



# How to Scale Up Rural Sanitation Service Delivery in Indonesia



**WORLD BANK GROUP**

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### PROJECT DATA

**PARTNER ORGANIZATION:**  
World Bank

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Multilateral

**DELIVERY CHALLENGE:**  
Identity, culture, and norms

**DEVELOPMENT CHALLENGE:**  
Access to water and sanitation

**SECTOR:**  
Water and sanitation

**COUNTRY:**  
Indonesia

**REGION:**  
Asia

**PROJECT DURATION:**  
November 2006–present

**PROJECT TOTAL COST:**  
US\$8.8 million

**ORGANIZATION COMMITMENT:**  
US\$7.6 million

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## In Brief

- **Development Problem:** More than 100 million of Indonesia’s 250 million people lack access to improved sanitation, with some 54 million practicing open defecation. In rural areas, only 46 percent of the population has access to improved sanitation, and another 31 percent of rural residents defecate in the open.
- **Program Solution:** Shift the paradigm from investment in “hardware” to investment in behavioral change.
- **Program Results:** Indonesia provided 25 million rural people with access to improved sanitation in rural areas in the last decade.

## Executive Summary

How did Indonesia provide 25 million rural people with access to improved sanitation in the last decade? Was its paradigm shift—from subsidizing the purchase of latrines to changing people’s behavior—responsible for its success? This case study tracks how the government and development partners introduced community-led total sanitation (CLTS) and developed total sanitation and sanitation marketing (TSSM). It identifies key delivery challenges implementers faced and analyzes the decisions and actions they took to help overcome many of them.

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 This case study was prepared by Sarah Glavey and Oliver Haas. Eddy Perez, Nila Mukherjee, Jacqueline Devine, Deviariandy Setiawan, and Craig Kullmann provided crucial guidance and feedback. Many thanks to all of the interviewees and others who contributed their time.

**Lack of improved sanitation is an enormous problem in Indonesia.** More than 100 million of the country's 250 million people lack access to improved sanitation, with some 54 million practicing open defecation. In rural areas, just 46 percent of the population has access to improved sanitation, and another 31 percent of rural residents defecate in the open (WHO Global Health Observatory 2012). The scale of the need dwarfed Indonesia's ability to deal with it, leading to a decline in rural access to sanitation, from 43 percent in 1985 to 37 percent in 2008.

**In the early 2000s, the government was not making sufficient progress in improving access to rural sanitation services to meet national and international targets.** It needed to find a way to increase private investment in sanitation and new mechanisms of delivering services at scale.

**Its efforts yielded results: between 2002 and 2012, the proportion of the rural population without access to improved sanitation fell from 64 to 54 percent (WHO/UNICEF Joint Monitoring Programme 2015).** Between 1990 and 2012, the share of rural residents that engaged in open defecation fell from 49 percent to 31 percent. These gains were made possible by a concerted effort by multiple stakeholders, led by the government, to scale up rural sanitation services across the country and to learn through implementation. Through a combination of top-down policies and grassroots behavior change, these efforts helped 25 million people access improved sanitation facilities in the last decade.

**Using qualitative research methods, including a literature review and key informant interviews, this case study examines the implementation process to better understand the “how” and “why” of service delivery (see annex A for a list of interviewees).** It maps stakeholders' pain points, incentives, and interests to understand how the government planned and implemented service delivery.

**With the support of donors, including the World Bank's Water and Sanitation Program (WSP), the government engaged in a systematic process of proving from the bottom up that behavior change improved rural sanitation outcomes and provided benefits for citizens.** At every step along the way, it generated local evidence to support further scaling up—from the village level to the province level to the multiprovince level to the national level. This evidence

was produced and packaged in a way that was accessible to implementers. Importing and adapting methods from other countries, including the community-led total sanitation (CLTS) project from India/Bangladesh and sanitation marketing from Vietnam, was a key part of this journey.

**Implementation of successful study/learning visits to observe new methods was important in showing rather than telling stakeholders what could work.** Many champions were created through the process of witnessing the positive impact of first CLTS and then TSSM. This case study illustrates the importance of champions for rural sanitation at many levels of government, but it also shows that success depended on mobilizing and institutionalizing support beyond them.

**Interministerial coordination—through mechanisms including the Water Supply and Sanitation Policy and Action Planning (WASPOLA) Working Group—was crucial in ensuring that all relevant ministries were involved in developing the agenda for rural sanitation.** Engagement of key community groups was essential, including the women's organization Pemberdayaan Kesejahteraan Keluarga (PKK), which means empowerment family welfare, as well as religious leaders. To do so, leaders leveraged informal social structures, such as a network of district administrators' wives. Initial field trials were embedded in two large-scale projects to maximize resources and lay the foundations for scaling up.

**Multiple development partners provided technical assistance.** The government and development partners learned how to work together and adapt to ensure that the most relevant technical assistance was available. The WSP's input evolved from a small-scale hands-on role to development of its own capacity to support government to a less intensive role as the government developed its own capacity. There was a focus on scaling up human resources and building capacity.

**This case is about improving citizen outcomes.** The government and its partners focused on achieving benefits, gaining support by publicizing successes, and then scaling up. As a result of this shift in paradigm, 25 million people gained access to improved sanitation in rural Indonesia in the last decade. The change improved health outcomes, including the reduction of diarrheal and parasitic diseases, and enhanced the overall quality of life for Indonesia's rural citizens.

## Introduction

Gema Sparringa proudly shows off the new latrine inside her house and the septic tank outside. “My family doesn’t need to use the smelly open pit anymore,” she says, smiling widely. “Now we use the latrine inside in comfort at night.” Gema and her husband, Budi, a rice farmer, borrowed the money for the latrine from the local bank and paid it back at harvest time.

Fifteen delegates from the Lao People’s Democratic Republic, the Philippines, and Pakistan have come on a study visit organized by the World Bank’s Water and Sanitation Program (WSP).<sup>1</sup> Azma Azhid Bokhari, a member of the provincial assembly in Punjab, Pakistan, is talking animatedly to the Sparringas and taking notes. Pakistani officials asked Azhid Bokhari to come to Indonesia in the hopes that she will champion the cause of rural sanitation in their country. Later that evening she agrees to make rural sanitation a priority of her work in Punjab.

The government of Indonesia has helped 25 million people access improved sanitation facilities through a combination of top-down policy and bottom-up behavior change. This is the story of how they did it.

### The Development Challenge: Open Defecation and Its Pernicious Effects

In Cambodia, Indonesia, Lao PDR, the Philippines, and Vietnam, poor sanitation causes at least 180 million disease episodes and 100,000 premature deaths annually (World Bank 2006). More than 100 million of Indonesia’s 250 million people still lack access to improved sanitation (2012 figures from World Bank databank), and some 54 million people practice open defecation (WHO/UNICEF 2012). The problem is magnified in rural areas, where just 46 percent of people have access to improved sanitation and another 31 percent still regularly engage in open defecation (WHO Global Health Observatory 2012).

Of the four leading causes of under-five mortality in Indonesia, two—diarrhea and typhoid—are preventable fecal-borne illnesses directly linked to inadequate

sanitation and hygiene. Eleven percent of children in Indonesia suffer from fecal-borne diseases in any two-week period. More than 33,000 children die each year from diarrhea, and another 11,000 die from typhoid (Cameron, Shah, and Olivia 2013).

The economic costs of poor sanitation and hygiene are also significant. Indonesia lost an estimated \$6.3 billion to poor sanitation and hygiene in 2006—equivalent to 2.3 percent of the country’s gross domestic product (World Bank 2008). Poor sanitation also affects education and gender equality outcomes, as women and girls are disproportionately affected by lack of access to improved sanitation.

### The Delivery Challenge: Increasing Commitment, Changing Behavior

By the early 2000s, the need for rural sanitation services in Indonesia was clear. The government was faced with the challenge of delivering services at scale in a geographically dispersed and decentralized country. Half the country’s population was without improved sanitation services, including more than 60 percent of the rural population (WHO Global Health Observatory 2012).

In addressing water and sanitation issues, sanitation was the “forgotten twin.” Existing policies, which centered on investment in infrastructure and subsidies, had failed to achieve results. An estimated \$600 million in annual investment during 2005–15 was needed to achieve the country’s water and sanitation Millennium Development Goal targets—far more than the government and donors could provide.

The Indonesian government had invested an average of just \$27 million a year in the sector over the previous 30 years, and most of it had gone to urban areas. Population growth and lack of effective large-scale rural sanitation programs had led to a decline in rural access to sanitation at the national level, from 43 percent in 1985 to 37 percent in 2008 (Perez 2012).

A new approach was called for. The government needed to increase private investment in sanitation and find new mechanisms for delivering services at scale, particularly to poor people living in a range of dispersed geographical locations across the country’s 17,000 islands.

This case study outlines the story of the paradigm shift in Indonesia from investment in hardware subsidies to investment in behavior change. It tracks how it

<sup>1</sup> The WSP is a multidonor 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.

introduced community-led total sanitation (CLTS) and total sanitation and sanitation marketing (TSSM). It identifies some of the key delivery challenges faced by implementers and the decisions and actions that helped overcome many of these challenges.

Between 2003, when the government introduced the first policy for community-based water supply and sanitation, and 2014, when CLTS was incorporated into the national policy, sanitation became a priority for national and local governments. During this time, 25 million people gained access to improved sanitation in rural Indonesia.

This case study answers the following delivery questions:

1. How did a paradigm shift take place from supporting infrastructure to supporting behavior change?
2. How did scaling up a rural sanitation service become a priority for local and national governments?
3. How did the government and donors learn in an adaptive way through implementation of this national service?
4. How did the provision of technical assistance by development partners evolve alongside the paradigm shift?

## Contextual Conditions

The shift toward investment in behavior change took place in the context of the government's wider policies and programs to address rural sanitation needs. The introduction of CLTS, and the adaptation, development, and scaling up of services, intertwined with policy making over a period of more than 15 years (see table 1). This case focuses on the service delivery challenges faced and the solutions introduced during key moments that influenced the trajectory of the scaling up process.

## Geography and Decentralization

Indonesia is the world's fourth most populous country, with about 250 million people. It is made up of more than 17,000 islands and divided into 33 provinces and the capital city, Jakarta (map 1).

The government adopted a strategy of decentralization in 2001, under which regencies<sup>2</sup> and municipalities

became the key administrative units responsible for providing most government services, including water and sanitation. Policy and regulatory responsibilities for the water and sanitation sector are shared by several ministries, including the Ministry of Health, the Ministry of Home Affairs, the Ministry of Public Works, and the Ministry of National Development Planning (BAPPENAS). Key working groups and projects, including the National Water Supply and Environmental Sanitation Working Group and the National Program for Community Empowerment (PNPM), also influence the water and sanitation agenda.

## Policy Context

In 1998, the government embarked on an initiative to develop a national policy for the development of community-based water supply and environmental sanitation through the Water and Sanitation Policy Formulation and Action Planning (WASPOLA) project.<sup>3</sup> A multisectoral approach to policy development was evident. The central government took the lead on policy development, but supporting policies were developed at all levels of government, down to the village level. The policy context intertwined with implementation processes; key stakeholders leveraged policies to promote implementation, and evidence from implementation was used to inform policy. The policy context was one element of the enabling environment that was defined and monitored through the TSSM project.

## Donor Involvement

The Millennium Development Goals seek to halve the proportion of the global population without sustainable access to safe drinking water and basic sanitation by 2015. More than a quarter of the world's population gained access to improved sanitation since 1990. Despite this progress, 2.5 billion in developing countries still lack access to improved sanitation facilities, and 1 billion people still engage in open defecation. The vast majority of people practicing open defecation (82 percent) live in populous middle-income countries, such as Indonesia.

The WSP played a key role in providing a knowledge base for scaling up rural sanitation in Indonesia. It facilitated key projects that influenced the process, including WASPOLA. During the period presented in this case

<sup>2</sup> A regency is a local level of government beneath the provincial level. There are 405 regencies in Indonesia.

<sup>3</sup> WASPOLA was a partnership between the government and the WSP, East Asia and the Pacific.

**Table 1 Timeline for Rural Sanitation Initiatives in Indonesia**

Year	Initiative
1998	Water Supply and Sanitation Policy and Action Planning Facility (WASPOLA) seeks to build a paradigm for community-based sustainable drinking water and sanitation services.
2001	Indonesian government is decentralized.
2003	Government develops National Policy for the Development of Community-Managed Water Supply and Environmental Sanitation Facilities and Services.
2004	Government representatives visit Bangladesh and India and commit to pilot community-led total sanitation (CLTS) in Indonesia.
2005–06	The Water and Sanitation Program (WSP) initiates CLTS in six provinces through the Second Water and Sanitation for Low Income Communities (WSLIC 2) and Asian Development Bank projects. A village in Lumajang, East Java, is the first in Indonesia to achieve open defecation free status.
2006	The Bill & Melinda Gates Foundation funds total sanitation marketing (TSSM) projects in Indonesia, India, and Tanzania.
2006–10	Total sanitation and sanitation marketing (TSSM) is implemented by the WSP and the World Bank, with funding from the Bill & Melinda Gates Foundation.
2008	Community-based total sanitation (STBM), including CLTS, is launched as the national rural sanitation strategy through a Ministry of Health decree.
2008–09	Definition of the term open defecation free (ODF) and use of ODF as benchmark within the TSSM approach in East Java.
2009	Key market research report is produced.
2010	The National Development Strategy for 2010–14 (RPJMN) sets the main objective of sanitation development as open defecation free status in Indonesia by 2014, with nationally applicable definition of open defecation free.
2011	STBM policy and operational guidelines are developed.
2012	STBM Secretariat is established to strengthen coordination and strategic direction. Scaling Up Rural Sanitation Programme is established— expanding TSSM to five provinces.
2013	Minister of Health Circular Letter No. 132 encourages villages to achieve open defecation free status.
2014	Ministry of Health issues Regulation No. 3, on community-based total sanitation.
2014	Capacity building is institutionalized; accredited curriculum is integrated into health schools and distance learning. As of the beginning of 2014: 18,400 villages had implemented STBM, 3,000 villages were open defecation free, and 25 million additional people in rural areas had access to improved sanitation.

Note: STBM = Sanitasi Total Berbasis Masyarakat.

**Map 1 Indonesia**

Source: University of Texas Libraries.

study, it provided technical support to the government of Indonesia in identifying potential new mechanisms to scale up rural sanitation services and in implementing them. It worked closely with the World Bank's Country Program (although the structures are separate). The World Bank Group administered the Water & Sanitation for Low Income Communities Project (WSLIC) 1 and 2 in Indonesia and its successor, PAMSIMAS. The WSP supported TSSM in East Java between 2006 and 2011 and worked with the World Bank to design and initiate the PAMSIMAS project following WSLIC 2. The Bill & Melinda Gates Foundation provided funding for TSSM in East Java as part of a global project to learn about scaling up rural sanitation. Its goal was to provide access to improved sanitation to 10 million additional people in three countries (India, Indonesia, and Tanzania).

## Tracing the Implementation Process

About 17.5 million rural people in Indonesia gained access to improved sanitation between 2008 and 2013. More than 18,000 villages implemented the government's program for community-based total sanitation (Sanitasi Total Berbasis Masyarakat, STBM), and 2,867 villages were declared open defecation free by 2014. By 2012, rural sanitation coverage was 46 percent (WHO Global Health Observatory 2012). Over a period of about 10 years, the government successfully shifted its approach from investment in infrastructure to investment in behavior change. As a result, 25 million rural citizens benefited.

These gains were possible because of a concerted effort by multiple stakeholders to scale up rural sanitation services across the country and because of a process of learning through implementation. The government led implementation and learning, with the support of a range of partners from the public and private sectors.

This case tells one part of the story, focusing on some of the interactions between the government and key development partners, including the WSP and the World Bank. It takes a high-level view of key moments that affected the trajectory of attempts to scale up rural sanitation in Indonesia, identifying key actions and interventions and providing insights into the rationale behind these actions (see the causal map in annex B for a visual representation of the process).

## First National Policy to Include Rural Sanitation (2003)

In 2003, Indonesia's government made the commitment to improve rural sanitation, but it did not have the know-how to scale up its efforts. WASPOLA had been working hard for five years, evaluating past and ongoing water and sanitation project experiences and analyzing lessons learned, in collaboration and consultation with key sector stakeholders, such as funding partner agencies, local governments, nongovernmental organizations, and academia.

Their efforts culminated in 2003. The Ministry of National Development Planning (BAPPENAS) came together with the Ministry of Health, the Ministry of Home Affairs, and the Ministry of Finance to launch the National Policy for the Development of Community-Managed Water Supply and Environmental Sanitation Facilities and Services (inflection point). At the time, recalls Nugroho Tri Utomo, the current chair of the National Water and Sanitation Working Group, "sanitation was the poor twin, behind water."

The new policy was the first to address rural sanitation at the national level. The policy message was clear: evaluations of all major rural water and sanitation projects in the country had shown that the "stimulant approach"—providing construction subsidies to households—was not achieving results and that a new approach was needed.<sup>4</sup> Rural sanitation would henceforth be addressed at the local level rather than by the central government alone. The policy gave decision-making powers to communities for choosing, planning, implementing, using, and maintaining their water and sanitation services; it changed the role of the government to that of a facilitator of community initiatives (organizational change).

Local government officials noted the new policy with interest while wondering what it would mean in practice. Water and sanitation agenda spanned multiple ministries; Ministry of National Development Planning (BAPPENAS) officials knew that coordination was therefore crucial. When the policy was approved, a national-level interministerial working group, funded by

<sup>4</sup> The World Bank's Water and Sanitation Program (WSP) evaluated rural sanitation components of the Rural Water Supply and Sanitation projects funded by UNICEF (WSP 1997), AusAID (World Bank 1998, 2011), and the World Bank (First Water and Sanitation for Low-Income Communities [WSLIC 1] and Second Water and Sanitation for Low-Income Communities [WSLIC2]). Participatory evaluation by communities included in the projects informed all the evaluations.

the government, was set up to guide the implementation process (organization change). It was the responsibility of the working group to implement the policy. However, no details were available about implementing the new rural sanitation policy. The “know-how” was missing (pain point).

Past policies had failed, and the government faced funding constraints (pain points). Officials were actively searching for a new approach to rural sanitation that would prove more successful than past interventions at delivering improved sanitation to Indonesia’s dispersed rural population.

In early 2004, officials from the Ministry of Health approached the WSP for technical advice (inflection point). The WSP had supported WASPOLA in developing the new water and sanitation policy and had a good working relationship with the group. The WSP and the Ministry of Health had also worked closely together on previous projects, including WSLIC 2.

Nila Mukherjee, a WSP social development specialist, was the Task Team Leader for WSLIC 2 when Ministry of Health officials came seeking advice. She had heard about the success of community-led total sanitation, which the WSP had supported in Bangladesh and India, and wondered whether it might provide a solution (box 1).

Between 1997 and 2005/06, the WSP organized annual regional knowledge exchanges in East Asia. Topics were typically chosen based on client demand. During the late 1990s and early 2000s, demand for sanitation topics was high (feedback loop). Nila Mukherjee recognized the opportunity to introduce the CLTS approach to colleagues in East Asia. She invited Kamal Kar, who established the approach in Bangladesh, to attend the 2004 conference (inflection point). Kar presented

the experience of developing CLTS in Bangladesh in 2000 and disseminating the method to India. Many of the delegates from the region were incredulous at the prospect of investing in behavior change, a major shift from the policy of subsidizing latrines; skepticism was high (feedback loop).

Realizing the importance of “showing as well as telling,” Mukherjee’s team organized a field visit for Indonesian government representatives. The objective was to show officials the reality of implementing CLTS at the community level in both Bangladesh and India. Delegates were chosen carefully. Mukherjee liaised first with members of the WASPOLA Working Group, which included members from the ministries who had previously worked well together and had formed close relationships through the development of the new policy. She viewed this group as the “principal vehicle for any kind of innovative thinking” at the time. Central government officials suggested bringing local government representatives “to provide a reality check” for new ideas. They chose delegates from East Java, West Java, West Nusa Tenggara, and South Sumatra provinces. Choosing a mixture of national and local government delegates for the visit was crucial (inflection point). The trip was planned through several consultation meetings with delegates. It took place in December 2004, with support from the WSP’s Delhi and Dhaka offices.

“Until they went, nobody was convinced that anything like CLTS would work. They believed it only when they arrived in Bangladeshi villages, when they walked around and spoke to people,” said Mukherjee (inflection point). The delegation visited poor communities in Bangladesh that had changed their behavior and were

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### Box 1 What Is Community-Led Total Sanitation?

Community-led total sanitation (CLTS) provides a range of tools and principles for triggering behavior change. A facilitator, typically a local health worker or “sanitarian,” comes to the village and sits with the community. Together they draw a map of the community. The facilitator asks community members to mark on the map the places where they defecate. He or she then asks community members to mark the places where they eat, wash, and draw water. As the community comes to understand that open defecation leads to contamination of their food and illness for their families, they typically experience feelings of shame and disgust as well as a desire for increased self-respect and collective responsibility. As a community, they decide on a plan to create a healthier village. The facilitator monitors and spurs further progress, invoking pride by publicly praising households that have latrines and have stopped open defecation and shame by publicly identifying those that have not.

Source: CLTS Foundation 2015.

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open defecation free. The program had achieved results by leveraging local culture. Delegates saw how children and community representatives from a range of different groups were involved. According to Deviariandy Setiawan, a consultant with the WSP at the time, from this visit and from consulting directly with community members, delegates saw the power of real community empowerment (inflection point).

“Early believers” from this visit, particularly from the Ministry of Health, became some of the strongest champions of CLTS in Indonesia. However, according to Deviariandy Setiawan, “there were lots of pessimists initially who thought, ‘Just because it works there doesn’t mean it will work here.’” Institutional arrangements in Bangladesh, India, and Indonesia were very different. In India, for example, the Ministry for Rural Development and the *panchayati raj* (decentralized local government institutions) were responsible for sanitation. In Indonesia rural water and sanitation is the responsibility of the Ministry of Health, and urban water and sanitation are under the Ministry of Public Works (pain point). Central and local government officials wanted to see evidence that CLTS could work in Indonesia.

## Field Trials

While enthusiasm was still high from the field visit, WSP and WASPOLA representatives agreed to design a series of CLTS field trials in Indonesia (inflection point). Because many past interventions had failed, the government had become wary of small-scale pilots. CLTS was therefore introduced as field trials in two large-scale projects, so that the lessons learned could immediately be taken to scale. The champions of CLTS at the WSP and the Ministry of Health aligned their efforts closely to the national policy and engaged with the Water and Sanitation Services Working Group, which had leverage to influence the sector agenda.

The issue of scale was emphasized from the beginning. The Ministry of Health suggested that the field trials be implemented through two existing large-scale initiatives—the World Bank–supported WSLIC-2 project and the Asian Development Bank–supported Community Water, Sanitation and Hygiene project—to minimize costs and the need for additional staffing and infrastructure (inflection point). Together the two projects were engaging with 10 of Indonesia’s most populous provinces. The government deliberately chose

districts across six of these provinces, in order to include a range of geographical conditions, from coastal to agricultural to island locations, with the intention of testing whether CLTS worked in various environments across Indonesia (organizational change). Ministry officials were “desperate for change and felt that CLTS was a light at the end of the tunnel,” recalls Mukherjee.

The WSP decided to bring in Kamal Kar again, this time to lead CLTS training workshops. Five-day workshops were held at the six locations to train local government staff working on the two projects. Kar delivered the training in English, which was translated by a consultant with the WSP.

Kar’s initial trainings, based on his experiences in Bangladesh, had mixed results. “In some project sites it worked very well, in others it raised a lot of resistance. In one village he almost got beaten up!” recalls Mukherjee (pain point/feedback loop). The team soon realized that the issues raised in training were culturally sensitive and that the training would need to be adapted to the Indonesian context.

Deviariandy Setiawan, the consultant who served as translator, began to adapt his translation of the training. He remembers it as “a great learning experience and vastly entertaining” (adaptation/refinement). Representatives from the Ministry of Health and the WSP who had participated in Kar’s training sessions went on to lead the training in the remaining four provinces. The team recognized that as well as the tone of training, the content needed to be adapted based on context-specific challenges. In Bangladesh, for example, people defecate in fields; in Indonesia they usually use rivers. As a result, “the problem is not visible, you can’t smell it and you really can’t use the same triggers,” explained Mukherjee (adaptation/refinement). Between May and July 2005, about 200 facilitators attended CLTS training courses organized by the Ministry of Health and the WSP. During this period, CLTS was initiated in 24 rural communities (Robinson 2005).

Although CLTS training was not uniformly successful, it achieved some positive results in all six districts. By 2006, two subdistricts in East Java and Sumatra had been declared free of open defecation (feedback loop). This evidence that CLTS could work across a range of Indonesian contexts persuaded the government that the approach had the potential to be successful at scale (feedback loop). With evidence that behavior change

was possible following CLTS training, some of the nonbelievers started to change their minds. “It was a very eye-opening experience to see CLTS in action . . . seeing is believing, and the local government could see. The first two years were in the air, but with evidence, there was no reason not to prioritize CLTS,” said Nugroho Tri Utomo, the current chair of the National Water and Sanitation Working Group.

The Ministry of Health and the WSP were pleased with the initial success of the field trials. In collaboration with the World Bank and the Asian Development Bank, they made the decision to scale up from six trial districts to all of the districts involved in the two projects—about 150 in total—starting in 2006. Local governments came together to ask the Ministry of Health to change the WSLIC loan agreement, because they wanted to use the money to fund CLTS instead of providing subsidies (behavior change). The Ministry of Health and the World Bank negotiated an amendment to the loan in 2006, and funding for construction subsidies was diverted for triggering collective behavior change (organizational change). All WSLIC districts started to implement CLTS training immediately, creating high demand for the relatively small number of trained facilitators. “For 2 districts you can bring Kamal Kar, you can’t bring him to 150,” said Mukherjee. To multiply this effect, the people whom Kar initially trained became national trainers and traversed the country for a year (adaptation/refinement).

An evaluation of the field trials showed that just 30 percent of people trained in the districts became fully fit to engage villages with CLTS practice (feedback loop). The main reason for this failure—time constraints—was identified through feedback from trainees in the months following training, during regular project supervision visits to the districts by Ministry of Health, WSP, and World Bank staff. CLTS facilitators and trainers needed to learn, practice, and reflect perhaps 20 times before they were fully competent, and many of the original trainers did not have time available to do so.

WSP staff saw that the main challenge for scaling up CLTS would be building the capacity of trainers. The trials also showed that ensuring quality of the facilitation and follow-up would be more difficult to ensure at large scale. The WSP and the government decided to focus their technical assistance on providing CLTS training to sanitarians. These government-recruited officers

had been placed in community health centers to work on environmental sanitation but had little guidance or capacity to do so.

## **Development of Total Sanitation Marketing in East Java Province**

Trials with CLTS had shown that it was possible to change sanitation behavior at the household and community level in Indonesia. There were champions in the Ministry of Health for the approach, including in particular some WASPOLA members. However, others in the government were concerned that the targeting of specific districts through the WSLIC and the Asian Development Bank projects meant that success might not be generalizable beyond these hand-picked districts (pain point). There was still a prevailing view among government officials that “if we can’t prove it on whole-province scale with all districts, we haven’t really proven it in Indonesia.”

How could the government team change behavior at scale, and where would it get the resources to do so? Timing was on the side of the government. Ede Ijjasz Vasquez, the manager of the WSP at the time, was engaged in discussions with the Bill & Melinda Gates Foundation about a possible funding opportunity (inflection point). The foundation had approached the WSP expressing its willingness to help governments provide rural sanitation services at scale. It wanted to engage in populous countries at scale, to work on both the demand and the supply side, and to make a difference to 10 million people by the end of the four-year period. It was interested in funding projects in Africa, East Asia, and South Asia as learning labs.

The WSP proposed the idea of engaging with the Bill & Melinda Gates Foundation to WASPOLA. Indonesia was an attractive partner for the foundation, given that CLTS had already been field-trialed and shown results. The government wanted to change sanitation behavior at a province-wide scale; this was an opportunity to try to do so. The Bill & Melinda Gates Foundation funded the Total Sanitation and Sanitation Marketing (TSSM) project in Indonesia, India, and Tanzania from 2006 to 2011 (inflection point).

The government made the decision to engage with the foundation and to include East Java province in the new program (inflection point). It chose East Java because it had low sanitation coverage (only 55 percent), was

densely populated (almost 40 million), and was home to 20 percent of Indonesia's poor. It would be a crucial test of whether CLTS could be implemented successfully at the province level.

Because the program would last only four years, gaining local government buy-in would be crucial if the program was to have long-lasting impact. Several districts from East Java had been included in the CLTS pilot, so some local government officials had seen results and were enthusiastic about behavior change. Building sustainable capacity in all 29 districts of East Java province, however, would require a more organized, concerted effort.

*Getting local government buy-in.* Officials from the Ministry of Health and BAPPENAS sat with WSP staff and brainstormed to devise a strategy to secure local government ownership of the behavioral approach to rural sanitation in East Java. They decided that receipt of technical assistance in learning to implement the new approach should be demand driven (inflection point). Normally, districts were selected according to prespecified criteria, and local government, and were motivated by the income from the project. In this case, the central government wanted to promote local ownership and coinvestment (organizational change). It wanted to create a line in local government budgets for sanitation from the beginning. Central government officials decided to go to East Java province and sell TSSM to provincial, regency, and district-level government officials. The plan was to do so through a project launch workshop at the province level, followed by roadshows in districts to inform local government officials and offer them the opportunity to take part in TSSM.

BAPPENAS representative Basah Hernowo and senior Health Ministry officials set off to East Java province. District-level heads of administration and heads of health were invited to the launch workshop in Surabaya, the capital of East Java. At the workshop they received a simple, somewhat unusual message: "We have failed to scale up progress in rural sanitation so far using conventional approaches. Now we have found ways of doing things better (CLTS). Here is an opportunity to learn how to become open defecation free. Technical assistance will be made available to help design district wide programs and train your people. However, there will be no financial assistance, and you will have to pay the costs of your staff [organizational change]. Participation will be on a first come first served basis. Ten districts can be included at a time, and the intention is that in

three years the project will cover all districts in East Java. Talk to your bosses, get your *bupatis* [heads of district administrations] to send us a letter of interest if you want to participate."

Government and WSP staff waited to see how the message would be received. It was an atypical approach, but officials in East Java had seen the results of the field trials in some districts and were receptive. *Bupatis* of 22 districts signed letters of interest initially; within several months, the rest followed suit (inflection point).

In November 2007, the program launched, with the involvement of 10 districts—the first districts that had committed resources and were ready to go. The second phase, in the first half of 2009, covered 11 districts; the third phase, in the second half of 2009, covered the remaining districts.

The WSP and the government provided technical assistance to the districts in three batches. In collaboration with the district government, they identified district-level CLTS facilitators and worked with them for eight months, with four to six months of follow-up support. District-level health officials recruited a new cadre of health workers to be trained. "Sanitarians" are government employees attached to community health centers at the subdistrict and lower levels who are responsible for improving environmental sanitation. They were a logical choice as facilitators for triggering communities to become open defecation free through CLTS. The volume of training was adapted based on the field trials; TSSM planned to train at least 40 people per district, including sanitarians, community health workers, and volunteers, so that there would be at least 15–20 functional CLTS facilitators who were fit and available to practice at the end of the training (refinement/adaptation). The project helped each district conduct CLTS-triggering events in 30 communities. Half were led by a resource agency engaged by the WSP, and half were led by the local facilitators backed up by the resource agency trainer.

From the field trial, the government had seen the success of behavioral approaches, which reduced open defecation and accelerated demand for latrines. It had also seen the failure of some local markets to supply sanitation products and services once demand had been created (Mukherjee and others 2011). In some districts, there had been a backlog of latrine orders, people got discouraged, and demand dissipated (pain point). Government officials realized that they needed to address both supply and demand for gains to be sustainable.

TSSM intended to address both supply and demand. The Ministry of Health and BAPPENAS agreed to try to combine them. However, neither the government nor the WSP knew how to go about addressing supply in order to achieve sustainable behavior change (pain point).

*Addressing the issue of supply.* The government and the WSP worked closely together to initiate TSSM. Sanitation marketing had been tried in Vietnam, where it had been successful in scaling up supply and demand. It consists of activities to improve the availability of product and service options in local markets based on market research and to reach customers and persuade them to buy and use sanitation products or services. Neither the WSP nor the government had technical expertise in sanitation marketing (pain point). “We did not know what to do on the supply side,” admitted Mukherjee.

The government needed to learn how to stimulate supply to meet demand. Doing so would involve engaging with the private sector at different levels and assisting local governments to build their own capacity in this area. The WSP realized that, in order to support its clients, it needed to build its own technical expertise. It set about building capacity by recruiting social marketing/communication professionals from the private sector to supplement technical skills both in Washington, DC, and in the field office in Indonesia.

On behalf of the government, the WSP contracted a private company based in Jakarta to research both demand and supply for rural sanitation services in East Java. The company’s assignment was “to fully understand the household behavior and attitudes, and to assess current products and services to feed into the strategic planning of marketing activities” (Nielson Indonesia 2009). The province of East Java was a learning laboratory for new methods in Indonesia (CLTS and SM). The behavior it was necessary to fully understand was open defecation. The report was to provide useful data on open defecation in East Java. The process of procurement and production of the report took almost two years, meaning that the project started implementation without its input (pain point).

When the report was released, in 2009, it revealed a wealth of information about consumer preferences in East Java, which informed the development of tools to guide marketing and communications (inflection point). Understanding consumer behavior fully was crucial to attempting to change it. For example, the report found that defecation into rivers was seen as socially acceptable and clean. Consumers also prioritized

sanitation after items such as televisions, mobile phones, and motorcycles. For the majority, the issue was not only affordability but also willingness to pay for a latrine.

Nielson found that the real challenge regarding sanitation habits was changing the cultural perception of an “ideal sanitation facility” (Nielson Indonesia 2009). The ideal sanitation facility for rural Indonesians was characterized as easy to clean, free of odor, and free of costs (beyond the initial cost) for the next three to four years (feedback loop). Promoting sanitation as a household priority and offering payment flexibility to accommodate the harvest season or times when people have extra money was particularly helpful in accelerating adoption of improved sanitation facilities by the target population (adaptation/refinement).

The government and the WSP considered the information in the report as they sought to change behavior at scale in East Java. The WSP’s technical experts used this research to contract a private company to produce a range of tools to support the CLTS and sanitation marketing. One example is the communication tools menu, which offers a choice of messages and media applications, allowing local governments (provinces and districts) to choose and combine them in their promotion plan. It gives ownership of the process to governments (organizational change).<sup>5</sup>

Another is the behavior change framework SaniFOAM, designed in 2008 by WSP staff to be used by program managers at all stages of intervention, from design, through implementation, to monitoring and evaluation (Devine 2009).<sup>6</sup> WSP staff used the information provided by the report to develop communication and marketing products specific to the Indonesian context that were used across East Java. The government could use this knowledge and adapt it locally to design its own programs.

## Evidence of Positive Citizen Outcomes in East Java

Implementation of TSSM in East Java provided an opportunity to learn how to scale up rural sanitation. After three years of implementation, TSSM interventions had reached all 29 districts in East Java, benefiting

5 See [www.wsp.org/toolkit/indonesia](http://www.wsp.org/toolkit/indonesia) for more information on the communication tools menu.

6 Sanifoam is a conceptual behavior change framework that can be used both in community-led and in sanitation marketing approaches. It is designed to help program managers and implementers to promote sanitation at all stages of their interventions, from program design through implementation to monitoring and evaluation [www.wsp.org/sites/wsp.org/files/publications/GSP\\_sanifoarm.pdf](http://www.wsp.org/sites/wsp.org/files/publications/GSP_sanifoarm.pdf)

1.4 million rural citizens (see Table 2). Improved sanitation coverage increased by 23 percent between 2007 and 2010 (Robinson 2011)—10 times faster than the national average. All 29 districts continued expanding the TSSM approach districtwide after technical assistance from the project ceased. By 2011, a third of East Java district governments had developed and formalized multiyear strategic sanitation programs and budget commitments for achieving open defecation free district goals. All 29 districts had created permanent budget lines to support approaches introduced by TSSM (see table 2 for a summary of key results).

There was also evidence that the approach had succeeded in changing the mindset around investment in sanitation hardware. From January 2007 to December 2010, TSSM project investment of \$3 million had leveraged \$1.7 million in local government investment in sanitation program development and \$7.8 million household investments in improving their own sanitation services and facilities. Average annual district investment in TSSM was \$13,400, and funds used earlier for providing hardware subsidies fell to zero. Program costs, including WSP, government, private sector, volunteer, and household investment, was \$8.53 per beneficiary. The burden on the central government was reduced, and the new policy of community-led development was working. A randomized control trial of TSSM carried out in 2013 showed evidence of positive citizen health outcomes, including a 30 percent decrease in childhood diarrhea (Cameron, Shah, and Olivia 2013; WSP 2013). In addition, sanitation entrepreneurs sold more than 15,000 latrines, generating more than \$1.3 million in business, and improved sanitation coverage in East Java increased more than 10 times faster than the national average (Perez 2012).

TSSM provided a range of new delivery challenges. For example, the 2013 evaluation showed an increase in access to latrines overall but not among the poorest 20 percent of the population. The data showed that although one-third of triggered communities were open defecation free, the remainder had not yet achieved the target.

Achieving behavior change at the province-wide level was an important milestone in the paradigm shift. The next challenge for the government was scaling up beyond one province and implementing the behavior change approach to sanitation nationwide.

### Developing and Implementing a National Community-Based Total Sanitation Policy

Scaling up rural sanitation services based on a new paradigm of behavior change requires both top-down policy formulation and bottom-up implementation and adaptation. Indonesia is in the process of developing both nationwide and learning how they meet in the middle.

Implementation at scale involves a large network of actors at all levels. The WSP mapped these stakeholders and their interests and influence in preparation for providing technical assistance to the government in scaling up (WSP 2011<sup>7</sup>).

The government launched community-based total sanitation (STBM) in 2008, with a ministerial decree and five pillars, the first of which was to stop open defecation. It included three program components as well as financial guidelines about what would and would not be funded by government budgets, including the rural sanitation sector game-changing directive of “no subsidy for household sanitation facilities”—the first of its kind in the world in 2008. The government led the way in banning subsidies for household facilities—a bold move.

Integration of the behavior change paradigm into national policy was completed in 2011, with clear-cut operational guidelines, policy status, and presidential instructions. The year marked a transition to full, integrated government ownership of the open defecation free agenda, with associated resources to deliver the program (organizational change).

<sup>7</sup> See that document’s Table 10.

**Table 2 Total Sanitation and Sanitation Marketing Targets and Results in East Java**

	Target	Result
No. of additional people with access to improved sanitation	1.4 million	1.4 million
No. of communities screened (demand creation event)	2,700	6,250
No. of open defecation free communities	870	2,200

Source: Perez 2011.

When STBM was being developed, a core group of WSP staff and Ministry of Health officials worked together to provide input on the national operational guidelines. Many of these people had been involved in the implementation of TSSM and were keen to ensure that evidence from TSSM informed the policy. The WSP advised on the operational guidelines for STBM to assist multiple implementers in improving outcomes. Devi Setiawan provided leadership to this process when he became the task team leader role for TSSM2/SURS (Total Sanitation Sanitation Marketing 2 and Scaling Up Rural Sanitation) in 2011. He characterized the initial government indicators as somewhat fluffy; just one hamlet per village was to be triggered, natural leaders were to be identified, and an action plan was to be generated, but there were no indicators measuring quality. The WSP worked with Ministry of Health officials to ensure that the key indicators emphasized the achievement of open defecation free status at the village level, which is more specific and focused than the initial indicators (adaptation/refinement).

The WSP also proposed strengthening the STBM secretariat (organizational change), which initially consisted of just one staff member. The Ministry of Health took over the secretariat and invested in both technical and administrative staff. The WSP also supported the development of the website, including new functionality to enable it to become a monitoring tool, recording up-to-date information on open defecation free status at the village level. The WSP was able to influence the process because of a good relationship with counterparts at the Ministry of Health who were very active (inflection point). They took key lessons from TSSM and recommendations from the WSP and advocated for their inclusion in STBM.

Politically, a key mechanism to ensure central government support for the behavior change paradigm was to ensure that STBM was included in the presidential program. The Ministry of Health had a performance agreement with the President's Office and nominated its own priorities for inclusion in the presidential program. It submitted STBM as a priority for 2009–14. As a result, two presidential instructions were issued on the matter (inflection point)—a key measure from the top down to help motivate all levels of government. Officials at the district and village level were informed of these regulations by Ministry of Health officials and were made responsible for their implementation.

The central government recognized that gaining buy-in from local government at all levels would be critical to the success of attempts to change behavior. At the province level, the Ministry of Health led the drive to scale up behavior change. It recognized the important leadership role that the *bupatis* could take on as champions of TSSM. The initial roadshow for TSSM in East Java was successful in gaining early investment of resources from *bupatis* (district heads) using the new demand-driven approach. As behavioral change was witnessed in villages across East Java, officials from the Ministry of Health's district offices kept momentum for TSSM going by bringing *bupatis* from other districts to observe these success stories (feedback loops). Seeing was believing, and a way of increasing political support for the behavior change paradigm.

Typically, the Ministry of Health champions efforts at the district level and helps keep the *bupatis* invested and linked in to national efforts to implement STBM. The head of the Environmental Health Division at the Ministry of Health in East Java, Pak Eddy, explained how health officials liaise with subdistrict leaders to understand the characteristics of the *bupatis* and then approach them accordingly. Some, he noted, are more receptive than others. In Ngawi district (East Java), the district health officer explained that the *bupati* of Ngawi, Budi Sulistyono, had responded to the central government policy by setting the goal of being the second open defecation free district in East Java by 2014. The goal was to achieve “spectacular Ngawi”—a vision for extraordinary health services. “It is very difficult (to change behavior), but government can't give up,” said Sulistyono.

The WSP provides technical support at the province level by allocating technical staff to work with the Ministry of Health. According to Devi Setiawan, “The ones who are really good at explaining the benefits are the local government. They spread practices to other places.” The head of province in East Java attributes the success of triggering behavior change to the village level. “Village government must be 100 percent behind it or it will not succeed,” he said.

In Dawu village, in East Java, the head of the village government explained, “We do not position ourselves like a Santa Claus. What is most important is to create a culture to gain the understanding of the community.” A slightly different language is needed to discuss issues with key community groups, such as young people, religious leaders, and women, he noted. Women are

more available than men during the day to meet and discuss health issues and to promote healthy practices, so the village government realized it was crucial to engage women's groups (inflection point). From the province level down, each level of government acknowledges the importance of buy-in from the level below, right down to the community level.

Both positive and negative reinforcement mechanisms are used to gain local government buy-in. CLTS is essentially a process of creating collective responsibility and pressure to improve sanitation at the household and village level. In East Java, creating competition between districts keeps sanitation on the agenda. A key motivator has been the governance award given to the top district each year by the Java Post Institute Pro-Autonomy (JPIP).<sup>8</sup> The award is of great political importance to district leadership. Every year the Java Post widely publicizes rural sanitation and other program achievements of the winning district.

In Dawu village, Ngawi province, local health officials used a camera to take pictures of feces and then display them to spark humiliation among households in the village. Villages and districts that achieve open defecation free status receive awards and recognition at both the local and national levels.

Additional reinforcement comes from learning visits. People visit East Java from other provinces and other countries to learn how to change behavior. The head of Kawu village said of the recent visits of officials from the Lao PDR, Pakistan, and the Philippines, "This visit motivates us to continue." The annual STBM conference hosted by the ministries of health, public works, environment, and BAPPENAS is another source of positive reinforcement. The conference is attended by representatives of local government from each of Indonesia's provinces; awards are given to the provinces that perform best against national STBM targets.

## **Integrating the Total Sanitation and Sanitation Marketing Approach into New Projects**

As the successes of TSSM were being documented and government support for the approach grew, the approach

was integrated into a range of new projects. Integration of STBM into PAMSIMAS is one example.

PAMSIMAS was designed as the World Bank's follow-up to WSLIC 2; it addresses both water and sanitation. The WSP and the World Bank worked together to embed STBM into the project during the design stage. George Soraya, lead municipal engineer for Indonesia, became convinced of the benefits of the behavior change paradigm on seeing the results of TSSM in East Java. "The technical part is simple, but we need to make people feel engaged," he said. The approach needed in working with government is to really understand where the client is coming from "to sit with the government and face the reality on the ground, then design things that are useful for them," he explained.

PAMSIMAS was initially implemented at the village level; STBM was implemented at the district level. Feedback from village heads helped identify an important blockage in implementation (feedback loop). Facilitators hired by PAMSIMAS were replicating the work of the sanitarians on the ground, causing confusion and sometimes frustration (pain point). Local governments as well as the central government were invited to design sessions for the project, and PAMSIMAS was adjusted to align with government structures. PAMSIMAS provides one STBM consultant each at the provincial and district levels; at the community level, it expects sanitarians and health cadres to undertake, trigger, and monitor CLTS (World Bank 2014). The project now has critical support within the government, with about 50–60 staff working on PAMSIMAS. At the request of the Ministry of Health, since the beginning of 2014 the WSP has been providing additional technical assistance to PAMSIMAS (organizational change). WSP staff are integrated in technical assistance teams for PAMSIMAS. Technical assistance involves provision of regional support to PAMSIMAS provincial coordinators; strengthening mechanisms, such as the STBM secretariat; and provision of specialist knowledge on topics including monitoring and evaluation, sanitation marketing, and entrepreneur training. Since January 2014, PAMSIMAS has been implemented in 32 of 33 provinces and 220 of 405 districts in Indonesia.

## **Adapting Training**

In the first Indonesian field trials, it became clear that the key to achieving behavior change at the household

<sup>8</sup> Since 2009, JPIP has used its evaluation methodology to benchmark all East Java districts on rural sanitation program performance (inflection point) (Mukherjee and others 2009).

level was building the capacity of local CLTS facilitators to engage with communities. As the process of scaling up has unfolded, CLTS training has been informed by the learning process and by adaptations at the local level. The WSP has played a key role in providing technical assistance to support training.

The role of the sanitarian employed by the Ministry of Health has evolved as services have been scaled up. The CLTS field trials identified sanitarians as key actors in sanitation improvement, taking on the functions of triggering and monitoring. As they worked, many sanitarians saw a business opportunity: as they triggered demand, they could also assist in providing supply (adaptation/refinement). Incentives were aligned to encourage this dual role. Provincial health officials proved supportive of the dual role and encouraged and recruited sanitarians to function as sanitation entrepreneurs. As one sanitarian in East Java remarked, “I got into business when I saw the need. I receive 50 percent of payment during construction and 50 percent at the end. I work as a sanitarian in the morning. In the afternoon I work on the business. I help train other sanitarians to be entrepreneurs, and I supervise a group of 16 masons, who I mainly manage by phone.”

Entrepreneurship training now takes place at the local government level, carried out by the district health office (Ministry of Health) supported by the WSP. During the initial TSSM years, efforts to increase supply were directed toward mason training. Large-scale mason training was implemented during TSSM, but it did not succeed in increasing supply sufficiently (pain point). Monitoring and action research conducted by the WSP in late 2010 confirmed that less than 10 percent of project-trained masons were actively involved in increasing household access to improved toilets (pain point) (Mukherjee and others 2011). The key market research report showed that there was a need to focus investment higher up in the supply chain; a more appropriate level of intervention was to provide entrepreneurship training and enable entrepreneurs to operate at scale in accessing credit, handling a volume of customers, and managing masons (feedback loop).

In response to this feedback, the WSP provided technical assistance to develop a capacity-building curriculum and guidelines to train potential sanitation entrepreneurs. The government selected participants for training using guidance and tools developed by the

WSP. It was assisted by APPSANI, the association of sanitation entrepreneurs. This training included modules on business, consumer needs, marketing, inventory, and the development of a standard one-stop shop sanitation business model for sanitarians.

In a further evolution of their role, some sanitarians also work on behalf of local government-owned banks to market bank products that enable consumers to access credit to purchase latrines (adaptation/refinement). Sanitarians provide the local bank branch with information on potential customers, and the bank follows up to conduct a risk analysis and creditworthiness check on the household.

Local adaptations also took place as entrepreneurs figured out themselves what was needed to grow their businesses. Trained entrepreneurs in East Java were having some success but facing challenges scaling up and remaining sustainable. Some individuals had expanded their businesses and were hiring masons and other entrepreneurs. WSP staff saw this development and set up APPSANI, a membership organization that supports sanitation entrepreneurs and provides technical assistance (inflection point). Budi Darmawan, a sanitation business development consultant who had helped set up an association for drinking water providers, was recruited to assist in developing the APPSANI model (adaptation/refinement). APPSANI was initially funded by the WSP but now sustains itself. It has trained more than 1,000 participants from five provinces (West Java, Central Java, East Java, Bali, and West Nusa Tenggara), all of whom are now registered with APPSANI (although only about 200 are considered active). APPSANI has taken over entrepreneurship training from the WSP, with support from local government.

As training was introduced to new contexts outside East Java, local staff adapted the standardized training to their own contexts, with examples of success and failure. Budi Darmawan described how training in Bali did not fit with the culture. There are five social classes in Bali; dealing with human waste is acceptable only in the lower castes. This challenge limited the pool of potential facilitators who were willing to become sanitarians or sanitation entrepreneurs. In addition, it was not easy to find construction workers in Bali. As a result adoption of TSSM is lagging behind other provinces.

In West Java, septic tanks were made deeper, so that households would not need to empty them as often. The

sense of humor used in the training was also adapted to local tastes, and adaptations were made to communication messages and the use of local construction materials. Although best practices for business processes are standardized within the training process, some variation may occur as individuals start to implement what they have learned.

## What Next?

Indonesia is on track to achieve universal access to improved sanitation—but the road ahead is long and winding. Scaling up from 6 field trials to 32 provinces took more than a decade. As the TSSM approach scales up across Indonesia, multiple implementers have become involved. Although government policy provides a common context for STBM, it is inevitable that implementation is not uniform. Multiple implementers and a lack of standardization have reduced the quality of training, according to Deviariandy Setiawan. Implementers are now following a process rather than “starting from scratch, writing from a plain page” and Deviariandy Setiawan emphasizes the importance of witnessing the successes of CLTS - “seeing is believing.”

What happens when implementation fails and seeing is not believing? The next challenge for Indonesia is to tackle quality training and implementation at scale and to try to bring benefits of STBM to the full community. More must be learned about improving services, in particular for the bottom 20 percent of the population, who have not yet been reached, and for villages that have not yet attained open defecation free status. Some of the initiatives that are underway include e-learning, launched at the annual STBM conference in Jakarta in September 2014 (box 2), and integration of STBM training into the curricula of health professionals.

## Lessons Learned

### Shifting the Paradigm from Supporting Infrastructure to Changing Behavior

The paradigm shift in Indonesia took place as a result of intertwining implementation efforts to scale up and use outcomes to inform evidence-based policy development at all levels of government. The government, with support from development partners, including the WSP, engaged in a systematic process of proving from the bottom up that behavior change produced outcomes for rural sanitation and benefits to citizens. A key part of this journey was importing methods learned through the WSP’s extensive network, including CLTS from India and Bangladesh and sanitation marketing from Vietnam. Study/learning visits were important in showing rather than telling stakeholders what could work. At every step along the way, local evidence was generated to support further scaling up—from the village level to the province level to the multiprovince level to the national level. This evidence was produced and packaged in a way that was accessible to implementers.

### Making Scaling Up Rural Sanitation a Priority for Local and National Government

Donors influenced both the agenda and the budget for scaling up rural sanitation at the central government level. The Millennium Development Goals provided external pressure to meet international targets. Donors, particularly the Bill & Melinda Gates Foundation, were engaged at an opportune time to support TSSM. Multiple development partners were involved in the process, including the WSP, which provided a constant presence throughout the process.

The central government used tools such as roadshows to achieve buy-in and successful investment of funds

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#### Box 2 Indonesia’s Annual Community-based Total Sanitation Conference

Each year, the government hosts an annual conference to promote STBM. Delegates from each of Indonesia’s 32 provinces, including local government officials and NGO representatives, attend. Panel discussions and smaller group meetings give delegates the opportunities to share their experience and learn. Awards are presented for the most improved provinces and districts as well as to overall leaders in achieving open defecation free targets.

In 2014, the Minister for Health opened the conference, launching the new STBM distance training initiative. Delegates from Laos PDR, Pakistan, the Philippines, and Vietnam attended the conference. East Java was recognized as the leading province.

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by provincial and district-level governments. Both positive reinforcement (annual awards) and negative reinforcement (public shame) played important roles.

Interministerial coordination through the WASPOLA Working Group was crucial in ensuring that all ministries were involved in developing the agenda. Engagement of key community groups, including women's organizations, the PKK, Muslim women's groups, and religious leaders, was essential. It was achieved by leveraging informal social structures such as the network of *bupatis'* wives.

## Learning in an Adaptive Way through Implementation

All stakeholders in the process engaged in adaptive learning. The project is notable for its learning strategy, which included specific global learning goals and a strategy (Frischmuth 2008). Lessons were also learned from the wider global network, in particular the WSP's network, which led to the introduction of both CLTS and sanitation marketing. Stakeholders spoke of a learning culture within both the Indonesian government and the WSP network. "Valuing the learning that comes from both successes and failures, and recognizing learners for generating and sharing the learning, were the most important institutional incentives for efficient learning within WSP, which the WSP strived to create also within TSSM partner institutions," said Mukherjee.

## Changing the Nature of Technical Assistance

Initially, the WSP drew on internal capacity within its network to provide technical assistance on policy development relating to rural sanitation. With the introduction of CLTS and subsequently sanitation marketing, it developed its own capacity in order to provide technical assistance to the government. It recruited external specialists in sanitation marketing, including both staff and consultants.

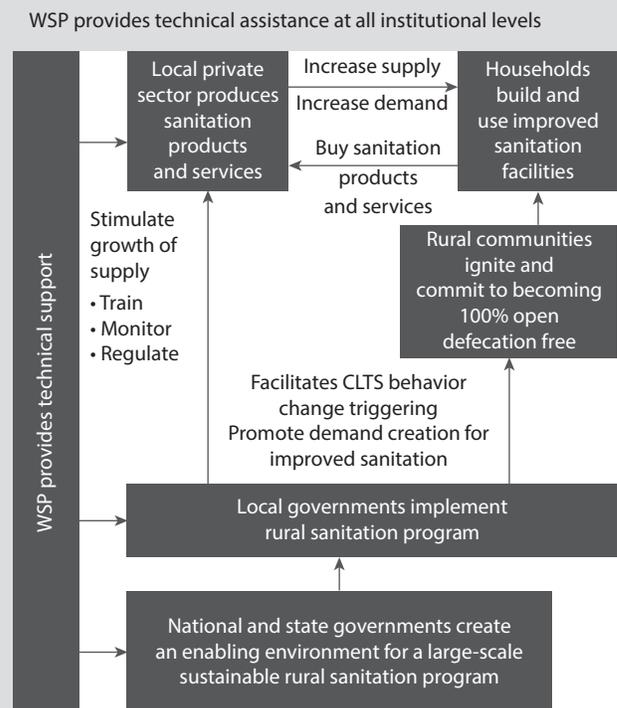
The long-standing relationship between the WSP and the government—developed through initiatives such as the WSLIC 1—created an essential foundation for working together to scale up rural sanitation. The relationship developed with the interventions. WSP and World Bank staff continually emphasized the importance of understanding and working toward the government's agenda. "The role of government cannot be replaced by

others, we can help them in preparing things, but if they don't do it themselves, it is useless. We need to do it step by step," noted Deviariandy Setiawan. "We need to bring along the Bank into the reality of the government," said George Soraya. Government officials provided feedback on some aspects of technical assistance that proved particularly useful, such as methods for documenting lessons learned in a donor-acceptable format.

As one of the development partners involved, the WSP evolved in its approach to providing technical assistance, but it focused on scaling up human resources and building capacity throughout. Initially, a small number of WSP staff provided hands-on support to the government. Today 50–60 staff associated with PAMSIMAS work within the government, and the WSP's role has shifted to higher-level coaching.

Investment in different types of training also evolved. A key feature of the technical assistance the WSP provided was associating experts closely with different levels of the government, particularly at the provincial level, working with the Ministry of Health and with new projects (figure 1).

**Figure 1 Technical Assistance Provided by the Water and Sanitation Program in Indonesia**



Source: Perez 2011.

Note: CLS = community-led total sanitation; WSP = Water and Sanitation Program.

## How the Case Study Informs the Science of Delivery

### Adaptive Implementation

CLTS was developed in Bangladesh and adapted through implementation in Indonesia. Adaptations occurred as the implementers learned from their experience, from small adaptations made to CLTS training to adapt to local culture to larger adaptations to the process such as the development of TSSM to meet the need to address demand as well as supply. As TSSM was scaled up, further adaptations were required to meet the needs of the diversity of populations encountered. Implementation and adaptation is continuing as the Government of Indonesia (GoI) continues to learn how to meet the sanitation needs of Indonesia's rural populations.

### Relentless Focus on Citizen Outcomes

This case is about citizen outcomes. The government and its partners focused on achieving and then disseminating benefits to citizens at each stage of implementation. As a result of this shift in paradigm, 25 million additional people in rural Indonesia gained access to improved sanitation in the last decade. Diarrheal and parasitic diseases declined, and household investment in latrines increased as government subsidies decreased, improving the quality of life of Indonesia's rural people.

### Multidimensional Response

Delivery of water and sanitation services in Indonesia is inherently a multisectoral endeavor. Part of the strength of the initiatives to scale up services described in this case was their effort to understand and find mechanisms for engaging, and where necessary coordinating, with each stakeholder group. A key action as early as 1999 was the creation of the multisectoral WASPOLA Working Group for water and sanitation. It proved instrumental throughout the process, from working on the first national policy in 2003 to consulting on every step of the development of plans for service delivery and integrating successful methods to STBM by 2008.

The STBM secretariat adopted a similar open attitude to collaboration. "We love having meetings, every time we have meetings we invite everyone. We understand everyone's style and treat them as friends and family, as long as we have common objectives we can work together," said Yulita Suprihatin, STBM Secretariat).

### Evidence to Achieve Results

This case illustrates the importance of starting with a field trial but planning for scale from the beginning. Central to this process is starting at a scale that is not large but that has the potential to go large rapidly. Evidence was used at each juncture to discuss positives and negatives with stakeholders and to collectively decide on the next step. Project implementers were adept at experimenting in smart ways, taking advantage of existing structures and opportunities to promote their agenda to deliver rural sanitation services at scale. Instead of launching a pilot project, they incorporated the field trials into existing large-scale projects. To maximize resources and minimize the need for additional structures, they carried out trials through the WSLIC and Asian Development Bank projects. Evidence of success from the initial trials led to scaling up within these projects, as originally envisaged.

The next stage was scaling up to the province level, which harnessed resources from the Bill & Melinda Gates Foundation through strategic planning. Lessons from the field trials were included in the province-wide approach.

Additional expertise was engaged to generate evidence to inform the project design. Evidence from East Java was fed into the government's planning for the nationwide STBM strategy (in 2008) and later the national STBM policy (in 2011). This process was neither simple nor linear. One of the key factors that enabled the scaling up and integration of CLTS and sanitation marketing was the careful accumulation of evidence that these approaches work and work in Indonesia. As well as sharing knowledge within Indonesia, the GoI participated in the Global Scaling Up Rural Sanitation Learning Project, which engaged three countries from diverse regions – Indonesia, India, and Tanzania – to learn from each other's experience. This provided a wider context for Indonesia to draw on and contribute to.

## **Leadership for Change**

Champions at many levels were necessary to scale up rural sanitation services, but success in mobilizing and institutionalizing support went beyond these champions. Champions were created through the process of witnessing the positive impact of first CLTS and then TSSM. The mantra “seeing is believing” held true throughout.

The political sensitivity of the effort to scale up rural sanitation is clear. Although there was clear evidence that subsidies to purchase latrines were not working, withdrawing financial support was difficult for the government in some areas. Fearing repercussions, the

last district to sign up waited cautiously for positive evidence from others districts.

## **Behavior Change**

Changing the behavior of households is at the heart of this case. Program implementers achieved behavior change at the household level by bringing and adapting a tested method (CLTS) to Indonesia. The real challenge the government faced was scaling up behavior change at the national scale. The key indicator of success is achieving open defecation free status at each level, from household to village to district.

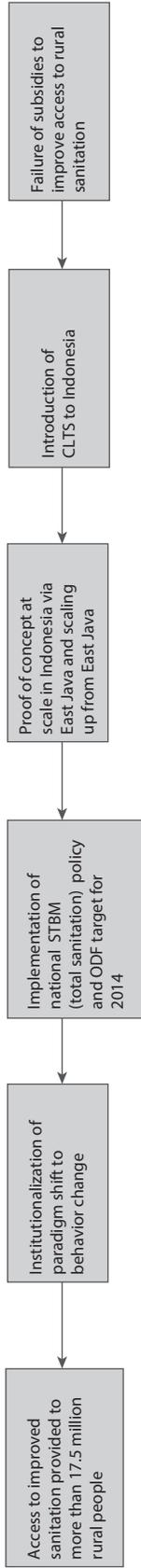
## Annex A Interviewees and Their Titles or Office

<i>Name</i>	<i>Title or Office</i>
<b>National Level</b>	
Wilfried Purba	Director of Environmental Health, Ministry of Health, Indonesia
Yulita Suprihatin	National Coordinator STBM, Ministry of Health
Nugrotto Tri Utomo	Director for Housing and Settlements, National Development Planning Agency (BAPPENAS), Chairman of National Water and Sanitation Working Group
<b>Province Level</b>	
Sri Ratvia Astuti	Central Java Health Office
Ba Eddy	Head of Environmental Health Division, East Java
Ronald Luntungan	Papua Province, Department of Environmental Health
Heri Wibowo	Head, District Health Office, East Java
<b>District Level</b>	
Ba Arif	Head of Development Agency of Ngawi
Joko Hastomo	Head of Subdistrict
Afanasi Nuhrotto	BRI Jombang
Ba Pugi	District Health Officer, Ngawi
Budi Sulistyono	Bupati, District of Ngawi
<b>Village/Other Lower Level</b>	
Didik	Officer, Local Health Community Center, for Dawu
Ba Doni	Head of Village, Kawu Village
Sanitation entrepreneurs and masons	
<b>WSP Staff</b>	
Budi Darmawan	Sanitation Business Development Consultant
Jacqueline Devine	Senior Social Marketing Specialist, Water and Sanitation Program, DC Office
Ari Kamasan	Sanitation Marketing Specialist, Water and Sanitation Program, Indonesia Office
Craig Kullman	Water and Sanitation Specialist, Water and Sanitation Program, DC Office
Nila Mukurjee	Former Co-TTL TSSM Indonesia
Amin Robiarto	Monitoring & Evaluation and Knowledge Management Consultant
Saputera	Provincial Coordinator Consultant for East Java
Wendy Sarasdyani	
Deviariandy Setiawan	Indonesia Country Program Coordinator/Community Development Specialist
George Soraya	Lead Municipal Engineer, Indonesia
<b>NGOs/Civil Society</b>	
Andreas Ayoni	Lecturer, Polytechnic Health at Jayapura, Papua
Aidan Cronin	Water, Sanitation, and Hygiene Specialist, UNICEF
Dewi Sukowati	World Vision Indonesia, Team Leader MNCHN Project
Lilik Trimaya	UNICEF

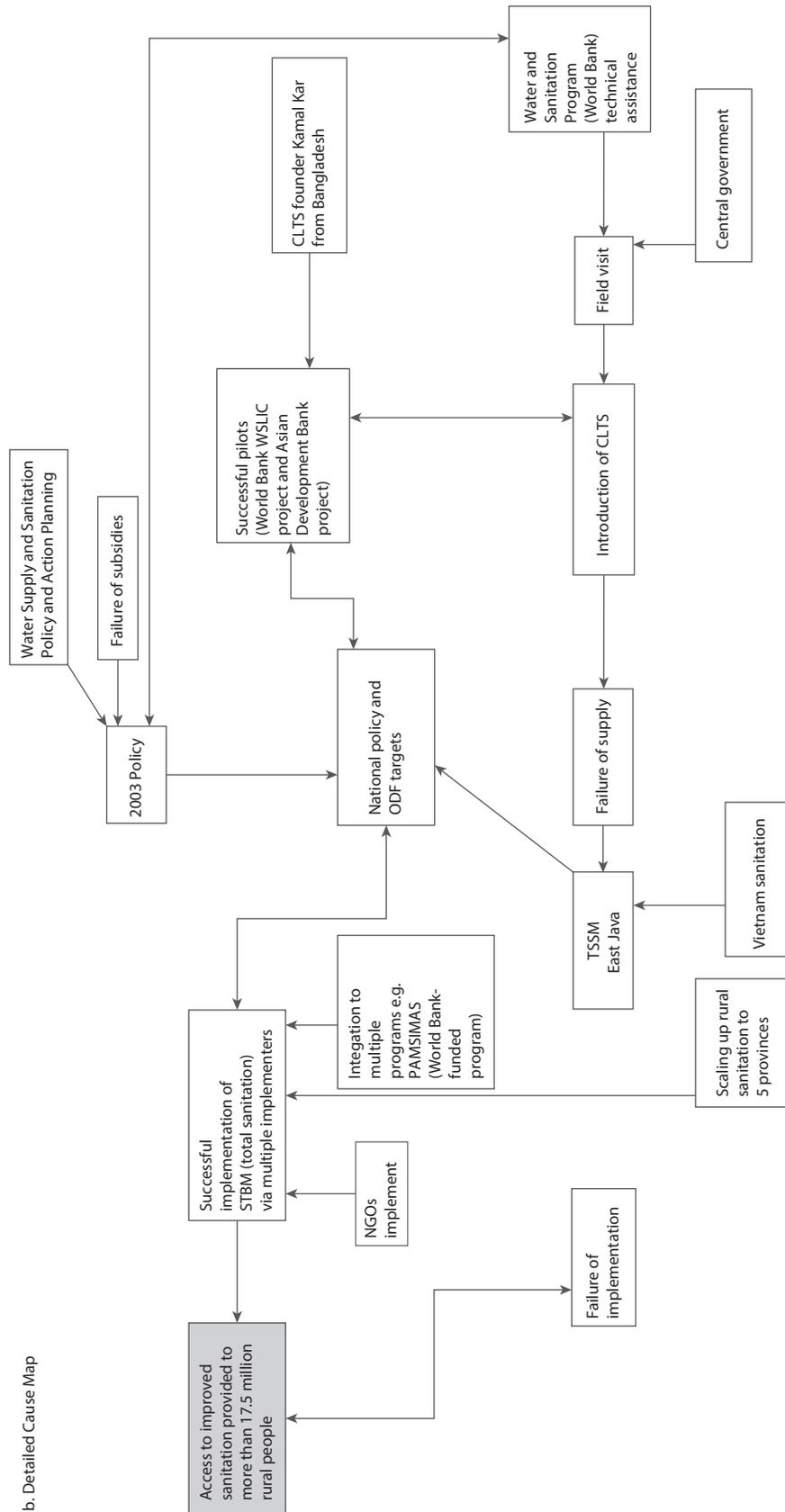
**Note:** MNCHN = Maternal, Neonatal, Child Health and Nutrition; TSSM = total sanitation and sanitation marketing; TTL = task team leader; WSP = Water and Sanitation Program.

# Annex B Causal Mapping of Rural Sanitation Effort in Indonesia

a. Basic Cause Map



b. Detailed Cause Map



Note: CLTS = community-led total sanitation; NGO = nongovernmental organization; ODF = open defecation free; STBM = Sanitasi Total Berbasis Masyarakat; TSSM = total sanitation and sanitation marketing.

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