Learning at Scale

The TSSM project is demonstrating a new combination of approaches in India, Indonesia and Tanzania, to generate sanitation demand and improve market supplies of sanitation products and services, at scale. In Indonesia the national government and local governments of East Java seized the TSSM opportunity to do things very differently than in the past and learn from the results.
One of the most densely populated places on earth, with only 55% of the rural population having access to any kind of sanitation, and home to an estimated 20% of Indonesia’s poor, East Java presented a significant challenge for a global project aimed at learning how to scale up sanitation and hygiene improvements sustainably.

Executive Summary

The four-year Total Sanitation and Sanitation Marketing (TSSM) project is now in its third year of implementation in India, Indonesia and Tanzania. In East Java, Indonesia, it is demonstrating a combination of innovative approaches at a province-wide scale, in partnership with the national government and local governments of East Java’s 29 districts. The project is operationalizing the Government of Indonesia’s new National Strategy for Community-based Total Sanitation. It is a collaboration between the Government of Indonesia, the Bill and Melinda Gates Foundation and the Water and Sanitation Program-East Asia and Pacific.

Implementation experience has been promising, with rapid increases in household sanitation access being reported from most districts, following project interventions. Local governments are co-funding project interventions, progressively internalizing the new methodologies and approaches, and scaling up their application to the whole district. A rich harvest of learning is being gathered about how to combine community-level demand creation with consumer-research-based enhancement of market supplies of improved sanitation products and services. What it takes to foster an enabling policy and institutional environment for sustainable sanitation programs is also on the project’s agenda for learning jointly with stakeholders.

This Field Note is an update on TSSM’s progress in Indonesia and an attempt to identify what needs to be done before it concludes, in order that its learning experiences and knowledge products serve the purpose of scaling up access to improved sanitation in other provinces of Indonesia, as well as help neighboring countries in the region looking for strategies to help them achieve the Millennium Development Goal targets for sanitation.
Country and Provincial Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia population (2008):</td>
<td>228.8 million</td>
</tr>
</tbody>
</table>
| Access to improved sanitation: | Urban: 67% *  
| | Rural: 38% * |

East Java Province:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
</table>
| Population (SUSENAS, 2006): | Urban: 4.7 million  
| | Rural: 32.7 million |
| Sanitation coverage (SUSENAS 2004): | Urban: 69.8%  
| | Rural: 54.9%  
| | (Facilities not differentiated as improved/unimproved)** |

TSSM Project Intervention in East Java Province

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commencement of TSSM project activities at community level</td>
<td>November 2007</td>
</tr>
<tr>
<td>Number of communities declared and verified open defecation free</td>
<td>715 (as of May 2009)</td>
</tr>
<tr>
<td>Population gaining access to improved sanitation fully financed by households, between November 2007 and May 2009</td>
<td>325,627 persons</td>
</tr>
<tr>
<td>Percentage increase in local government funding for rural sanitation after TSSM intervention (in FY08 and 09 budgets, over 2007 baseline)</td>
<td>average 68%</td>
</tr>
<tr>
<td>Community investment in sanitation improvement leveraged per IDR 1 million (USD 100 in May 2009) of rural sanitation program expenditure</td>
<td>IDR 2-31 million, depending on district, between January 08 and April 09</td>
</tr>
<tr>
<td>Value of total TSSM technical assistance per East Java district including province level research, development and national level advocacy cost</td>
<td>USD 86,000 over 2007-10</td>
</tr>
<tr>
<td>Value of direct technical assistance to each district</td>
<td>USD 26,100 approx.</td>
</tr>
</tbody>
</table>

* 2008 Joint Monitoring Program (JMP) report (actually based on 2006 data)  
** East Java: Sanitation coverage figures from Susenas 2004 – includes users of private facilities, excludes public and shared facility users.

A Sanitation Transformation Underway in East Java

In November 2007, a rural sanitation transformation quietly got underway in villages of East Java with the commencement of the Total Sanitation and Sanitation Marketing (TSSM) project activities in 10 districts. A year and a half later, sanitation access rates – growing by thousands of households every month and tripling in geometric progression every quarter – are beginning to put East Java in the national limelight like never before, and attracting a steady stream of international visitors.

The transformation is remarkable since East Java is in Indonesia, a country where rural sanitation progress has been sluggish, with national rural access to sanitation actually declining from 42% to 37% between 1985 and 2008 (JMP estimate) despite a succession of large-scale water and sanitation projects.

Most significantly, all of the recent gains in access to improved sanitation in East Java are fully financed by the community households themselves rather than through subsidized or free latrines or sanitation credit as in previous projects, which had all failed to push up people’s access to sanitation. In many TSSM districts, rural sanitation, which was once the neglected orphan
of local government budget allocation exercises, is suddenly a favorite sector with local leaders, who are giving district sanitation programs unprecedented annual funding increases over the pre-TSSM allocations. They have seen that funding the new approaches being promoted by TSSM has brought forth community investments for sanitation improvements in amounts 10-30 times larger than the cost of government interventions in different districts.

This significant change in a long-stagnant sector has come about through an innovative partnership between the Government of Indonesia, the Bill and Melinda Gates Foundation, and the Water and Sanitation Program – East Asia and the Pacific (WSP-EAP). This partnership aims to help 1.4 million additional people in all districts of East Java gain effective access to improved sanitation, as defined by the Joint Monitoring Program and appropriate national government standards.

The Indonesian province of East Java is home to a population of 37 million people (SUSENAS 2006). One of the most densely populated places on earth, with only 55% of the rural population having access to any kind of sanitation, and home to an estimated 20% of Indonesia’s poor (SUSENAS 2004), East Java presented a significant challenge for a global project aimed at learning how to scale up sanitation and hygiene improvements sustainably. The national government (Ministry of Health) and the local governments of East Java seized the TSSM project as an opportunity to try to do things very differently than in the past, and learn from the results. A comparison of the differences between the conventional and the TSSM approaches is presented at the end of this update, which summarizes what was done differently and what has been learned thus far in Indonesia.

Several years of sector experience analysis and multi-stakeholder dialogues have resulted in the Government of Indonesia’s new Community-based Total Sanitation Strategy (Sanitasi Total Berbasis Masyarakat or STBM), launched in September 2008. Box 2 illustrates the principal STBM components, which fully endorse the TSSM project’s three-pronged approach. This has made it possible for national government and WSP to position the TSSM project as an opportunity to put into operation the new strategy on a province-wide scale in East Java.

1 Within its implementation period (2007-2010), the TSSM project will focus only on steps 1 and 2 of the four steps of Total Sanitation.

---

**Box 1 What is the TSSM Project Aiming to Do Globally?**

The Total Sanitation and Sanitation Marketing (TSSM) project is demonstrating a new combination of approaches in India, Indonesia and Tanzania, to generate sanitation demand at scale and increase the supply of sanitation products and services at scale. The increased demand and supply are expected to increase access to hygienic sanitation, and improve health and well-being for poor households in rural villages and informal urban settlements.

The global project focuses on generating and sharing knowledge about scaling up these approaches cost-effectively, in order to influence programs in other areas and countries. It also rigorously evaluates health, social and economic impacts from sanitation improvements effected in all the three TSSM countries.
Instead of selecting areas for project intervention as is conventional practice, national policymakers and WSP-EAP jointly devised a strategy to start at scale with a stakeholder demand-driven approach. All 29 districts in East Java were offered the opportunity to participate in the project. By then, public awareness had already spread that TSSM was funded by the Bill and Melinda Gates Foundation, giving rise to expectations of mega dollars of donor funds flowing into districts. To counter these expectations, TSSM was presented to district governments as a short-term window of opportunity to learn how to become open defecation free within the next few years. Investment-sharing for TSSM implementation was made an essential condition of participation to safeguard the sustainability of TSSM interventions. However, local governments were free to choose whether or not to participate. The national government leadership introduced the TSSM project to East Java district governments, stressing that the onus was on the district governments to maximize the learning that they could derive from the eight months\(^2\) of the TSSM opportunity – enabling

---

**Box 2 Community-Based Total Sanitation (STBM) Strategy, Indonesia, 2008**

The Community-Based Total Sanitation (STBM) strategy states that a community is considered to have achieved total sanitation when:

1. All households have access to and use improved sanitation facilities for all human excreta disposal.
2. All households habitually wash their hands with soap after defecation, after cleaning up infant feces, and before eating, feeding and handling food.
3. All households use safe handling and storage practices for food and drinking water.
4. All households use safe practices for disposal of their solid waste and domestic waste water.

---

\(^2\) To cover 29 districts in three years, implementation was phased into three batches of districts, each batch receiving eight months of direct technical assistance, and another 4-6 months of limited follow-up support. The remaining project time was needed for institutional preparation, procurement of services and wrap-up.
them to become open defecation free within target dates that they then set for themselves.

The approach bore ample fruit. Within the next two months, demand for participation with a cost-sharing commitment was formally expressed to WSP-EAP through letters of interest signed by the heads of 22 districts. The remaining seven districts came on board a few months later. The 10 districts that were ready with their share of the funds in 2007 were included in the first phase of implementation. The second phase covered 11 districts, where TSSM intervention concluded mid-2009, and the third phase will cover the last eight districts during the second half of 2009.

At the district level, TSSM intervention began with roadshows as part of the project’s advocacy strategy to generate stakeholder buy-in. These one-day interactions brought together local government officials from related sectors, sub-district administrative heads, district legislators, prominent NGOs, opinion leaders, local media, and, where available, private sector sanitation suppliers. Roadshow participants were presented with facts and figures on the economic impact of poor sanitation at country and district level, and on the social and economic returns from investing in sanitation improvements. The TSSM project goals, vision, and interventions were explained, and stakeholders’ views were sought about how best to utilize the TSSM opportunity to scale up sanitation improvements district wide.

The roadshows clarified that the project would begin interventions at the sub-district and community levels only after the sub-district heads formally expressed their demand for the same and facilitated similar roadshows at sub-district level to inform village heads of the opportunity, and formal Letters of interest were received from the villages requesting a demand-triggering Community-led Total Sanitation (CLTS) event. The CLTS approach was already well-known in East Java, due to its introduction in the second Water and Sanitation for Low Income Communities (WSLIC) project in 2005. TSSM combined CLTS with interventions such as sanitation marketing and local supply chain strengthening, and offered to demonstrate CLTS triggering events in 30

**Box 3 What is CLTS?**

CLTS is an innovative methodology for mobilizing communities to completely eliminate open defecation. Communities are facilitated to conduct their own appraisal and analysis of open defecation and take their own action to become open defecation free (ODF). At the heart of CLTS lies the recognition that merely providing toilets does not guarantee their use, nor result in improved sanitation and hygiene. CLTS focuses on the behavioral change needed to ensure real and sustainable improvements – investing in community mobilization instead of hardware, and shifting the focus from toilet construction for individual households to the creation of “open defecation-free” villages.

For more information please see [www.communityledtotalsanitation.org/](http://www.communityledtotalsanitation.org/)

**Figure 1 TSSM Progress in 21 East Java Districts: No. of Communities Triggered and No. That Became ODF (as of April 30, 2009)**

At the time of writing, of the 1,991 sub-villages thus triggered in 932 villages, 715 have declared themselves open defecation free, as defined and verified by local governments. In the process, more than 325,600 people have gained access to improved sanitation facilities in 21 districts.
villages in each district. TSSM contracted facilitators who used these 30 demonstrations to build the capacity of district level government and NGO personnel to trigger and facilitate change in other villages in the district.

Sub-district level road shows and meetings organized by sub-district heads and sub-district primary health centers spread the information to all villages, and soon letters of interest from village heads began pouring in. The majority of districts received many more than the 30 letters of interest needed to start TSSM intervention at the village level. Local governments decided that no letter of interest would go unresponded. After TSSM-contracted facilitators triggered CLTS in 30 villages in each district and provided hands-on training for local facilitators, the latter took over and triggered other interested villages.

As of April 2009, a total of 932 villages had asked for, and received CLTS triggering in at least one sub-village per village. A village may comprise 5-10 sub-villages, and village and sub-villages heads have been active in spreading the CLTS movement from one sub-village to another. At the time of writing (June 2009), of the 1,991 sub-villages thus triggered in 932 villages, 715 have declared themselves open defecation free, as defined and verified by local governments. In the process, more than 325,600 people have gained access to improved sanitation facilities in 21 districts.
In the 21 districts covered in the first 18 months of interventions USD 1.76 million worth of TSSM project assistance has leveraged more than USD 1.69 million of community investment for household sanitation improvement. In the process over 325,600 additional people have gained access to improved sanitation, and the numbers are still growing.

Monitoring data indicate that demand is accelerating. The pace did not slacken once TSSM intervention concluded in the phase 1 districts. In fact it speeded up, and is steadily spreading across each district - from the 30 communities initially triggered by TSSM (Figure 4).

Figure 4  TSSM Triggering Intervention Plus Spontaneous Spread, as of May 2009
Sanitation Behavior Change Calls for a Multi-pronged Approach

While CLTS has proved very effective for triggering a community-wide desire and effort to be free of open defecation, global experience shows that attempts to scale up CLTS to many communities quickly is inevitably fraught with risk of loss of quality of both process and outcomes. Moreover, for a community to be able to sustain its open defecation free status, people have to be able to progressively upgrade to more permanent kinds of facilities and other key hygiene improvements over time. That calls for larger investments of community resources than is required for just declaring ODF status. Any attempt to influence the higher level household investment behaviors at scale must be based on in-depth understanding of consumer behavior related to sanitation. TSSM therefore supplemented community level CLTS triggering with a formative research-based behavior change communication strategy, and a market research-based supply improvement program.

Consumer and market research in East Java helped identify what drives households to improve their sanitation and hygiene behaviors and facilities, and what constrains their making such changes. The results have produced a strategic basis for TSSM’s behavior changing interventions, called SaniFOAM – the Sanitation Framework of Opportunity, Ability and Motivation, for

<table>
<thead>
<tr>
<th>Identified Determinants</th>
<th>Communication Objectives</th>
<th>Marketing Mix</th>
<th>Mechanism and Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanitation is considered household improvement which is low priority (Motivation – competing priorities) Limited cash (Opportunity – affordability)</td>
<td>Prioritize improvement of existing facility</td>
<td>Integrate flexible terms of payments for households at one-stop sanitation providers</td>
<td>Step up promotion in harvest season; others mechanisms to be determined (eg. tapping into artisans)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Identified Determinants</th>
<th>Communication Objectives</th>
<th>Marketing Mix</th>
<th>Mechanism and Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception that improved latrines are expensive (Ability - affordability)</td>
<td>Know that there exist improved latrines options those are not expensive as perceived</td>
<td>Use sanitation-related formal and informal community components to provide information on improved latrine options Based on research, promote feeling of embarrassment and fear of being subject of gossip when practice open defecation</td>
<td>Provide facilitators, sanitarians and natural leaders with an informed choice catalog and flyers, both stressing low starting price Use character/concept of Lik Telek to support the process of CLTS through an integrated campaign (posters and radio drama)</td>
</tr>
</tbody>
</table>

Several consumer segments were identified, along with target behaviors specific for each segment, e.g.,
- Open defecators – need to stop this practice
- Owners of unimproved sanitation – need to upgrade to improved sanitation
- Sharers of other people’s latrines – need to acquire their own improved facility.

The examples here illustrate how one segment of consumers (open defecators) is addressed by the communication strategy, which targets the specific determinants of their behavior, and uses channels that are the most credible and influential to them and times behavior-changing communication for when the consumers are most able to act on their decision to change.
As research findings began to emerge, they sparked discussions and debates with district-level partners, generating wider stakeholder awareness of supply side issues that needed to be addressed in each district, for consumer demand to be fully unleashed.

East Java. SaniFOAM-based communication efforts signal an essential departure from the common “Information Education, Communication” approach, which is often based on sanitation program managers’ beliefs of what people need to be educated or informed about in order to change their behaviors, rather than on a researched understanding of why people behave as they do. Box 4 provides an example of how the SaniNIFOAM addresses the constraints to changing behavior and capitalizes on people’s motivations for change.

A set of prototypal media materials have been designed based on the SaniFOAM. In early 2009, they were offered to district governments as a communication tools menu in a form that is ready-to-replicate, along with costing estimates. District governments have begun to select media materials from the menu, replicating them with their own funds and using them in their districts. By March 2009, four districts had spent USD 4,500 from local budgets to reproduce posters, stickers and mobile display units featuring items from the menu, which were visible in village offices in remote communities and in outreach health centers. WSP-EAP is currently also working with the East Java provincial government towards their using selected materials on province-wide television networks, to capitalize on the high penetration of television services in rural East Java.

Market Research-based Supply Enhancement – What Value Does It Add?

Following the experiences of the second WSLIC project, national policymakers were already convinced that raising demand through CLTS would be insufficient for scaling up desirable sanitation behavior change sustainably, and had included in the national strategy for Community-based Total Sanitation a component to improve the supply capacities of local sanitation markets. TSSM supports activities for sanitation market development. However, sanitation marketing is unfamiliar territory for government agencies, and at the start of TSSM, government partners at the district level were not clear about what they were expected to do.

It took almost 18 months of the TSSM implementation period to complete the sanitation marketing research in East Java, and design tools and mechanisms for market supply improvement based on research findings. As research findings began to emerge, they sparked discussions and debates with district-level partners, generating wider stakeholder awareness of supply side issues that needed to be addressed in each district, for consumer demand to be fully unleashed. Market research findings revealed that:

- There is a lack of a common definition/perception of what constitutes the “ideal” (safe, healthy, hygienic, good-to-have) sanitation facility, among consumers, sanitation suppliers, and engineers.
- Consequently, standards vary widely, and create a general impression that a good sanitation facility is unaffordable for most consumers. This in turn leads to low consumer demand.
- Complicating matters further, open defecation into water bodies is not only completely socially acceptable, it is also considered convenient, safe and quite clean as the feces are invisible and carried away by the water or eaten by fish. Moreover it costs nothing! (Nielsen, Indonesia, 2008).

The identified challenge, and a set of interventions that have been designed in response and are being fielded in East Java districts, are described in Box 5.
## Box 5  Popularizing Safe Sanitation Options at a Wide Range of Prices

### A1  Roofless superstructure

- Wooden frame; plastic walls; gunny sack; or bamboo mat; roofless.
- **Advantages:** Very low cost; can easily be built by family; without high skills needed; the first step to produce a better superstructure in the future.
- **Disadvantages:** Requires frequent repair and maintenance; may be damaged in a serious storm and is less convenient during the rainy season.
- **Life span:** Short.

### T1  Bamboo clay-lined slab with a lid

- Bamboo frame with clay slab and wooden lid.
- **Advantages:** Can easily be built by family; low cost; reduced smell; no much water needed for operation.
- **Disadvantages:** Slippery when wet; flies can enter if the lid is not re-placed after use; strength of bamboo may be weakened by termites and fluids; not easy to clean; slab may be holed as affected by water.
- **Life span:** Short.
- **Tip on construction:** bamboo will be stronger if it has been soaked in water or sprayed with termite-repellent or smeared with used lubricant.

### B1  Unlined pit

- **Advantages:** Can easily be built by family; low cost; may last a long time depending on the pit's depth; easy to cover up when full and dig a new pit nearby.
- **Disadvantages:** Not suitable in sandy soil; small hole; not suitable where groundwater table is (seasonally) high; groundwater pollution is more possible.
- **Tip on construction:** Note the distance to the water source (such as a well) used by the community at a minimum of 10 m; ground slope and soil/rock type.

### The “Real” Supply-Side Challenge:

- How to popularize a common perception of what constitutes the “ideal” (safe, healthy, hygienic, good-to-have) sanitation facility, among consumers, sanitation suppliers (vendors and masons), and engineers.
- To get the market (manufacturers, suppliers, vendors and masons) to deliver a range of sanitation options recognized as “ideal” and priced for different segments of consumers, with a particular focus on options for low-income consumers.

### TSSM Supply Improvement Measures Designed in Response:

1. **Promotion of definitions of “improved” and “unimproved” sanitation based on global Joint Monitoring Program definitions, translated in a way that makes it easy to differentiate between the two at field level.** Building these definitions consistently into all program implementation tools and resources.
2. **“WC-ku Sehat” (my latrine is healthy/hygienic)** a thumbs-up sign branding for facilities that meet the “improved sanitation” criteria.
3. **Informed Choice Catalogue (ICC) of safe (improved, “WC-ku Sehat”) sanitation options:** a) illustrating all possible combinations of lowest cost to highest cost components for below ground, on the ground, and above ground sections of latrines, and b) promoting the idea that safe/hygienic, good-to-have sanitation facilities can be affordable for all.
4. **Mason training/accreditation program** delivered by a leading technological training institute in East Java, to equip every district with masons capable of: a) facilitating informed choice-making by consumers from the ICC, and b) promoting and delivering WC-ku Sehat options from the ICC with quality assurance.
5. **Vendor orientation program** to promote WC-ku Sehat options and link consumers with trained masons.
If they have access to markets, and financing options are available, people seem to move up the sanitation ladder quickly, and even poor consumers find the means to pay for what they like.

**Spontaneous Developments in Local Markets Sparked by TSSM Interventions**

TSSM is gathering evidence that catalyzing demand and supply allows consumers to invest in what they really want, thus unleashing market forces which could have an enormous potential for scaling up. Some examples presented here indicate that while CLTS offers an explosive impetus for collective behavior change to stop open defecation, the East Javanese are not really content just to dig and cover pits in order to become an ODF community. If they have access to markets, and financing options are available, people seem to move up the sanitation ladder quickly, and even poor consumers find the means to pay for what they like.

**Arisan** is a group savings and credit arrangement common in Java that enables poor households to raise funds for large expenses. The group members meet and contribute agreed amounts of money at regular time intervals. The pooled amount is then made available to single members in rotation, and has often been used to acquire household sanitation facilities. The arisan group entered into an agreement with the local sanitation materials retailer to get their supplies on credit and build their facilities immediately, and pay back in six monthly installments. The retailer has received a guarantee for the credit from the neighborhood head in Wayang, and his experience of paybacks has proved to be positive. Wayang recently declared itself ODF, four months after triggering, with people moving quickly from open defecation in the river and unimproved pits directly to improved facilities, because the agreement made it possible to pay for the facilities of their choice in six monthly installments. Other villagers, who did not join the arisan, sold goats or their coffee harvest to pay for their facilities.

Stories of arisan being used to improve sanitation access or upgrade existing unimproved facilities have surfaced from many districts. In Pasuruan district, Kresikan village residents have moved on to environmental cleanliness initiatives such as community-based solid waste recycling and composting, after becoming ODF through credit made available from their arisan. Another sub-villages in the same village has used a grant from the National Community Empowerment Program (Program Nasional Pemberdayaan Masyarakat) supported by the World Bank, to set up a community credit facility managed by the village governance committee. At the request of interested households, the committee pays the local sanitation materials store to deliver a latrine construction package costing IDR 300,000 (USD 30) to each household, and the household then repays the cost of the package to the community credit fund in installments. The sub-villages achieved ODF status, with all households gaining access to improved sanitation, within six months.
Sumadi, a trained mason in Nganjuk district has devised three differently priced, and progressively upgradable, improved sanitation options that make use of locally available materials. His one-page Informed Choice Catalogue explains the pros and cons and the basis of costing of each option. He also brokers installment payment arrangements between consumers and suppliers. Sumadi is kept very busy by the unprecedented demand he has generated by offering consumers both information and choice.

Bureaucrats and funding agencies may have something to learn from Sumadi’s home-grown marketing wisdom:

“Instead of advising communities that they can become open defecation free by covering their latrine pits with a plank of wood, which would soon get eaten by termites, it is more useful to offer them choices for more permanent and healthier latrines. My customers don’t really want pits. What they really want is safe sanitation, but at prices and payment arrangements that they can afford. I try to meet those expectations.”

(From Sumadi’s presentation at 2009 Stakeholder Learning Review, Surabaya, March 19, 2009)

Following a test run of the mason training for delivering WC-ku Sehat options in Kediri district in February 2009, a local health official collaborated with a local manufacturer of motor parts, to produce the first low-cost fiberglass latrine pans in the province. By April 2009, they were ready to sell fiberglass pour-flush pans at IDR 40,000 (USD 4), which is half the price of ceramic pans. The light weight pans can be transported cheaply to remote communities. Their ecosan version (separating urine and feces, for ecologically sustainable waste management) in fiberglass costs the same as ceramic pans. The crux now is to find financing institutions that will provide loans for working capital. This is where the local government might need to step in as guarantor.

Several districts have started monitoring changes in population access to improved sanitation, thereby catalyzing demand. Stickers of different colors are affixed by local health center staff on the front walls of houses that have unimproved or improved sanitation facilities. A green sticker (improved latrine) is a matter of pride, while a yellow one (unimproved latrine), an indicator of intent to change behavior. Not having a sticker means the house lacks a sanitation facility, and the residents either share other people’s latrines or are open defecators. This is fast becoming a matter of social embarrassment, pushing the family towards becoming owners and users of latrines or upgraders of their facilities.
An Enabling Environment to Support Scaling up and Sustainability

Project outcomes often fail the sustainability test once external funding ceases, and project benefits, even if sustained, remain limited to project areas without scaling up to other districts and provinces. For both scaling up and sustainability of the outcomes, an enabling environment is essential. TSSM defines an enabling environment as the policy, institutional and financial environment that promotes mutually self-sustaining growth of demand for, and supply of, improved sanitation. From global experience, eight different dimensions of the enabling environment have been identified, and TSSM interventions are focused on improving all the dimensions, working with national and local governments, NGOs, communities and the private sector as required. These are:

- Policy, strategy and direction
- Institutional arrangements
- Program methodology
- Implementation capacity
- Availability of products and tools (for demand creation, supply improvement, program management)
- Financing
- Cost-effective implementation
- Monitoring and evaluation

Policy and Strategy: In 2003, the Government of Indonesia laid the foundations for sustainable and equitable rural water supply and environmental sanitation (WSES) development with the Community-Based WSES Policy. To bring greater clarity to policy and strategy issues in the rural sanitation sector, the Health Ministry then initiated a national strategy development dialogue, assisted by WSP-EAP. The result was the National Community-Based Total Sanitation (STBM) strategy, launched in September 2008 by the Health Minister. The strategy endorses all of TSSM’s core principles and components, which is now making it very easy to get local government buy-in and funding for adoption and replication of TSSM approaches. Most importantly, the 2008 strategy unequivocally forbids the use of subsidies for household sanitation facilities, thus bringing about essential consistency in funding for rural sanitation from all sources and all donors.

Institutional Arrangements: The Health Ministry and district government health offices are the institutions responsible for rural sanitation programs in Indonesia. This has been a major advantage because the Health sector has the best outreach capacity into rural areas, through its sub-district primary health centers, and health agencies measure program impact in terms of health-related outcomes rather than simply counting the number of latrines built.

Program Methodology and Implementation Capacity: TSSM has introduced new program methodologies and tools for generating demand, improving supply, and monitoring progress. It is providing technical assistance to build local capacities for using these methodologies, in ways that promote their integration into routine local government program planning, budgeting, implementation and monitoring. Training modules developed with the Institute of Technology, Surabaya, are currently in use to equip local masons in every sub-district with the skills to promote and deliver improved sanitation solutions to consumers, with a degree of quality assurance.

Availability of Products and Tools: Through formative research, a communication tools menu and prototypical behavior-change communication products
have been developed, along with costing tools for their use by local governments. District governments have begun to select communication materials from the menu, and replicate and use them over local media channels with their own funds. Through market assessments and consumer research, an Informed Choice Catalogue for sanitation solutions has been developed and is being used by trained masons with their clients. It will also soon be used along with product branding, by vendors and suppliers of sanitation materials.

**Financing:** The new national STBM strategy has brought much needed consistency into financing issues in the rural sanitation sector. Although construction subsidies to households are no longer financed by the Health Ministry and all donors funding rural sanitation programs must comply with this requirement, some districts still continue with subsidies to households out of local government funding. Focused advocacy with district political leaders and opinion makers is under way through both TSSM and the Health Ministry to tackle this.

**Cost-effective Implementation:** Through the project’s efforts to analyze cost-effectiveness of interventions, a culture of measuring and reporting costs versus results has begun to grow at all levels in East Java. Districts are routinely measuring and reporting on costs per unit of outputs and outcomes at annual stakeholder meetings. District health offices have begun to use these analyses to argue for and gain larger budget allocations from district legislators. Cost-effectiveness graphics are found posted on district health office and primary health center walls and discussed at management meetings. Cost-effectiveness calculations have begun to make proud appearances even on village notice boards.

Steadily rising budget support for replicating TSSM-introduced approaches seems to indicate national and local government confidence in their effectiveness. In the first two phases in 2007-2009, USD 1,763,237 worth of TSSM project assistance has so far leveraged USD 220,245 of local government funding for implementing and scaling up TSSM-introduced approaches. In addition, USD 33.7 million of national government funding has been made available for replication of TSSM approaches in other provinces through existing large-scale national projects supported by the World Bank and the Asian Development Bank.

In 16 months between January 2008 - April 2009, USD1.76 million of TSSM interventions have resulted in more than USD 1.69 million being invested by communities for household sanitation improvement in 21 districts, and the numbers are still climbing. Cost-effectiveness analysis carried out with 21 districts has shown that TSSM approaches have to date stimulated community investments up to 30 times the project investment (Figures 2 and 3). Lumajang district took the initiative to further analyze
the cost-effectiveness of TSSM approaches as compared to subsidy-based approaches of other programs. It found that within a year the subsidy-free TSSM approach had resulted in ten to fifteen times the number of new household toilets being constructed as compared to the outputs from subsidy-based approaches like “stimulant packages” or construction credit (Figure 5).

Of East Java’s 29 districts, 21 have concluded their share of TSSM interventions by June 2009. The remaining eight districts will be covered between July 2009 and February 2010. TSSM will close in November 2010. However, the approaches and the ideas it has introduced seem to have taken root. Currently the districts of East Java are debating whether the whole of East Java will become open defecation free by 2012 or 2013.

**Monitoring, Learning, Evaluation:** Reliable data on sanitation access and hygiene behavior are difficult to come by in most countries, and Indonesia is no exception. Thus, TSSM is focusing on improving the quality and reliability of rural sanitation data by developing a community-based monitoring system that feeds access and behavioral data regularly into local, provincial and ultimately national databases. TSSM’s performance monitoring plan incorporates key generic indicators for sanitation programs and ways of measuring them. Capacities and mechanisms are being built to integrate these into existing local government monitoring systems, and more importantly, as learning tools that catalyze action in response. However, a lack of demand for such data from the existing monitoring system is proving to be an obstacle to institutionalization.

To facilitate rapid exchange of experience and learning, TSSM is organizing annual stakeholder learning reviews at province, district and sub-district level. These workshops
Box 6  TSSM Benchmarking and Monitoring System – February 2009 Assessment Results

Indicators for annual assessment—each with appropriate scoring and weightage
1. District sanitation budget allocation per district household without access to improved sanitation;
2. % of sanitation budget used for non-construction activities (e.g. for demand creation, market supply improvement, capacity building, monitoring and evaluation), does not include household subsides;
3. Number of villages requesting demand-triggering intervention;
4. Number of communities triggered;
5. Number of trained masons able to deliver WC-ku Sehat (hygienic latrines) per sub-district;
6. Number of communities verified by local government as “open defecation free” and “progressing to total sanitation” during the assessment year;
7. % additional people that gained access to improved sanitation (over the baseline) during the assessment year;
8. Cost effectiveness of usage of local government sanitation budget, during the assessment year:
   • Community investment leveraged per IDR 1 million of program investment
   • Program investment per open defecation free community achieved
   • Number of additional people gaining sanitation access per IDR 1 million of program investment.

Another supply indicator will be added later in 2009 and the scores adjusted:
– Number of vendors per sub-district selling and promoting WC-ku Sehat.
During the remaining project period, TSSM will need to divert some attention and resources towards firming up strategic links with existing institutional programs of the Health Ministry, and also identify additional partners for the purpose of post-TSSM scaling up.

provide a collective progress monitoring and mutual learning forum for government officials and functionaries, community representatives and leaders, local politicians, media persons, and private sector agencies active in sanitation. Some districts that are better learners are already helping less advanced districts by offering study visits and training support. Innovations in one district are quickly transferred to others after exposure at such meetings. Failures and mistakes are also freely reported for collective learning benefit, because TSSM strives to foster an error-embracing learning climate through annual Learning Champion Awards to an individual and a district.

A rigorously designed and generously funded global impact evaluation study is underway in all TSSM countries, including Indonesia, executed by WSP. Country governments are the facilitating partners as well as the clients for the study findings. A baseline study was completed in Indonesia in 2008. The end line study is scheduled after 24 months of intervention.

Recently, TSSM has introduced a district performance benchmarking system, featuring selected indicators for the enabling environment dimensions. Some of these indicators and dimensions representing district sanitation program performance have been picked up by a prestigious provincial award scheme that evaluates good governance and selects the best performing district in East Java each year. The first round of evaluation and presentation of

Figure 5 Comparison of Latrines Built through Investments by Different Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>No. of new household latrines built</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLTS-TSSM (Nov’07-Apr’08)</td>
<td>37</td>
</tr>
<tr>
<td>WSLIC2 - Revolving credit</td>
<td>3</td>
</tr>
<tr>
<td>Gerbang Mas - Local govt.</td>
<td>2</td>
</tr>
<tr>
<td>PHPM/UPP - WB projects. Stimulant pkg</td>
<td>1</td>
</tr>
</tbody>
</table>

Number of new household latrines built per Rp. 1 million ($110) investment by different rural sanitation programs in Lumajang district, East Java, 2007-08.
awards by the Jawa Pos Institut pro-Otonomi (JPIP), which is part of East Java’s biggest media network, took place in May 2009. JPIP’s decision to include sanitation performance as an indicator of good governance is expected to spur local governments to achieve even more. Lumajang District won the 2009 JPIP award. Its district head has already increased the annual budget allocation for sanitation, and asked five new sub-districts to devise action plans for becoming ODF by 2010.

Challenges on the Horizon

In the remaining months of the project, TSSM will have to gear up to face the tests of time as well as scalability. Mainstreaming and institutionalizing its innovations, ensuring sustained financing of its approaches, and influencing other provinces of Indonesia to adopt the demonstrated new approaches of addressing rural sanitation are the principal challenges.

Institutionalization for sustainability: The TSSM implementation experience has spawned many champions, some at national and provincial level, and many more at district and sub-district levels. Successful TSSM interventions are still driven largely by these committed individuals within the local government system, mostly in the district health offices. They have had a frustrating experience with past, top-down and subsidy-based approaches, and have finally found a methodology that seems to work. However, except in a few districts out of the 29, such championship has not yet percolated upwards to the district leadership, whereby district heads (Bupatis) would institutionalize all the mechanisms and funding needed to operationalize the national rural sanitation strategy (STBM) using TSSM-initiated approaches. To sustain the TSSM momentum beyond counting ODF communities and move on to viable programs to achieve all the four total sanitation goals in each district, the TSSM project needs to secure sustainable institutional and political commitment before concluding at the end of 2010. Helping all districts to develop District Strategic Plans for Total Sanitation as a part of Regional Medium Term Plans for the 2010-2015 period will be critical to secure funding commitments to translate the new STBM strategy into operation at scale.

Vehicles for scaling up to multiple provinces: Indonesia does not yet have a national sanitation program that can serve as a primary vehicle to take TSSM lessons to scale. Existing large scale projects may serve the purpose partially, but time- and target-bound project-based environments provide a poor fit for the programmatic TSSM approaches required for scaling up sustainably. While TSSM has produced the tools for operationalizing the new STBM strategy, and a pool of trained manpower in East Java, it is not yet clear how the national government plans to utilize them in the post-TSSM period, for scaling up to other provinces. During the remaining project period, TSSM will need to divert some attention and resources towards firming up strategic links with existing institutional programs of the Health Ministry, and also identify additional partners for the purpose of post-TSSM scaling up.

Funding innovations through government budgets, post-TSSM: New TSSM interventions such as sanitation marketing are proving promisingly effective, but have also proved both skilled manpower-heavy and resource-intensive. Replicating them as they were demonstrated in East Java through the TSSM grant may not be feasible through existing government budgets available in other provinces. Economies of scale and support strategies will have to be identified in consultation with the national government, to enable new provinces embark on sanitation marketing interventions.
### Different Results - from Doing Rural Sanitation Differently

<table>
<thead>
<tr>
<th>Program aspects</th>
<th>Conventional sanitation program approach</th>
<th>TSSM approach</th>
</tr>
</thead>
</table>
| **RESULTS**     | • Average 10-15% increase in sanitation coverage over 4-5 years of project intervention  
• Access gains mainly among the better off and middle income households. Majority of poor households failing to gain access  
• No open defecation free (ODF) communities | • 49% increase in access to improved sanitation over baseline access, within 18 months of intervention (as of June 2009)  
• Poorest households gaining access at rates higher than non-poor households  
• 715 communities declared open defecation free, as defined and verified by local governments, as of May 09 |
| **Targeting areas for intervention** | Districts selected by national government and donor agencies, based on sector-specific and development indicators | Demand-driven approach. Districts governments choose to participate with cost-sharing and takeover commitment after 8 months of TSSM intervention |
| **Project focus/goals/targets/Performance measurement criteria** | Defined in terms of sanitation coverage achieved, number of additional latrines constructed | Defined in terms of community behavior change achieved, and progress made towards country’s MDG target (access to improved sanitation) |
| **Forms of project assistance** | • Subsidies for construction of household latrines  
• Hygiene education (IEC) materials and activities based on program implementers’ beliefs about what people need to be educated about  
• Capacity building for project implementation | • Capacity building and technical assistance for consumer demand generation (triggering CLTS)  
• Formative research-based communication tools menu development for sanitation behavior change  
• Market research-based local sanitation market supply improvement  
• Stakeholder learning analysis and sharing mechanisms, linked to M&E  
• Incentive system establishment for local government sanitation program performance measurement |
| **Local government and community participation** | Limited to getting project-provided funds, materials and advice from outside and distributing them according to project rules | • Active participation by choice and cost-sharing by local governments. Communities participation by formally expressed demand for TSSM intervention  
• No externally provided cash or materials at any level |
| **Sustainability of approach and results** | Usually tied to period of project implementation and project funding | Long term – due to integration of TSSM approaches into local government budgeting, planning, implementation and monitoring systems |
| **Key motivating factors** | • External fund assistance at local government level  
• Subsidies at community level | Self-respect and pride in own achievement, at local government and community levels |
| **Expectations of, and dependency on external support** | High. Both local governments and communities come to expect externally provided handouts, which stifles local initiative and self-help action | Low. Both local governments and communities opt to participate after knowing that: a) no cash/in-kind handouts are available, and b) the only assistance available is a learning opportunity about how to become open defecation free |
| **Motivators** | Project staff and consultants | Natural leaders in communities, local government outreach staff, occasionally district and sub-district administrators and politicians |
| **Replication** | Project-initiated, scope determined by external funding available | Spontaneous and multi-stakeholder-initiated. By community members and leaders at sub-village, village and inter-village levels. Initiated by local government units using local operational budgets at sub-district and district level. |
Selected References:

- Nielsen (2008) : Total Sanitation and Sanitation Marketing Research in East Java, Qualitative and
ABOUT THE SERIES:

WSP Field Notes describe and analyze projects and activities in water and sanitation that provide lessons for sector leaders, administrators, and individuals tackling the water and sanitation challenges in urban and rural areas. The criteria for selection of stories included in this series are large-scale impact, demonstrable sustainability, good cost recovery, replicable conditions, and leadership.