians, were accredited and encouraged to use the “*WC-ku sehat*” (“My Latrine is Hygienic”) logo in their marketing materials. Newly trained masons introduced innovative and affordable products to market.

This approach did not achieve the expected results. For example, of 1,700 people trained, more than 97 percent were reported to be either inactive or utilizing their improved skills in other sectors or areas. The selection process for trainees was one factor in this disappointing outcome. Another factor was that few trainees had the ideal mix of dynamism, ambition, people skills, and technical capacity. Another factor was that local masons—who were less educated and less mobile, yet were the first persons contacted by consumers seeking information about sanitation products and services—were not included among trainees (the selection criteria specified higher levels of formal education and training). During implementation, it was recognized that relying on training masons did not adequately address all supply needs. A business aggregator mechanism was needed to connect household demand, material suppliers, and service providers. These findings informed the subsequent design of the entrepreneur training and one-stop shop model. A second phase of training targeted a small cadre of sanitation entrepreneurs who have started

to employ project-trained masons to install latrines, thus utilizing some of the previously built capacity as originally intended.

In Tanzania, there was a need to strengthen capacity to increase supply and produce slabs and covers either before or concurrent with demand creation. Mason trainings focused on how to make, sell, and install the *Sunguru* slab (or sanplat). Masons took orders directly from households, purchased raw materials and manufactured them on-site near village centers, sometimes using makeshift workshops. Masons were selected for training by local governments based on masonry skills, willingness to be involved, and business experience. This did not necessarily mean they were experienced or natural entrepreneurs. While only 10 to 40 percent of masons who took part in training took advantage of triggering activities to sell slabs, masons were not doing CLTS triggering. It is important to have a clear progression from triggering to create demand and community-wide behavior change to households buying sanitation products and services. Other masons tended to be more passive. They waited for orders from households or assistance from community officials or CLTS committees, or were using their training to find jobs in urban centers.

Several constraints impeded masons on the path from training to starting and operating a viable business. First, access to capital continued to be an issue for masons and the cost of the slab mold, about US\$50, was out of reach for most. Masons often relied on the district government to loan them the molds. The difficulty faced by masons was that supply could not keep up with demand. Similar to the Indonesia experience, the direction in Tanzania was to move up the sanitation supply chain and work with aggregators of services such as hardware stores to build their capacity in providing services for on-site sanitation.

Another issue was access to financing to cover start-up costs for masons. Several solutions were piloted, including the use of district revolving funds and renting slab molds to newly trained masons. For example, the Rufiji district piloted a mason fund with the cooperation of local suppliers of cement, wire mesh, and other materials. Under this

arrangement, masons compiled lists of customer orders and presented them to ward officers for validation and notarization. The masons then presented the lists to suppliers upon the purchase of manufacturing materials. Once construction was complete, the masons reimbursed suppliers with revenues collected from households. In the first round, masons borrowed and repaid suppliers for the equivalent of US\$200 worth of building materials. This pilot was partially effective: supply increased—but not enough. This approach was iterated to move further up the supply chain to work with local hardware stores that had credit, access to materials, and could sub-contract masons. This approach proved more successful at meeting demand.

A lack of reliable transportation among villages also made it difficult for district personnel to transport molds and supplies. Thus, sanitation-related goods and services were not readily available in many communities. A possible solution may be to use visits by district vehicles to transport sanitation supplies directly to villages.

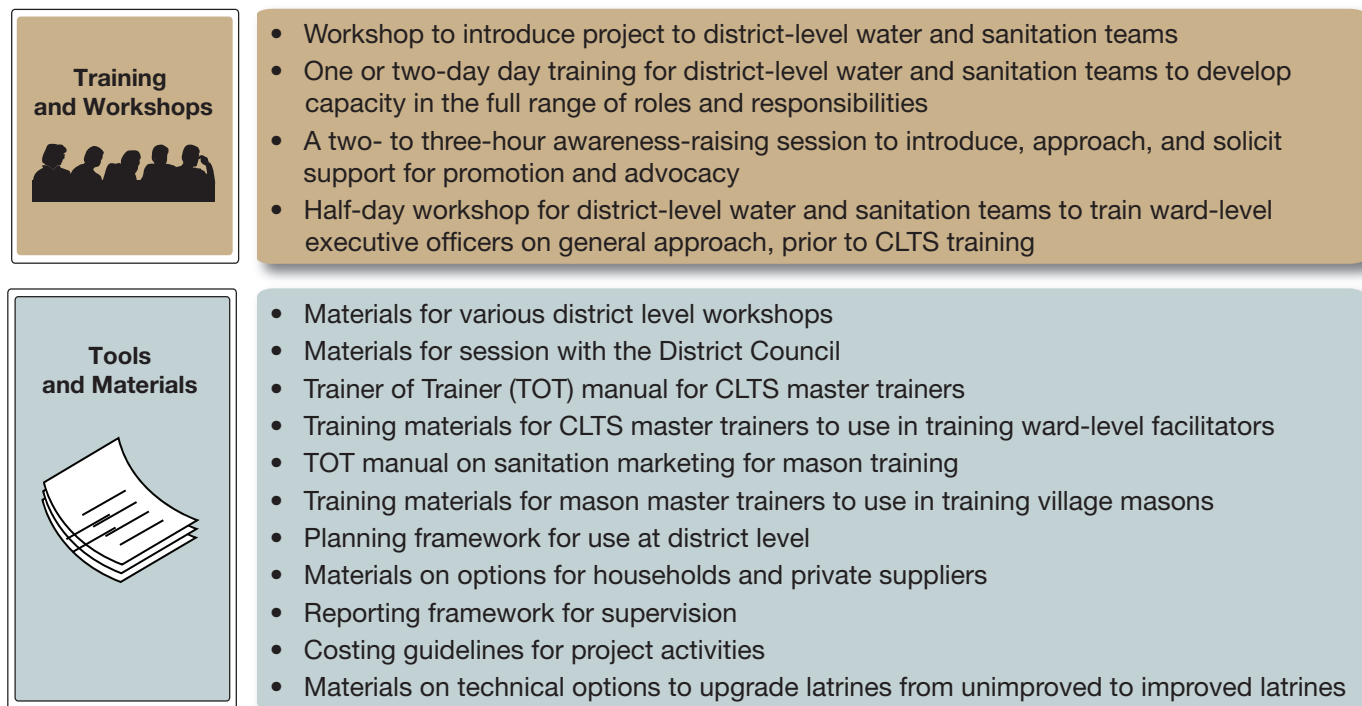
#### 3.5.4 Training of Trainers (TOT)

Trainers with the necessary subject matter expertise and training skills comprise the centerpiece of an effective training system. There should be enough qualified trainers in the various technical aspects to address the scale of the training required. Developing trainers often includes Training of Trainers (TOT) workshops, followed by co-training opportunities with experienced trainers and regular monitoring.

A cascading approach can include three or four levels and master trainers. A master trainer is usually defined as someone who is already experienced in the content and then acquires the skills needed to train others. For example, in Tanzania, two resource agencies were trained and introduced CLTS and sanitation marketing to district water and sanitation teams (DWSTs). Next, the resource agencies trained district officials in CLTS and master masons and local hardware store owners in sanitation marketing. These district-level trainers, in turn, trained ward-level extension officers as CLTS facilitators. In any cascading TOT approach, the challenge is to maintain quality from one level to the next.<sup>28</sup>

<sup>28</sup> For more on building the capacity of local government, please see F. Rosensweig and D. Kopitopolis, 2010, *Building the Capacity of Local Government to Scale up Community-Led Total Sanitation and Sanitation Marketing in Rural Areas*; available at [www.wsp.org/wsp/sites/wsp.org/files/publications/WSP\\_BuildingCapacity\\_TSSM.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/WSP_BuildingCapacity_TSSM.pdf).

**FIGURE 7: PROPOSED WORKSHOPS, MATERIALS, AND TOOLS TO SUPPORT TRAINING OF TRAINERS IN TANZANIA**



TOT should be heavily weighted toward subject matter upgrading. This is essential because trainers must understand CLTS and sanitation marketing in order to train others. However, training also requires solid training delivery skills. Trainers must have the ability to conduct training from a design developed by someone else. They also need to be able to facilitate training sessions, give interactive presentations, provide clear instructions, lead plenary discussions, and use print and visual media. Figure 7 shows the range of workshops, materials, and tools proposed to support the TOT approach in Tanzania.

Over time, several best practices emerged:

- Develop a package of standardized tools and training materials for each level of the training of master trainers.
- Provide a separate trainer’s guide and participant manual adapted to each level.
- Develop a more rigorous approach to training master trainers and increase the emphasis on training skills.
- Translate materials into local languages as needed.

Also, while using resource agencies to build local government capacity has proven effective, and the overall quality of the training and support provided by the resource agencies was good, in some countries there might not be enough available resource agencies if the pace of scale-up increases.

To avoid a situation in which master trainers were training others outside their area of expertise, district trainers in Tanzania triggered up to four communities under the supervision of the resource agency before they were asked to train ward-level CLTS trainers. Although triggering four communities did not provide in-depth experience, it is a practical solution to address this experience gap. A similar issue occurred in India, where people were selected to become master trainers even though they might not have previous experience in sanitation or community mobilization. However, because the districts had been implementing CLTS for some time, natural champions emerged and districts asked them to train new facilitators.

A training strategy typically includes:

- a summary of the training needs and identification of the people to be trained at all levels;
- the overall objectives of the training program(s);
- a description of the training courses, including their sequence;
- a description of the training materials that need to be adapted or developed from scratch for each training course;
- the training of providers and/or criteria for selecting them;
- a monitoring and evaluation plan; and
- an implementation plan that details what it will take to put the capacity-building plan into action.

One way to achieve consistency in the quality of training is by having an agreed-upon training methodology, applying it rigorously, and ensuring that there is capacity to use it when designing and delivering training. Core elements include training, training materials, and a way to monitor and evaluate the training's effectiveness. This could include a simple questionnaire at the end of training, an assessment of whether participants can apply what they learned on the job, or a determination of whether the training achieves the broader program outcomes desired.<sup>29</sup>

Answers to the basic questions of finance—“Who pays for what, when, and how?”—determine the extent to which projects can replicate, expand sanitation, and meet household needs.

### 3.6 Financing Approaches: Who Pays for What, When, and How?

Financial arrangements probably shape the success or failure of sanitation projects more than any other factor. Answers to the basic questions of finance—“Who pays for what, when, and how?”—determine the extent to which projects can replicate, expand sanitation, and meet household needs. Projects with financial designs that match local needs and capacities can take off, while projects with poor or unrealistic financial designs will stall at the end of the project cycle. Sanitation finance is thus a key element of project design, yet one that often lags because of the paucity of information, options, and sound analysis rooted in local conditions. In recent years, there has been much debate in the sector about how to finance on-site sanitation and whether hardware subsidies should be used or not. One study, *Financing On-Site Sanitation for the Poor—A Six-Country Comparative*, based on an analysis of case studies from Bangladesh, Ecuador, India, Mozambique, Senegal, and Vietnam, showed that public investments of varying forms enabled an absolute increase (ranging from 20 to 70 percent) in the number of poor people gaining access to sanitation.<sup>30</sup> There is little doubt that some form of public expenditure is required to increase household access to on-site sanitation, even if those funds are not directly used on hardware

<sup>29</sup> See F. Rosensweig and D. Kopitopoulos, 2010, *Building the Capacity of Local Government to Scale Up Community-Led Total Sanitation and Sanitation Marketing in Rural Areas*, available at [www.wsp.org/wsp/sites/wsp.org/files/publications/WSP\\_BuildingCapacity\\_TSSM.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/WSP_BuildingCapacity_TSSM.pdf).

<sup>30</sup> S. Trémolet et al., 2010, *Financing On-site Sanitation for the Poor – A Six Country Comparative Review and Analysis*, available at [www.wsp.org/wsp/sites/wsp.org/files/publications/financing\\_analysis.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/financing_analysis.pdf).

subsidies. As noted in this study, the most relevant question is not “Are subsidies good or bad?” but rather “How best can we invest public funds?”

But the financing situation is complex in most countries that are currently off-track to reach the MDG target for sanitation—and particularly for low-income countries. In these countries, providing a hardware subsidy that covers a significant portion of the cost of a basic latrine for those without access to improved sanitation is extremely expensive and most countries cannot sustain a large-scale hardware subsidy. This means that demand creation activities are a prerequisite and that some entity has to finance them. More often than not that responsibility falls on the shoulders of the government as the domestic private sector that is engaged with providing on-site sanitation services is often

too fractured and immature to take on large scale demand creation efforts.

A model of government financing for sanitation promotion that has proven effective are programs that focus resources on sanitation promotion, such as was done in Maharashtra, India, and Bangladesh (in both cases targeted hardware subsidies were provided for the poorest). *Financing On-Site Sanitation for the Poor* indicated that these programs had among the highest levels of leverage (household investment compared to public-investment) and the most increased ratios of sanitation access to public funding.<sup>31</sup> This study demonstrated that households are willing to finance investment in on-site sanitation if demand is created. However, given the range of possible approaches to financing on-site sanitation (see Table 6), the challenge is to choose an approach that matches the local context.

**TABLE 6: POTENTIAL FINANCING APPROACHES FOR ON-SITE SANITATION**

Financing Approach	Potential Advantages	Potential Risks
<b>Financing Sources: Purely Private (Households)</b>		
Self-financing: Households invest in their own facilities and pay for sludge-emptying services—no subsidy	<ul style="list-style-type: none"> <li>Majority of latrines are currently financed privately this way</li> <li>Reflects existing demand</li> <li>No use of public funds</li> </ul>	<ul style="list-style-type: none"> <li>Risk of poor-quality infrastructure</li> <li>Does not fully consider environmental impact</li> <li>Suppliers may not exist</li> <li>Unaffordable for the very poor</li> </ul>
Sanitation surcharge: Cross-subsidy to finance on-site sanitation	<ul style="list-style-type: none"> <li>Use of cross-subsidies</li> </ul>	<ul style="list-style-type: none"> <li>Available funds may be limited due to affordability constraints</li> </ul>
<b>Financing Sources: Combination of Private (Household) and Public Funds (Taxpayer Monies and External Sources)</b>		
Loans to households, including micro-credit for sanitation or home improvement (e.g., revolving funds)	<ul style="list-style-type: none"> <li>Particularly useful in cohesive communities aiming at 100% sanitation</li> <li>Limits initial outlay of public funds</li> <li>Subsidy linked to outcome</li> </ul>	<ul style="list-style-type: none"> <li>Demand for sanitation needs to be stimulated</li> <li>Requires a solid institution to manage funds</li> <li>May be unaffordable for the very poor</li> </ul>
Software support, with low/no subsidy for hardware	<ul style="list-style-type: none"> <li>Focuses subsidies on creating demand</li> <li>Relies on community cohesion/ solidarity</li> </ul>	<ul style="list-style-type: none"> <li>Sustainability at risk once the initial attention / champion or other motivating factor disappears</li> </ul>
Loans to private-sector providers	<ul style="list-style-type: none"> <li>Lift constraints for small-scale independent providers (SSIPs) to expand their services</li> </ul>	<ul style="list-style-type: none"> <li>Services may not reach the very poor</li> <li>Not sufficient demand to keep the business running if not combined with hygiene and sanitation promotion</li> </ul>
Non-financial support to providers (training, demand creation)	<ul style="list-style-type: none"> <li>Boosts private-sector development so that supply can meet demand for sanitation facilities</li> </ul>	<ul style="list-style-type: none"> <li>Services may not reach the very poor</li> </ul>
Output-based aid: Grants to households or SSIPs based on outputs or outcomes	<ul style="list-style-type: none"> <li>Subsidy linked to actual outputs delivered</li> </ul>	<ul style="list-style-type: none"> <li>Requires private sector prefinancing, which may not be forthcoming</li> </ul>
Partial hardware subsidy: Users contribute in kind or in cash	<ul style="list-style-type: none"> <li>Enhances ownership of facility</li> <li>Improves affordability</li> </ul>	<ul style="list-style-type: none"> <li>May be unaffordable for the very poor</li> <li>May be an unsustainable drain on resources</li> </ul>
<b>Financing Source: Purely Public (Taxpayer Monies and External Sources)</b>		
Full subsidy: Households receive facilities as a gift	<ul style="list-style-type: none"> <li>Removes affordability constraint for the very poor (if they capture the subsidy)</li> </ul>	<ul style="list-style-type: none"> <li>Can crowd out household resources</li> <li>No demand test, so facilities often not used</li> </ul>

<sup>31</sup> Ibid.

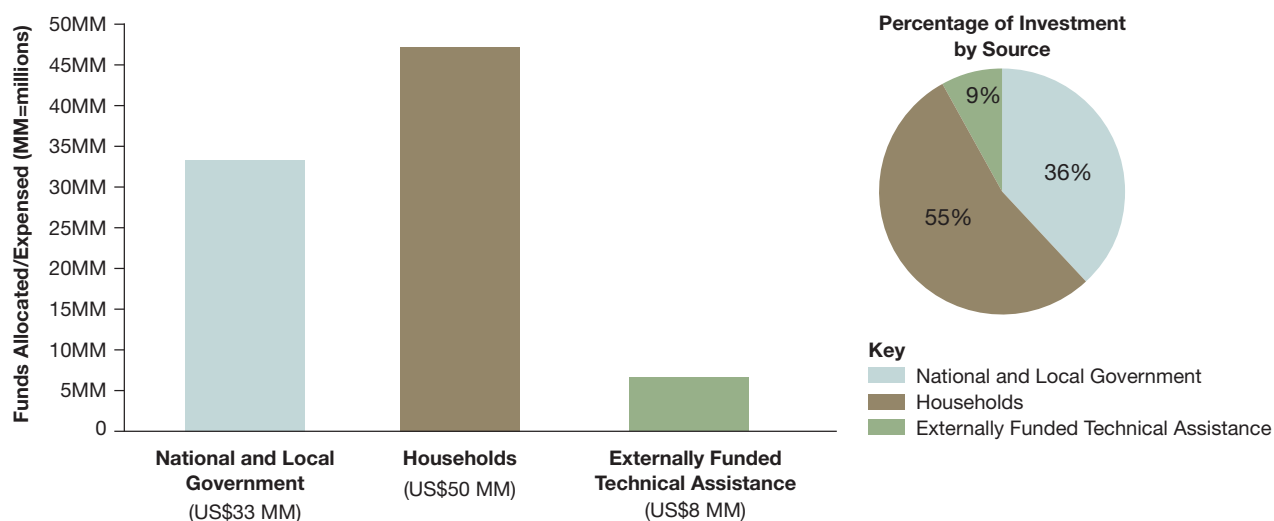
### 3.7 Scaling Up Rural Sanitation: Program Financing

In India, Tanzania, and Indonesia, investments in on-site sanitation demand and supply generally fell into three cost categories: (a) *one-time upfront* costs (e.g. conducting formative market research, developing marketing messages, producing communication/promotion materials); (b) *onsite household sanitation facility* costs; and (c) *sanitation promotion* (including increasing demand and strengthening supply), *monitoring, and evaluation* costs.

Figure 8 provides a breakdown of investment in sanitation programming by national/local governments, households, and external donors.<sup>32</sup> Households represented the largest investor group for on-site sanitation. National and local government investment represented 36 percent (US\$33 million) of total funds invested. These investments covered both (a) *one-time upfront* and (c) *sanitation promotion, marketing, and evaluation* costs. Some governments, such as India, provided subsidies to below the poverty line (BPL) households. Examples of costs assumed by national and local governments included:

- Contracting NGOs to carry out CLTS triggering;
- Allocating time of local government staff to create community-level demand for improved sanitation;
- Producing duplicates of sanitation marketing print materials and purchasing airtime for radio spots;
- Providing financial incentives for achieving community-wide open defecation free status;
- Training community facilitators in CLTS;

**FIGURE 8: PUBLIC AND PRIVATE INVESTMENT IN RURAL SANITATION IN INITIATIVE AREAS (JANUARY 2007–JUNE 2010)**



<sup>32</sup> E. Perez et al., 2011, *Progress Report: July 1, 2009–June 30, 2010*; available at <http://www-wds.worldbank.org>.

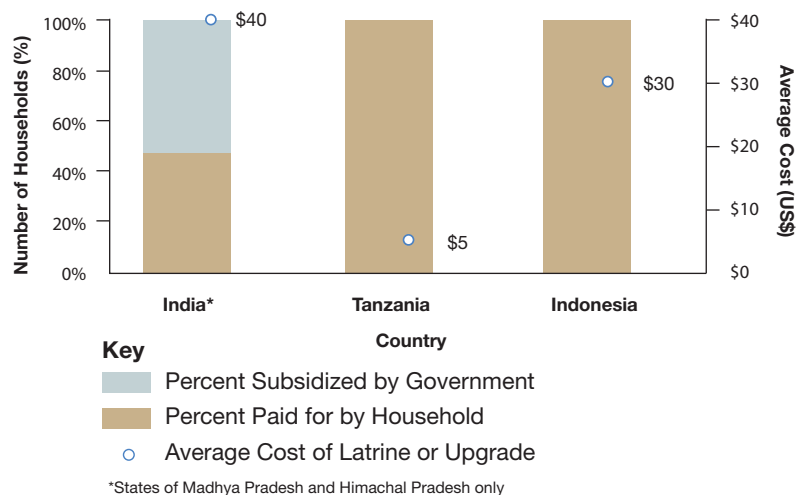
- Helping the local private sector strengthen the supply of affordable sanitation products and services; and
- Monitoring household and community sanitation outcomes.

Externally funded technical assistance represented nine percent (US\$8 million) of total funds invested. Most of these costs fell into (a) *one-time upfront costs*. No external funds were used to fund sanitation facilities, government-related labor costs, or ongoing recurrent costs to sustain implementation. Examples of costs covered by external sources included:

- Conducting formative market research;
- Developing marketing messages and communication/ promotion materials;
- Conducting training and capacity building activities for local government;
- Production of resource materials and mass media campaigns;
- Collecting monitoring data;
- Direct technical assistance;
- Advocacy efforts to support policy reform; and
- Capturing and disseminating knowledge.

Investment from households represented 55 percent (US\$50 million) of total funds invested. These investments fell into (b) *onsite household sanitation facility costs*. In Tanzania and Indonesia, households financed the entire cost of a household latrine. In Himachal Pradesh and Madhya Pradesh, India, above the poverty line (APL) households financed the entire cost from their own sources, while some households below the poverty line (BPL) added their own resources to a government subsidy to build a higher quality latrine (see Figure 9).<sup>33</sup>

**FIGURE 9: WHO PAYS AN AVERAGE COST FOR HOUSEHOLD LATRINES IN IMPLEMENTATION AREAS**



<sup>33</sup> E. Perez et al., 2011, *Progress Report: July 1, 2009–June 30, 2010*; available at <http://www-wds.worldbank.org>.

---

# IV. From Learning to Knowledge to Action

## KEY POINTS

- Intentional learning requires a culture of learning and a learning strategy.
- Learning should be integrated into a results framework, program management, and evaluation system.
- Effective learning is forward looking. The application of lessons learned and insights gained should be practiced with clear intention.
- Learning is important but it is not the end goal. The goal of learning is to use or leverage evidence-based knowledge to inform government and donor policies and practices, increase investments in sanitation, and ensure that these investments reach the poor.

---

### 4.1 Learning

Intentional learning takes place through iterative cycles of doing, reflecting, making meaning, generating hypotheses of what to do differently, and planning for the next round of doing. As people reflect together they share different perspectives, experiences, and learning styles. New knowledge can emerge as a result. However, pausing to reflect, capture, and share knowledge is often difficult in a fast-paced working environment. Another challenge, especially for programs being implemented at scale, has been to capture and disseminate learning in a way that is systematic, timely, and beneficial to country teams, clients, partners, and program managers.

To overcome these issues, a comprehensive learning strategy was developed to promote intentional and analytical learning, effective knowledge dissemination, and advocacy.<sup>34</sup> The strategy identified key learning questions that aligned to knowledge gaps in the global sanitation sector (see Annex A) and established learning principles and concrete techniques to guide and support a learning culture. To a large degree, learning, and applying learning—in other words, iterating programmatic approaches and activities based on learning—were performed in real time with local and national government partners. In parallel, quantitative and qualitative research was conducted both in the countries where the initiative was implemented and elsewhere (Bangladesh and Vietnam) to contribute to sector knowledge.

Components of the learning strategy included principles, a charter, goals, and actions plans.

**Learning principles.** A learning culture must be built on trust, a continuous practice of facilitated conversations, and shared learning. A set of learning principles was developed to guide choices in learning tools, platforms, and processes. These principles included the understanding that learning should be embedded in the way people work, with a focus on learning by doing; be field-tested and evidence-based; build on learning from other sectors; provide just-in-time insights on implementation, challenges, and lessons learned; and strike a good balance of doing, reflecting, and sharing.

**Learning charter.** A learning charter was developed to specify the tenants, values, and norms of team learning. The charter recognized the team commitments to support iterative cycles of learning; to share information and tools to help colleagues learn; to positively reinforce those who share; to encourage open and continuous dialogue; to challenge assumptions; and to recognize that learning takes place in both successful and unsuccessful interventions.

**Learning goals.** A set of global learning goals was developed to provide a shared framework for working and learning together. Three broad questions were supported by more than 30 sub-questions (see Annex A):

- What are the health and welfare impacts of large-scale sanitation programs on the poor?
- What are the best practice approaches and designs for creating demand and strengthening supply leading to sustainable, effective large-scale sanitation programs?

---

<sup>34</sup> C. Frischmuth, 2008, *Global Learning Strategy*, available at [http://www.wsp.org/wsp/sites/wsp.org/files/publications/WSP\\_Global\\_Learning\\_TSSM.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/WSP_Global_Learning_TSSM.pdf).



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

Country-level interventions were designed to test and learn about these questions and sub-questions. The goal of the learning component was not to learn per se, but to use or leverage evidenced-based knowledge to inform government and donor policies and practices, increase investments in sanitation, and ensure that these investments are effective in reaching the poor.

## 4.2 Key Learnings

The lessons shared below are based on fieldwork in India, Indonesia, and Tanzania; research undertaken in Indonesia,<sup>35</sup> Vietnam,<sup>36</sup> and Bangladesh<sup>37</sup> on the sustainability of sanitation marketing and CLTS; joint WSP-World Bank research on sanitation financing<sup>38</sup> and a six-country study of the political economy of sanitation;<sup>39</sup> and external evaluations.<sup>40</sup> Additional evidence and lessons will be available once impact evaluation endline results are completed, analyzed, and reported. See Annex B for a description of knowledge products and tools developed to date.

### ***Lesson #1: Well-targeted subsidies can be effective in reaching poor people.***

Public investments of varying forms, including subsidies, can and have helped trigger significant increases in access to household sanitation. Country field experiences supported by evidence-based research found that well-designed, affordable, and sustainable subsidy programs undertaken by the country government do help the poor gain access to improved sanitation. The more cost-effective approach to using hardware-related subsidies was an outcome-based approach, in which the government rewards communities that become ODF by providing financial subsidies for improved household sanitation facilities. When resources are scarce, public dollars give the biggest “bang for the buck” when they’re used to finance demand-creation activities such as CLTS and BCC.

Lesson #1: Well-targeted subsidies can be effective in reaching poor people.

Key points related to subsidies include:

- Partial public funding for hardware can significantly increase access to household sanitation.

<sup>35</sup> N. Mukherjee et al., 2012, *Achieving and Sustaining Open Defecation Free Communities: Learning from East Java*; available at <http://ebookbrowse.com/wsp-indonesia-action-research-report-pdf-d323629855>.

<sup>36</sup> C. Sijbesma et al., 2010, *Case Study on Sustainability of Rural Sanitation Marketing in Vietnam*; available at [www.wsp.org/wsp/sites/wsp.org/files/WSP\\_SustainabilityCaseStudy\\_TSSM\\_optimized\\_lowest.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/WSP_SustainabilityCaseStudy_TSSM_optimized_lowest.pdf).

<sup>37</sup> S. Hanchett et al., 2011, *Long-term Sustainability of Improved Sanitation in Bangladesh*; available at [www.wsp.org/wsp/sites/wsp.org/files/publications/WSP-Sustainability-Sanitation-Bangladesh-Brief.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/WSP-Sustainability-Sanitation-Bangladesh-Brief.pdf).

<sup>38</sup> S. Trémolet, 2011, *Identifying the Potential for Results-Based Financing for Sanitation*; available at [www.wsp.org/wsp/sites/wsp.org/files/publications/WSP-Tremolet-Results-Based-Financing.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/WSP-Tremolet-Results-Based-Financing.pdf).

<sup>39</sup> S. Trémolet et al., 2010, *Financing On-Site Sanitation*; available at [www.wsp.org/wsp/sites/wsp.org/files/publications/financing\\_analysis.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/financing_analysis.pdf).

<sup>40</sup> S. Amin, A. Rangarajan, and E. Borkum, 2011, *Improving Sanitation at Scale: Lessons from TSSM Implementation in East Java, Indonesia*; available at [http://www.mathematica-mpr.com/publications/PDFs/international/TSSM\\_implementation.pdf](http://www.mathematica-mpr.com/publications/PDFs/international/TSSM_implementation.pdf).

Lesson #2: The management model of working through local governments with the support of resource agencies to build capacity of local governments is fundamentally sound, but in many cases there is a need for capacity-building efforts.

- The relevant question is not “Are subsidies good or bad?” but rather “How can we best invest public funds?”
- Households are key investors in onsite sanitation. Careful project design and consumer research can maximize their involvement, satisfaction, and financial investment.
- The provision of hardware subsidies on an outcome rather than an input basis can stimulate demand and leverage private investment.

**Lesson #2: The management model of working through local governments with the support of resource agencies to build capacity of local governments is fundamentally sound, but in many cases there is a need for capacity-building efforts.** WSP evaluated the capacity-building efforts of local governments and identified seven specific functions that are important for local governments to perform in scaling up rural sanitation: strategy and planning, advocacy and promotion, capacity building, supervision, monitoring and evaluation, regulation, and coordination.

The evaluation concluded that the management model of working through local governments with the support of resource agencies to build capacity is fundamentally sound. Although local governments lack capacity in some areas, they remain the only structure in the country with the legal mandate, staff, and physical infrastructure to implement large-scale rural sanitation programs.<sup>41</sup>

Key lessons learned related to local governments included:

- Local governments made more progress in their roles related to CLTS and creating demand than in those related to sanitation marketing and strengthening the supply of sanitation products. The role of local government with respect to sanitation marketing continues to be an area of learning with respect to carrying out BCC activities and strengthening supply.
- Local governments have an essential role in ensuring supervision of CLTS facilitators and private-sector suppliers of sanitation products and services.
- National-level policies provide a platform but mean very little unless national governments invest time and resources in promoting the policy down to local levels, where it is translated into strategies, activities, and funding priorities.

Lesson #3: Performance benchmarking and monitoring can improve local governments' performance.

**Lesson #3: Performance benchmarking and monitoring can improve local governments' performance.** To improve the quality of the results from efforts to scale up rural sanitation, government partners in India and Indonesia developed a performance-monitoring-based benchmarking system. The model was designed to encourage good performers to sustain their high rankings and to motivate poor

<sup>41</sup> F. Rosensweig and D. Kopitopoulos, 2010, *Building the Capacity of Local Governments to Scale Up Community-Led Total Sanitation and Sanitation Marketing in Rural Areas*, available at [www.wsp.org/wsp/sites/wsp.org/files/publications/WSP\\_BuildingCapacity\\_TSSM.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/WSP_BuildingCapacity_TSSM.pdf).

performers to improve their rankings. Performance indicators included input, output, process, and outcome indicators with different ranking weights.<sup>42</sup> After having implemented the performance-monitoring system for six months, the government of Himachal Pradesh reported the following results:

- Benchmarking improved performance, enabled the districts to understand their performance, and motivated them to improve. It helped flag areas of strength, areas that need improvement, and linkages between them.
- The use of performance-benchmarking-weighted scoring allowed the state to put heavier emphasis on achievement of outcomes (stopping open defecation).
- Benchmarking enabled policymakers to monitor performance on a rational basis and thereby channel resources and efforts on the basis of identified strengths and weaknesses.
- Linking benchmarking to nonfinancial and financial incentives helps create an enabling environment to drive performance improvement.

**Lesson #4: A robust verification system is a prerequisite for an effective incentive program to motivate local governments to achieve ODF status.** The experience gained from the verification system instituted for the national and state reward programs in India has some important lessons, not just for the Indian context but also for replication elsewhere.

Lesson #4: A robust verification system is a prerequisite for an effective incentive program to motivate local governments to achieve ODF status.

Key points related to incentives and verification include:

- Programs need to plan for scale. The number of applications for the national award program in India, for example, increased from fewer than 500 to almost 10,000 in the third year. For state reward programs, in Himachal Pradesh, for example, the number of districts participating increased from just one in the first year to all 12 by the third year. To organize the verification process in a transparent and accountable manner, it is important to anticipate this scaling up and plan accordingly.
- Verification teams should receive training. This can include a mix of classroom sessions to ensure conceptual clarity and field practice on how to complete the verification forms. A well-developed verification instrument is a prerequisite for ensuring quality in the verification process. In addition to the technical parameters, training should cover the behavior and attitude of verification team members during the verification.
- Multi-level verification and the presence of a multi-stakeholder team ensure that the verification process retains its objectivity and adherence to the basic principles. In both the national and state reward programs in India, there were multiple levels of verification, with multiple teams at each level (national) or a multi-stakeholder team (state reward programs), which ensured that bias was reduced. Peer monitoring, such as using heads

<sup>42</sup> C. Ajith Kumar and U. Singh, 2010, *Benchmarking Local Government Performance on Rural Sanitation in India*, available at [www.wsp.org/wsp/sites/wsp.org/files/publications/WSP\\_BenchmarkingSanitation\\_TSSM.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/WSP_BenchmarkingSanitation_TSSM.pdf).

of past-ODF villages for verification of new ODF villages, also adds rigor to the verification process.

**Lesson #5:** The capacity of the local rural private sector to scale up supply of consumer responsive sanitation products and services was limited.

**Lesson #5: The capacity of the local rural private sector to scale up supply of consumer responsive sanitation products and services was limited.** The initial approach to strengthen the private sector’s ability to meet new or increased demand focused on training masons. This approach began to show its limitations, particularly in Indonesia and Tanzania. An external study in East Java, funded by the International Finance Corporation (IFC), found that all of the sanitation entrepreneurs interviewed had backlogs of orders, the highest being about 150 latrines.<sup>43</sup> Masons in Tanzania faced a similar challenge. In addition, other masons that went through the training in both Indonesia and Tanzania did not apply the skills on latrine construction as anticipated, and went on to work in urban areas. This situation demonstrated the need to move up the sanitation supply chain and try to build capacity at a focal point where services can be aggregated.

The emergent learning is that sanitation marketing programs must go beyond the traditional “mason model” and explore “market transformation” approaches that have been used in other sectors such as energy. This will mean moving up the sanitation supply chain to, for example, district-level hardware stores, and exploring partnerships with other organizations that can provide the necessary technical assistance in business development. A revised strategy recognizes that not every mason can be an entrepreneur. Capacity building to improve the supply of sanitation products and services must be sustained by creating centers of excellence/training institutions, identifying private-sector champions who can lead business-to-business networking, and so on. Access to financing mechanisms is another significant obstacle for small-scale private suppliers. A more holistic approach is required to foster the development of an enabling environment in which new products and services can be developed, brought to market, financed, and maintained. This encompasses much more than just the training of masons.

**Lesson #6:** Community-based monitoring and self-reporting is being effectively generated and used by communities, but manual data transfer from community maps to local government databases becomes burdensome when programs scale up. Use of emerging cell phone and related application technologies may provide the solution.

**Lesson #6: Community-based monitoring and self-reporting is being effectively generated and used by communities, but manual data transfer from community maps to local government databases becomes burdensome when programs scale up. Use of emerging cell phone and related application technologies may provide the solution.** The experience with participatory monitoring has shown that rural communities are able and motivated to monitor progress toward ODF status and that they can track changes in community access to improved sanitation. However in Indonesia, although communities were regularly generating monitoring data, much of this data was not reaching sub-district, district, or higher levels for regular consolidation. With the number of triggered communities running into thousands in East Java, manually collecting data from

<sup>43</sup> S. Giltner and A. Surianingrat, 2010, *Sanitation in Indonesia: A Market Assessment*; available at <http://www.cowater.com/readProject.cfm?ID=153>.

each triggered community on a monthly basis became too labor-intensive and time-consuming for government outreach staff. Similar experiences were found in Tanzania.<sup>44</sup> To address this challenge, national and local governments are piloting reporting to sub-district and higher levels through mobile phones into a computerized database. This is still a work in progress as new technical innovations are developed and tested.

**Lesson #7: Changing social norms around open defecation and latrine use through sanitation and hygiene promotion is important for long-term sustainability of behaviors.** Research carried out in Bangladesh looked at the long-term sustainability of sanitation behaviors and facilities in areas that were declared 100 percent sanitized or ODF. The research showed that latrine use had been the norm mostly among upper-income groups or in areas covered by earlier sanitation campaigns. However, after an extensive national sanitation campaign carried out between 2003–2006, latrine use in these ODF areas is currently a socially accepted practice at all levels of society, including the poorest wealth quintile, and those who continue to practice open defecation are socially criticized. Marriage arrangements, village respectability, and village purity for religious events are widely assumed to require use of “hygienic/health-enhancing” latrines. One plausible contributor to this shift in social norms in Bangladesh is that the BCC campaign directed at households was fairly pervasive: campaign messages were communicated through various channels and settings, including messaging by Union Parishad members or officers at meetings, rallies, over loudspeaker announcements, and through household visits by Union Parishad members or NGO workers.<sup>45</sup>

**Lesson #8: Effectiveness of CLTS in leading a community to become ODF depends on several factors.** By early 2010, with almost 2,000 East Java communities triggered using the CLTS approach, more than 700,000 people had gained access to improved sanitation and 35 percent of triggered communities had become ODF. But the percentage becoming ODF in different districts varied widely between 10 and 95 percent. In 2010, action research was conducted in 80 East Java communities to try to better understand why this was happening.

Key findings include:

- Communities reaching ODF status within two months of triggering achieved markedly higher access gains and sustained ODF behaviors better than communities that took many months to become ODF.

Lesson #7: Changing social norms around open defecation and latrine use through sanitation and hygiene promotion is important for long-term sustainability of behaviors.

Lesson #8: Effectiveness of CLTS in leading a community to become ODF depends on several factors.

<sup>44</sup> For more information, see N. Mukherjee, 2011, *Managing the Flow of Monitoring Information to Improve Rural Sanitation in East Java*, and Y. Coombes, 2011, *Utilizing Community-Based Registers to Monitor Improved Access to Sanitation and Hygiene in Tanzania*, both available at [www.wsp.org/scalingupsanitation](http://www.wsp.org/scalingupsanitation).

<sup>45</sup> S. Hanchett et al., 2011, *Long-Term Sustainability of Improved Sanitation in Rural Bangladesh*; [www.wsp.org/wsp/sites/wsp.org/files/publications/WSP-Sustainability-Sanitation-Bangladesh-Brief.pdf](http://www.wsp.org/wsp/sites/wsp.org/files/publications/WSP-Sustainability-Sanitation-Bangladesh-Brief.pdf).

- Communities that become ODF more than six months after triggering should be subject to intensive verification and periodic rechecks.
- Sanitation behavior change is more difficult to ignite in riverbank and waterfront communities, and special strategies should be developed for them.
- BCC strategies should target latrine sharers differently from open defecators, as underlying motivations or other behavioral determinants may be quite different.
- Poor-quality CLTS triggering was invariably associated with lack of ODF achievement. However, good-quality CLTS triggering alone did not guarantee ODF outcomes.
- ODF achievement and sustainability were hastened by local availability and affordability of latrines with attributes desired by all consumer classes.

---

# V. Conclusion

---

Much has been learned over the past five years on how to design and implement large-scale sustainable rural sanitation programs; how to promote systematic policy and institutional reform; how to strengthen stakeholders' support for at-scale service delivery; and how to develop and support affordable financing strategies that are effective in reaching the poor. These learnings are being developed into knowledge products and tools, and shared with government clients and development partners to increase investment, enhance technical support, and facilitate replication.

Sanitation is no longer forgotten. With current—and growing—global political will to improve rural sanitation, new learning can be used to help governments put political will into practice. The overall model described in this Working Paper is now being adapted and replicated by governments in Ethiopia, Cameroon, Ghana, East Timor, Laos PDR, and Bangladesh, and by development partners such as the World Bank, African Development Bank, USAID, UNICEF, and the Global Sanitation Fund.

Although progress has been made, much work remains, including learning how best to support governments to grow large-scale programs into nation-wide programs, and how to strengthen partnerships with other development agencies, donors, and international financing institutions. Some (but not all) of the key next-generation learning questions include:

- What are effective approaches to go from large-scale programs to national-level programs?
- How can the local private sector in isolated rural areas be transformed into a more robust sanitation market to keep up with the demand for improved sanitation by households?
- What institutional support is needed to sustain behavior change at the household and community levels over time?
- How can governments be more effectively motivated and supported to develop and own national-level sanitation monitoring and evaluation systems that they use for effective performance monitoring, real-time learning, and improvement of at-scale rural sanitation programs?
- How can financing be made more accessible to the local private sector as well as to households?
- How can large-scale capacity building of local governments and the local private sector be institutionalized and sustained over time?

With more than 2.5 billion people without safe sanitation, there is still much to learn and to improve. We welcome your comments and ideas.

With current—and growing—global political will to improve rural sanitation, new learning can be used to help governments put political will into practice.





# Annex A: Global Learning Goals

Global learning goals provide a framework for working and learning together with the goal of creating a team of global learners. Country-level interventions are designed to test and learn about these questions.

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 percent ODF communities and improved coverage to sanitation (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 and handling of children’s feces on top of total sanitation/sanitation marketing?
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 cost, time, sustainability, and scalability?
  - b. Can approaches be adapted across different environments, and if so, how?
  - c. How does environment influence the approach?
  - d. What are the roles of the private and public sectors (separate and together) in generating supply and sustaining demand at scale?
  - e. What are the 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 the private sector be encouraged to serve the poorest segments of the population?
  - 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 safe sanitation?
  - k. To what extent do “triggerred” communities have the opportunity, ability, and motivation to secure short- and long-term maintenance of their latrines?
  - l. What is the durability of behavior change achieved? Under what circumstances are these behaviors most likely to be sustained?
  - m. What key determinants of sanitation behavior influence communities to become ODF, and people to move up and down the sanitation ladder, or maintain their position, once improved sanitation has been attained?
  - n. Do communities that achieve ODF status go on to access safe latrines and improve their sanitation status (that is, go up the sanitation ladder)?
  - o. What are effective strategies for marrying CLTS 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 the approach be used to address handwashing with soap and safe handling and disposal of children’s feces?
3. **What enabling environment (programmatic and institutional conditions) is needed to scale up and sustain large-scale sanitation programs?**
  - a. What does it take to measure a supportive enabling environment?

- b. How do you prioritize among the enabling environment 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?
- 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 (that is, 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: What does it take to adapt/put in place a well-defined monitoring and evaluation system and to use the resulting data for policy, budget, and program decisions?
- i. Program methodology: How do we gain widespread acceptance and adoption of the approach/methodology among government and stakeholders? How many staff members are needed and what skills do they need? What are the different implementation models that districts use to carry out the social intermediation and outreach roles needed?

# Annex B: Publications, Video, and Toolkits

WSP supports evidence-based learning with an explicit goal to test new approaches, document and reflect on successes and challenges, and share lessons learned. All resources are available at [wsp.org/scalingupsanitation](http://wsp.org/scalingupsanitation). For information regarding reprints or permission to use, please contact [wsp@worldbank.org](mailto:wsp@worldbank.org).

## Enabling Environment for Working at Scale

- *Building the Capacity of Local Government to Scale Up Community-Led Total Sanitation and Sanitation Marketing in Rural Areas*
- *Enabling Environment Endline Assessment: Indonesia*
- *Enabling Environment Endline Assessment: Tanzania*
- *Getting Africa to Meet the Sanitation MDG: Lessons from Rwanda*
- *Financing On-Site Sanitation for the Poor*
- *Identifying the Potential for Results-Based Financing for Sanitation*
- *Learning by Doing: Working at Scale in Ethiopia*
- *Long-Term Sustainability of Improved Sanitation in Rural Bangladesh*
- *Output-Based Aid for Sustainable Sanitation*
- *Policy and Sector Reform to Accelerate Access to Improved Rural Sanitation*
- *Political Economy of Sanitation*

### Policy and Sector Reform to Accelerate Access to Improved Rural Sanitation (WSP: Perez, Rosensweig, Robinson; 2012)

A central sector hypothesis is that a supportive enabling environment is an essential element of large-scale rural sanitation programs. In order to research how to build and sustain the enabling environment needed, WSP developed a conceptual framework and conducted 2007

baseline and 2010 endline assessments of the enabling environment in India, Indonesia, and Tanzania. A synthesis study of the endline assessments strongly supports this hypothesis as the countries with the strongest enabling environment made the most progress. At the same time, WSP's experience indicates that while all components of the enabling environment are important, not all are equally amenable to external intervention and therefore take time to address. Steps to achieving scalable and sustainable rural sanitation programs include developing country-specific models, building an evidence base, strengthening local political commitment, and initiating supply chain development.

### Enabling Environment Endline Assessment: Indonesia (WSP: Robinson; 2011)

This follow-up to the 2007 baseline assessment in East Java, Indonesia, found clear evidence of accelerated sanitation progress in project communities, estimated at roughly 10 times the national average. Because sanitation remains a local government responsibility in East Java, a decentralized, demand-responsive approach to improvement has proven highly effective. Absent centralized programs, the assessment found that "district governments were convinced to use their own institutions and resources to implement the project, resulting in sustainable arrangements and finance, cost-effective use of local resources, as well as proactive efforts to learn from others, innovate, and develop locally appropriate approaches.

### Enabling Environment Endline Assessment: Tanzania (WSP: Robinson; 2011)

Tanzania's enabling environment for rural sanitation shows highly promising developments, particularly at the national level, where greater consensus on direction and an increased separation between sanitation activities and water-supply development are evident. As the government and development partners prepare a new national sanitation program, they are working to improve enabling environment at the district level and address the challenges that scaling up to all

132 districts brings, including addressing needs and priorities of diverse conditions and maintaining implementation quality across such a large area.

#### **Identifying the Potential for Results-Based Financing for Sanitation (WSP and SHARE; Trémolet, 2011)**

Results-Based Financing (RBF) offers an alternative to traditional sanitation financing by allocating public funds based on the achievement of specified results. This working paper offers practical ideas for advancing the use of results- and performance-based financing mechanisms in the delivery of sustainable sanitation services. The proposed “Grow Up with a Toilet” RBF program in Cambodia, for example, targets sanitation finance to improving sanitation among young children and promoting ongoing sanitation development. RBF incentives can also encourage service providers to provide services to the poor, such as in Morocco, where three providers of piped water and sewerage services received subsidies based on both their completion of the project and its ongoing support.

#### **Long-Term Sustainability of Improved Sanitation in Rural Bangladesh (WSP: Hanchett, Krieger, Kahn, Kullmann, Ahmed; 2011)**

A WSP study of 53 Union Parishads, declared 100% sanitized/open defecation free almost five years ago, showed that 90% of households had sustained use of a latrine that adequately confines feces. Factors associated with this outcome include a shift in social norms away from open defecation to using a latrine; on-going sanitation programming that reinforces latrine use; and easy access to private sector sanitation providers. In addition, a comparative analysis of four programmatic approaches used revealed little variation in sustained outcomes.

#### **Political Economy of Sanitation (WSP; 2011)**

Presents the results of a Global Economic and Sector Work (ESW) study on the political economy of sanitation in Brazil, India, Indonesia, and Senegal that was conducted by WSP and the World Bank. The purpose of the study is to help WSP and sanitation practitioners in understanding the political economy of sanitation and therefore to support partner countries better in the design, implementation, and effectiveness of operations that aim to provide pro-poor sanitation investments and services to improve health and hygiene outcomes.

#### **Output-Based Aid for Sustainable Sanitation (WSP and GPOBA: Trémolet, Evans, Schaub-Jones; 2010)**

This study reviewed experience to date with Output-Based Aid (OBA) for sanitation and examined its potential to improve both the delivery of public financing to the sanitation sector and access to sustainable sanitation services. Key questions included: What explains such limited use of OBA-financing approaches for sanitation? How can OBA subsidies be delivered to providers of sanitation services? What other components (e.g., support services to small-scale independent providers, micro-finance, etc.) may be required to improve chances of success of OBA schemes for sanitation?

#### **Financing On-Site Sanitation (WSP: Trémolet, Kolsky, Perez; 2010)**

Public investments of varying forms enable an absolute increase in the number of poor people gaining access to sanitation, varying from 20 percent to 70 percent, according to a WSP study of six cases in Bangladesh, Ecuador, India, Mozambique, Sénégal, and Vietnam. This report identifies the best-performing approaches, relevant factors, and issues to consider when designing a sanitation financing strategy.

#### **Synthesis of Three Country Enabling Environment Assessments for Scaling Up Sanitation Programs (WSP: Rosensweig; 2008)**

This report synthesizes the findings from four baseline reports, including preliminary conclusions and lessons learned, and recommended interventions and practices that can be used to strengthen the enabling environment. The report also identifies knowledge gaps and priority areas.

#### **Building the Capacity of Local Government to Scale Up Community-Led Total Sanitation and Sanitation Marketing in Rural Areas (WSP: Rosensweig, Kopitopoulos; 2010)**

One of the central premises of the Global Scaling Up Rural Sanitation project is that local governments can provide the vehicle to scale up rural sanitation. In all three project countries—India, Indonesia, and Tanzania—local governments are at the center of the implementation arrangements. This report looks at the experience to date in three project locations in developing the capacity of local government to carry out its role in rural sanitation.

## Behavior Change and Sanitation Marketing

- *Case Study on Sustainability of Rural Sanitation Marketing in Vietnam*
- *Experience from Rural Benin: Sanitation Marketing at Scale*
- *Factors Associated with Achieving and Sustaining Open Defecation Free Communities in East Java*
- *Introductory Guide to Sanitation Marketing/ Online Toolkit*
- *Introducing SaniFOAM: A Framework to Analyze Sanitation Behaviors to Design Effective Sanitation Programs*
- *Sanitation Marketing in Cambodia*
- *Sanitation Marketing in Indonesia*
- *Sanitation Marketing in Tanzania*
- *Sanitation Markets at the Bottom of the Pyramid: A Win-Win Scenario for Government, the Private Sector, and Communities*

### **Introductory Guide to Sanitation Marketing and Sanitation Marketing Online Toolkit (WSP: Devine, Kullmann; 2011)**

Sanitation marketing is an emerging field with a relatively small group of practitioners who are learning by doing. This print and on-line resource was developed to assist program managers with the design, implementation, and monitoring of rural sanitation marketing programs at scale in developing countries. Includes resource documents, narrated presentations, and samples of behavior change campaign communication materials, based on WSP's experience implementing rural sanitation marketing programs in Cambodia, India, Indonesia, Peru, and Tanzania.

### **Factors Associated with Achieving and Sustaining Open Defecation Free Communities: Learning from East Java (WSP: Mukherjee; 2011)**

In East Java, participatory research in 80 communities that were triggered using CLTS techniques sought to understand the factors that can be associated with achieving and sustaining open defecation free communities. The research shows that communities achieving ODF status within two months of triggering are more likely to achieve higher access gains and remain ODF longer than communities that take many

months to achieve ODF status. These QUICKLY ODF communities represent the most efficient model for scaling up sustainably. Factors associated with QUICKLY ODF communities include high social capital, high-quality CLTS triggering, access to latrine supplies, easy payment terms, absence of external subsidy packages to a few households out of all, and regular monitoring. One significant difference between ODF and NOT ODF communities was their proximity to bodies of water, with riverbank, beach, and lakeshore communities less likely to achieve ODF status.

### **Sanitation Markets at the Bottom of the Pyramid: A Win-Win Scenario for Government, the Private Sector, and Communities (WSP: Baskovitch; 2011)**

Research conducted in 2010 in Peru to identify techniques for reaching the population at the bottom of the pyramid shows that linking public infrastructure investments in water and sanitation with strategies for ensuring access to affordable products and services, healthy behaviors, and adequate maintenance of new sanitary infrastructure can improve public policies for sanitation. Domestic private participation at the bottom of the pyramid is viable and can be achieved through efforts such as the Creating Sanitation Markets initiative, which promotes sanitation for the very poor, with a focus on the domestic private sector's active involvement in sanitation supply, and public awareness of sanitation as a business opportunity.

### **Experiences from Rural Benin: Sanitation Marketing at Scale (WSP: Scott, Jenkins, Kpinsoton; 2011)**

Presents the Benin story and its development of a successful national sanitation marketing program adapted to the rural African context. The Benin story illustrates that sanitation marketing can work even in areas without a history of hardware subsidies—a valuable lesson for other African countries seeking to develop rural sanitation marketing programs that stimulate household demand at scale.

### **Introducing SaniFOAM: A Framework to Analyze Sanitation Behaviors to Design Effective Sanitation Programs (WSP: Devine; 2009)**

Why do individuals with latrines continue to defecate in the open? What factors enable individuals or households to move up the sanitation ladder? Before sanitation behaviors can be changed, they must first be understood. The

SaniFOAM framework, developed to help answer some of these questions, categorizes sanitation behavioral determinants under Opportunity, Ability, and Motivation. With the letter F for Focus, these categories spell out F-O-A-M.

**Case Study on Sustainability of Rural Sanitation Marketing in Vietnam (WSP: Sijbesma, Truong, Devine; 2010)**

To investigate the sustainability of sanitation marketing as an approach to creating and meeting rural sanitation demands in Vietnam, WSP collaborated with IRC International Water and Sanitation Centre and ADCOM to follow up on a pilot project conducted by IDE from 2003 to 2006. Knowledge products available include: the case study, a summary report, and a presentation from one of the authors.

**Sanitation Marketing in Tanzania (WSP; 2010)**

In 2009, WSP began working with ten local governments to test the effectiveness of marketing as a method to prompt households in rural Tanzania to invest in improving their sanitation facilities. Lessons include: 1) Fall in line with national reporting structures to make monitoring and evaluation easier; 2) Design the program around the consumer’s immediate needs and wants to bridge the knowledge-behavior gap; 3) Integrate supply and demand activities; and 4) Strengthen the supply chain.

**Sanitation Marketing in Indonesia (WSP; 2010)**

In a country where rural sanitation access rates remained stagnant at under 40% for recent decades, sanitation has suddenly become a profitable, fast growing business. This video features small-scale sanitation entrepreneurs serving households in Indonesia’s East Java province, one of the most densely populated places on earth (38 million people).

**Sanitation Marketing in Cambodia (Rosenboom, Jacks, Kov, Robert, Baker; 2011)**

A pilot sanitation marketing program was launched in Cambodia to make affordable, desirable latrines available through market channels. Option design, contractor training, awareness raising, and marketing resulted in a branded, low-cost pour-flush latrine. Trained suppliers have sold more than 7,400 units 22 months after project inception. Planned next steps include expanding

technology choices (still lower costs, and/or suitable for challenging physical circumstances), developing stronger linkages with micro-credit schemes and developing approaches for scaling up the approach. Published in *Waterlines*, Volume 30, Number 1.

**Performance Monitoring**

- *A Decade of the Total Sanitation Campaign: Rapid Assessment of Processes and Outcomes*
- *Benchmarking Local Government Performance on Rural Sanitation*
- *Case Study on the Sustainability of Rural Sanitation Marketing in Vietnam*
- *Factors Associated with Achieving and Sustaining Open Defecation Free Communities*
- *Learning by Doing: Working at Scale in Ethiopia*
- *Long-Term Sustainability of Improved Sanitation in Rural Bangladesh*
- *Managing the Flow of Monitoring Information to Improve Rural Sanitation in East Java*
- *Monitoring Systems for Incentive Programs: Learning from Large-scale Rural Sanitation Initiatives in India*
- *Results from Working at Scale for Better Sanitation and Hygiene in Amhara, Ethiopia: Baseline and Endline Comparisons of Institutional, Household, and School Surveys*
- *Utilizing Community-Based Registers to Monitor Improved Access to Sanitation and Hygiene in Tanzania*

**Factors Associated with Achieving and Sustaining Open Defecation Free Communities: Learning from East Java (WSP: Mukherjee; 2011)**

In East Java, participatory research in 80 communities that were triggered using CLTS techniques sought to understand the factors that can be associated with achieving and sustaining open defecation free communities. The research shows that communities achieving ODF status within two months of triggering are more likely to achieve higher access gains and remain ODF longer than communities that take many months to achieve ODF status. These QUICKLY ODF communities represent the most efficient model for scaling up sustainably. Factors

associated with QUICKLY ODF communities include high social capital, high-quality CLTS triggering, access to latrine supplies, easy payment terms, absence of external subsidy packages to a few households out of all, and regular monitoring. One significant difference between ODF and NOT ODF communities was their proximity to bodies of water, with riverbank, beach, and lakeshore communities less likely to achieve ODF status.

**Utilizing Community-Based Registers to Monitor Improved Access to Sanitation and Hygiene in Tanzania (WSP: Coombes; 2011)**

Efforts to systematically collect data to monitor sanitation and hygiene conditions at the community level face many challenges. To address some of these challenges in Tanzania, WSP collaborated with local governments and village-level CLTS committees to implement community-based and managed registers. This Learning Note reports on a validation exercise conducted through a random sampling of sub-villages and households to assess the use of the registers, including the accuracy and frequency of data collection.

**Long-Term Sustainability of Improved Sanitation in Rural Bangladesh (WSP: Hanchett, Krieger, Kahn, Kullmann, Ahmed; 2011)**

A WSP study of 53 Union Parishads, declared 100% sanitized/open defecation free almost five years ago, showed that 90% of households had sustained use of a latrine that adequately confines feces. Factors associated with this outcome include a shift in social norms away from open defecation to using a latrine; on-going sanitation programming that reinforces latrine use; and easy access to private sector sanitation providers. In addition, a comparative analysis of four programmatic approaches used revealed little variation in sustained outcomes.

**Learning by Doing: Working at Scale in Ethiopia (Faris (WSP); Rosenbaum (FHI 360/WASHplus):2011)**

In 2006, WSP partnered with the Government of Ethiopia, the Amhara Regional Health Bureau, and USAID's Hygiene Improvement Project (HIP) to launch the Learning by Doing Initiative in Amhara Regional State.

The project started at scale, reaching an initial 93,000 households in four districts (estimated population of 418,000) and then expanded further to include an additional 90 districts. Overall, 5.8 million people were reached and 2.8 million more people stopped practicing open defecation and now use an open pit latrine. Key strategies discussed included building capacity at the community level and developing and testing tools and training manuals.

**A Decade of the Total Sanitation Campaign: Rapid Assessment of Processes and Outcomes (WSP: 2011)**

Analyses primary and secondary data on the Government of India's Total Sanitation Campaign to understand the processes, outputs and outcomes at national and state levels and to benchmark the relative performance by states. This benchmarking, based on a combination of eight indicators, was undertaken for both states and districts across the country.

**Monitoring Systems for Incentive Programs: Learning from Large-Scale Rural Sanitation Initiatives in India (WSP: Kumar, Singh, Prakash; 2010)**

WSP assessed two monitoring systems, one on the national level and the other at the state level, analyzing the process to identify best practices for scaling up and replication. These systems, together with the participation of local governments, have promoted a significant increase in rural sanitation coverage.

**Managing the Flow of Monitoring Information to Improve Rural Sanitation in East Java (WSP: Murkherjee; 2011)**

WSP's Global Scaling Up Rural Sanitation has linked community-based sanitation access monitoring in real time with district- and province-level databases. A key innovation has been the development of a monitoring system that uses cell phones, SMS-text messaging, and a central database to transmit and store information reported from the field.

**Benchmarking Local Government Performance on Rural Sanitation (WSP: Kumar, Singh; 2010)**

To strengthen outcome-focused management of the rural sanitation sector in India, the Water and Sanitation Program's Global Scaling Up Sanitation Project, in partnership

with the Government of Himachal Pradesh, developed a five-step process to monitor and benchmark performance on a monthly basis across all 12 districts in the state. “Benchmarking” introduces the five-step process and key learnings drawn from experiences to date.

### Knowledge into Policy and Action

- *Emergent Learning about Learning*
- *Findings from the Impact Evaluation Baseline Survey in Indonesia*
- *Partnering on the Road Towards Achieving Total Sanitation in East Africa*

#### Partnering on the Road Towards Achieving Total Sanitation in East Africa (WSP: Coombes; 2011)

In East Africa, access to basic sanitation remains low, and intensive work is needed across the region to achieve sustained scaling up of sanitation. Determining how governments and non-governmental agencies can work together more effectively to achieve this goal is essential. This Learning Note highlights a learning exchange held for representatives from the Government of Tanzania and six non-governmental organizations. An initial outcome included consensus on a set learning questions to expand the knowledge base in areas such as equity and inclusion, sanitation marketing, and monitoring and evaluation.

#### Global Learning Strategy (WSP; 2008)

The purpose of this learning strategy, applicable to the entire Global Scaling Up Rural Sanitation Project team, is to develop a structured process of generating, sharing, capturing, and disseminating knowledge about what works in scaling up and sustaining sanitation programs. This learning process will help enable evidence-based decisions by policy makers and implementation of large-scale programs.

#### Emergent Learning about Learning (WSP: Frischmuth; 2011)

A challenge for projects implemented at scale and in multiple countries is to capture and disseminate learning in a way that is systematic, timely, and of benefit to country teams, clients, partners, and programmers. Another challenge is to continuously test key assumptions underlying the program design

and activities. To mitigate these challenges, WSP developed a Team Charter, Learning Action Plans, and Learning Strategies to establish and support a culture of learning. Learning has also been integrated learning into the Results Framework.

#### Findings from the Impact Evaluation Baseline Survey in Indonesia (WSP: Cameron, Shaw; 2010)

Baseline data collected from nearly 2,100 households reveals high rates of diarrhea and associated disorders such as childhood anemia. These health outcome measures will continue to be tracked during the project to assess the causal impacts of the project interventions.

### Video

- *Bangladesh: No Way Out Without a Sanitary Latrine*
- *Cambodia: Making It Easy*
- *Ethiopia: Stepping on the Sanitation Ladder*
- *India: Nirmal Bharat—A Journey through a Clean India*
- *India: We Adopted Sanitation*
- *Indonesia: Marketing Sanitation in East Java*
- *Indonesia: Mendadak Mules*
- *Indonesia: Sanitation Marketing/CLTS Intervention in District Sequence*
- *Indonesia: Triggering—Only the First Step of CLTS*
- *Indonesia: Unleashing Latent Demand for Sanitation*
- *Pakistan: The Story of Younis*
- *Peru: Inaugurating a Dream*
- *Peru: Let's Change Their Future*
- *Peru: Sanitation, A Great Deal*
- *Peru: The New Wave*
- *Tanzania: Moving Up the Sanitation Ladder*

#### Bangladesh: No Way Out Without a Sanitary Latrine—

A popular folk singer shares the adverse impacts of open defecation, explaining that sanitary latrines for all is imperative, need not be expensive, and is necessary for health.

**Cambodia: Making It Easy—Sanitation Marketing in Cambodia**—Overview of the Sanitation Marketing Project launched in Cambodia in early October 2009, with a goal



to have more than 10,000 toilets installed by households in rural villages over a period of 18 months through market force and demand creation activities.

**Ethiopia: Stepping on the Sanitation Ladder**—This video tells the story of Ethiopia’s progress since the year 2000 in reducing the practice of open defecation in the East African nation.

**India: Nirmal Bharat: A Journey through a Clean India**—In rural areas of India, nearly 18,000 million liters of liquid waste and 0.4 million metric tons of solid waste is generated daily. This video introduces several models of rural waste management that have been successfully implemented at various levels.

**India: We Adopted Sanitation, We Selected Himachal’s Pride**—In this video produced to promote safe sanitation in Himachal Pradesh, individuals representing family, school, and local government save their pride by adopting safe sanitation, therefore also saving the pride of Himachal Pradesh.

**India: The New Wave—Scaling Up Sustainable Sanitation in Rural India**—Documents new approaches in rural sanitation which advocate for community-driven approaches, appropriate policies, incentives for achievement, and decentralized responsibilities for implementation.

**Indonesia: Sequencing Sanitation Marketing/CLTS Interventions**—Summarizes the district technical assistance process, using Community-Led Total Sanitation (CLTS) strategies.

**Indonesia: Triggering—Only the First Step of CLTS**—Shows that triggering CLTS in communities and then forgetting about them is a sure way to fail to bringing about collective behavior change.

**Indonesia: Unleashing Latent Demand for Sanitation**—Shows how Scaling Up Rural Sanitation began campaigns

to raise consumer demand for sanitation amid competing priorities among community members.

**Indonesia: Marketing Sanitation in East Java**—Features small-scale sanitation entrepreneurs serving households in Indonesia’s East Java province, one of the most densely populated places on earth.

**Indonesia: Mendadak Mules**—Discusses safe sanitation and hygiene practices, as told through the story of one family in rural Indonesia.

**Pakistan: The Story of Younis**—This animated short film details the travails of a barefoot consultant who promotes sanitation in villages in Pakistan. The consultant prospers in his work and develops a working sanitation market, he achieves such success that he is soon asked to travel to other villages to help them become open defecation free.

**Peru: Let’s Change Their Future**—Shares the findings of baseline research conducted for a sanitation marketing initiative, as told from a child’s point of view.

**Peru: Inaugurating a Dream**—Shares the excitement of a poor family as they celebrate their new bathroom.

**Peru: Sanitation, A Great Deal**—Shares business opportunities in sanitation for small retailers, medium wholesalers, large-scale sanitation and construction suppliers, local providers of plumbing and masonry services, communal sales promoters, and microfinance institutions.

**Tanzania: Moving Up the Sanitation Ladder**—Describes how communities in rural Tanzania are reducing the spread of disease and creating local sanitation markets. Local masons are trained to make slabs, or Sanplats, which are more hygienic. These are purchased for \$5 and added to existing pit latrines.





