

Enabling Environment Assessment for Scaling Up Sanitation Programs: East Java, Indonesia

Andy Robinson

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

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Production Coordination: Paula Carazo

ABOUT THE AUTHOR

Andy Robinson

Andy Robinson is an independent water and sanitation specialist based in the French Alps. Since 1987, he has worked on the design, implementation, and analysis of water and sanitation programs in Asia and Africa for a diverse range of clients (including The World Bank, the WSP, UNICEF, and WaterAid). Over the last five years, he has been heavily involved in the promotion of improved sanitation and hygiene (and the spread of community-led total sanitation) in Asia, working with governments, development partners, and communities in Pakistan, India, Bangladesh, Cambodia, Indonesia, Laos, the Philippines, Timor-Leste, and Vietnam.

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Table of Contents

CREDITS.....	ii
LIST OF ACRONYMS AND ABBREVIATIONS.....	v
SUMMARY.....	1
1. INTRODUCTION.....	9
Assessment framework and methodology.....	9
Assessment Dimensions.....	10
Methodology of Assessment.....	12
Sampling Protocol.....	13
2. CONTEXT.....	14
Health Data.....	14
Poverty.....	14
Legal Framework.....	15
Impact of the 2004 Tsunami.....	15
3. RURAL SANITATION IMPROVEMENT.....	16
Evolution of Rural Sanitation in Indonesia.....	16
Indonesia Sanitation Sector Development Program.....	16
CLTS in Indonesia.....	17
Scaling Up Sanitation: The TSSM Project.....	18
4. FINDINGS.....	20
Policy, Strategy, and Direction.....	20
Institutional Arrangements.....	29
Program Methodology.....	34
Implementation Capacity.....	35
Availability of Products and Tools.....	36
Financing.....	37
Cost-Effective Implementation.....	41
Monitoring and Evaluation.....	43
5. CONCLUSIONS.....	46
Policy, Strategy, and Direction.....	46
Institutional Arrangements.....	48
Program Methodology.....	49
Implementation Capacity.....	50
Availability of Products and Tools.....	50
Financing.....	51
Cost-Effective Implementation.....	52
Monitoring and Evaluation.....	52
6. RECOMMENDATIONS.....	53
Policy, Strategy, and Direction.....	53
Institutional Arrangements.....	54
Program Methodology.....	55
Implementation Capacity.....	55
Availability of Products and Tools.....	56

Financing.....	56
Cost-Effective Implementation.....	57
Monitoring and Evaluation.....	58
7. ENABLING ENVIRONMENT INDICATORS.....	59
8. ACTION PLANS.....	60
REFERENCES.....	69
LIST OF FIGURES	
Figure 1: CLTS Effect on ODF Progress.....	17
Figure 2: Sanitation Coverage in East Java.....	45
LIST OF TABLES	
Table 1: Project Areas and Numbers of Beneficiaries.....	10
Table 2: East Java: District Financial Commitments to Rural Sanitation.....	38
Table 3: Indonesia: Rural Sanitation Coverage Estimates.....	43
Table 4: District Characteristics in East Java.....	44
Table 5: Enabling Environment Indicators.....	59
Table 6: Indonesia: National Action Plan.....	60
Table 7: East Java: Provincial Action Plan.....	65
APPENDIX A: GLOSSARY.....	70

List of Acronyms and Abbreviations

ADB	Asian Development Bank
ARI	Acute respiratory infection
BAPPEDA	District planning agency
BAPPENAS	National planning agency
CBO	Community-based organization
CLTS	Community-led total sanitation
CWSH	Community Water Services and Health Project (ADB-supported)
DepKes	Ministry of Health
DHS	Demographic and Health Survey
DinKes	Province or district health office
DPMU	District project management unit
EASAN	East Asia Ministerial Conference on Sanitation
ESI	Economics of Sanitation Initiative
GDP	Gross domestic product
GoJ	Government of East Java
GoI	Government of Indonesia
hhd	Household
IEC	Information, education, and communication
IMR	Infant mortality rate
ISSDP	Indonesia Sanitation Sector Development Project
JMP	WHO-UNICEF Joint Monitoring Programme for Water Supply and Sanitation
KUIS	Coalition for Health Indonesia
LoI	Letter of Intent
MDG	Millennium Development Goal
MoH	Ministry of Health
MoPW	Ministry of Public Works
MPA	Methodology for Participatory Assessment
M&E	Monitoring and evaluation
NAP	National Action Plan
NGO	Nongovernmental organization
NGP	<i>Nirmal Gram Puraskar</i> (clean village award)
NOSRSHII	National Operational Strategy for Rural Sanitation and Hygiene Improvement in Indonesia
ODF	Open defecation-free
PAMSIMAS	Water and Sanitation for Low-Income Communities (third phase, also known as WSLIC-3)
PHAST	Participatory Hygiene and Sanitation Transformation
PMU	Project management unit
Rp	Indonesian rupiah
RPJMN	National Medium-Term Development Plan

RSM	Rural sanitary mart
SUSENAS	Indonesian National Socioeconomic Survey
TSC	Total Sanitation Campaign
TSSM	Total Sanitation and Sanitation Marketing
UNICEF	United Nations Children’s Fund
USAID	United States Assistance in Development
WASPOLA	Water and Sanitation Policy and Action Planning Project
WHO	World Health Organization
WSES	Water supply and environmental sanitation
WSLIC-2	Water and Sanitation for Low-Income Communities Project (second phase)
WSP	Water and Sanitation Program
WSP - EAP	Water and Sanitation Program - East Asia and Pacific
WSS	Water supply and sanitation (WSS)

Summary

The Water and Sanitation Program (WSP) is in the start-up phase of a new Global Scaling Up Sanitation Project. The project is applying Total Sanitation and Sanitation Marketing (TSSM) to stimulate and scale up sanitation demand and supply. One of the central objectives of the project is to improve sanitation at a scale sufficient to meet the 2015 sanitation MDG targets in Indonesia, Tanzania and the Indian states of Himachal Pradesh and Madhya Pradesh.

The baseline assessment of the enabling environment was carried out during the start-up phase of the overall project in July and August 2007. A follow-up assessment will be carried out at the end of project implementation in mid-2009. This report presents the main findings and recommendations from the baseline assessment of the enabling environment to scale up, sustain and replicate sanitation improvements in East Java, Indonesia.

In order to ensure consistency in the assessment findings, WSP developed a conceptual framework for assessing the enabling environment for sanitation. This framework was developed based on a literature review and a series of discussions with key actors. The framework consists of eight dimensions considered essential to scaling up the total sanitation and sanitation-marketing approaches in rural areas:

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

Total Sanitation in Indonesia

Community-led total sanitation (CLTS) was introduced into Indonesia in May 2005 through field trials in six provinces. The remarkable success of these field trials, which were implemented with assistance from the Ministry of Health (MoH) and two of its large rural water supply and sanitation programs, caused the CLTS approach to spread to several hundred additional communities, generated significant demand from other districts and led to its subsequent adoption as the main methodology for sanitation improvement in several large-sector programs.

The Water and Sanitation Program – East Asia and Pacific (WSP-EAP) decided to implement the “Global Scaling Up Sanitation Project” in the province of East Java because of the unusually good response to CLTS interventions there. Lumajang District in East Java has been the most prominent success story of the CLTS experience in Indonesia and key stakeholders from East Java (including several local doctors) have been among the most visible and vocal supporters of these new approaches to sanitation development.

Policy, Strategy, and Direction

The rapid impact of the CLTS approach in Indonesia has led to an unusual degree of consensus and policy alignment among key stakeholders. Policy alignment is not complete, and several stakeholders—notably the Ministry of Public Works—are concerned about the low subsidy and basic technologies promoted by the total sanitation approach. Nevertheless, the adoption of common policies, facilitator training courses, and implementation methodologies by many of the largest donor and NGO sanitation programs has created an excellent enabling environment. The launch of the third Water and Sanitation for Low-Income Communities (PAMSIMAS, also known as WSLIC-3) program in 2008 will spread implementation of the TSSM approaches to another 5,000 communities and a further 15 provincial governments, thus ensuring a substantial scaling up of rural sanitation and hygiene improvement in Indonesia.

A significant acceleration in progress is required to meet Indonesia’s national and international sanitation targets. Political awareness and priority for rural sanitation have been low and have been hindered by inter-ministerial disagreements over project resources and a bias toward urban sanitation. Yet district support for rural sanitation appears to be growing, aided in East Java by the good publicity surrounding recent CLTS interventions. In addition, the MoH reports that more than 60 districts across the country have already implemented CLTS-based sanitation interventions, and that demand for CLTS training is now outstripping the capacity of its central team of trainers.

The draft *National Operational Strategy for Rural Sanitation and Hygiene Improvement in Indonesia* represents another important step forward. In its current form, the national operational strategy encourages policy alignment around TSSM approaches and thus will spread relevant policies and methodologies and scale up their application. The draft national operational strategy also defines the minimum requirements of a hygienic latrine, thus setting the minimum level of service for rural sanitation.

The district roadshows have already proved successful in raising awareness and budget allocations for rural sanitation. The project will target just over 10 percent of the 8,484 villages in East Java, but it also encourages districts to prepare longer-term action plans and budgets for Millennium Development Goal (MDG) achievement and universal

sanitation coverage within their jurisdiction. District budget commitments in East Java already demonstrate the value of this process: several districts have committed considerably more funds than expected to the early phases of the project and are planning well beyond the relatively modest project targets.

Support for the sanitation marketing approach is less clear-cut. The novelty of this approach, which has not previously been utilized in Indonesia, means that most stakeholders were unsure what sanitation marketing would entail and how it would fit with the more familiar total sanitation approach. Nevertheless, concern about how best to provide long-term sanitation services to rural communities and how to enable poor households to upgrade their facilities and climb the sanitation ladder illustrate the importance of promoting and developing sustainable market-based sanitation services.

Institutional Arrangements

The WSP Indonesia team was an active partner in the development of the draft national operational strategy led by the Ministry of Planning (BAPPENAS) and the MoH. The strength of this partnership, which builds on the WSP's important role in the introduction and piloting of CLTS in Indonesia, allowed the WSP to guide the strategy development process and ensure that the policies and guidelines adopted in the project are mirrored in the national operational strategy. Some stakeholders were concerned that the WSP's influence on policy has crowded out other opinions, but the key stakeholders (the MoH and BAPPENAS) appeared content with the evidence-based policies promoted by the WSP.

In general, cross-sectoral partnerships in central government are not strong. In particular, the more infrastructure-focused ministries, such as Public Works, appear to favor very different policies and objectives from those found in the MoH and BAPPENAS. Because of the shared responsibilities for sanitation and hygiene improvement, for example in the combined implementation of the PAMSIMAS program by the Ministry of Public Works (MoPW) and the MoH, these differences present a serious constraint to sector progress. In addition, there appear to be few links among health programs, many of which contain hygiene improvement components, and sanitation programs.

There appears to be limited ownership of the project in the central government, which may hinder the project's chances of national replication and scaling up. This lack of central ownership reflects project financing and management arrangements: none of the project funds pass through central government, and the Project Steering Committee—which oversees project implementation and ensures government involvement—had not been constituted at the time of the enabling environment assessment.

The establishment of a separate sanitation working group is a good indicator of sector progress, but at present the respective roles and functions of the combined Water and Sanitation Policy and Action Planning Project (WASPOLA) water and sanitation working group (referred to in Jakarta as "Pokja AMPL") and the separate sanitation working group are not clearly differentiated. The sanitation working group was initiated through the efforts of the Indonesia Sanitation Sector Development Project (ISSDP), and its agenda is often focused on urban issues and priorities.

In contrast to the lack of limited central ownership, intensive promotional efforts at the district level have produced strong local ownership and commitment to the project. The differences in ownership found at central and district levels reflect the one-province implementation of the project, which has led the WSP Indonesia team to focus its initial

efforts within East Java. Central government involvement and interest are likely to increase once implementation of the project is fully underway, but additional efforts may be required to build ownership and commitment in central government.

Project Methodology

The project methodologies build on recent CLTS experience in East Java and other parts of Indonesia, and on sanitation marketing experience from Vietnam. However, the project will be the first intervention to attempt to combine these methodologies. One of the advantages of this combined approach is that the sanitation marketing component provides opportunities to tackle some of the sustainability issues associated with the total sanitation component through more sustainable, market-based channels. The versatility of the combined methodology responds to the concerns voiced by stakeholders in Indonesia. As with the CLTS approach—these concerns will be addressed once solid evidence emerges from the project.

The project targets only 11 percent of the rural communities in East Java, so is unlikely to address the challenges found in communities facing more difficult technical conditions or more resistant social problems. Although the sanitation marketing component may reach a wider audience through its mass media campaigns and capacity-building efforts, there remains a risk that districts will choose easier targets for their initial interventions, leaving the program methodologies untested and unproven in more difficult contexts.

Implementation Capacity

Capacity remains a major implementation constraint at the national, provincial, and district levels. The WSP is not implementing the central activities needed to improve the enabling environment. There is a shortage of trained, professional sanitation staff throughout the subsector; and the provinces have limited capacity to undertake the management, policy making, strategic planning, monitoring and evaluation (M&E), and knowledge management activities that will be central to scaling up, sustaining, and replicating the successful sanitation approaches.

The project plans to strengthen district sanitation capacity in East Java using contracted resource agencies to train district staff, assist with the planning and design of activities, and develop local monitoring and support systems. However, one of the key constraints is at the *puskesmas* (rural health center) level, where sanitarians lack the resources (vehicles, fuel, allowances) to undertake the routine sanitation and health surveillance tasks assigned to them by the health department. Most sanitarians are happy to undertake these tasks when supported by project funds or given some incentive (such as a request for information from the district health office), but few institutional incentives exist at present.

Availability of Products and Tools

The sanitation marketing component offers a good opportunity to improve the supply of sanitation goods and services. There are few successful examples of the non-private supply of sanitation facilities in East Java, with most previous projects adopting a heavily subsidized approach built around the promotion of project technologies (for example, cement latrine pans) for which little demand appeared to exist.

Housing data from the Indonesian National Socioeconomic Survey (SUSENAS) 2004 reveals that one third of rural houses in East Java have earth floors and non-brick walls, suggesting that the most appropriate and sustainable latrine designs for poor households may be those that utilize local building materials (mud, bamboo, palm fronds) rather than market-bought materials.

Financing

The success of the CLTS approach has contributed to raising the financial ceiling for software support, as evidenced by the significantly increased government contribution to the software-heavy PAMSIMAS program (42 percent compared with only 13 percent in the Water and Sanitation for Low-Income Communities Project, second phase, or WSLIC-2).

District sanitation expenditures are usually spent on public services such as drainage or solid waste collection rather than on promoting household sanitation facilities. However, deepening decentralization means that district governments are increasingly interested in local economic growth rather than central government objectives, and thus are more open to preventive investments that produce long-term economic, health, and social benefits.

Another key factor is the current underutilization of local government funds. Despite the abundance of local needs, inadequate planning and management skills result in many local governments failing to utilize available development funds. Support in strategic planning is an important factor in assisting district governments to allocate and utilize funds more effectively, as evidenced by district commitments to the project in 2007, which averaged US\$12,000 per district. Although this level of annual investment will be insufficient to facilitate project interventions at a large enough scale to meet the sanitation MDG in East Java, it represents a substantial increase on previous local sanitation investments and confirms the value of targeting advocacy and promotional activities at district decision makers.

The project recognizes the importance of introducing a multilayered incentive system for sanitation and hygiene improvement in East Java, and the WSP Indonesia team is currently exploring the different options. However, sources of finance for the incentive frameworks are uncertain, and the novelty of the concept means that it may take some time to obtain firm commitment from either the government or the donor community to finance an outcome-based incentive system in Indonesia.

Cost-Effective Implementation

None of the key sanitation stakeholders in Indonesia were provided either cost or effectiveness data for their sanitation and hygiene interventions. As a result, no cost-effectiveness data could be sourced to compare against the project results.

While no cost data were available from Indonesia, a recent sanitation review in Cambodia found that a total sanitation approach was considerably more cost efficient than alternative approaches: the CLTS project cost was US\$10 per latrine (plus average household contribution of US\$0–10 per latrine), compared with typical project costs of US\$45–200 per household under comparable subsidy-based projects.

The sanitation marketing methodology for the project was still being designed and costed at the time of the assessment. However, the market and demand-based nature of this component, which relies on the marketing, distribution, and sale of locally desirable and

affordable products and services, should ensure that it remains more cost-effective than comparable supply-driven approaches.

Monitoring and Evaluation

It is difficult to reach a consensus regarding sanitation coverage in Indonesia because of differences between the definitions of “improved sanitation facilities” used by the WHO-UNICEF Joint Monitoring Programme (JMP) and the Indonesian national surveys. The national sample survey data typically indicate higher coverage figures than the JMP, due to the inclusion of a category of “pit latrine” that is likely to contain some unimproved facilities. Given the nature of the data collection instruments, the lower JMP figures are likely to be closer to reality. However, from 2007 onward, the national survey definitions will be made consistent with those of the JMP.

At present, there is no routine monitoring of sanitation outcomes in Indonesia. Few Indonesian sanitation programs collect routine information on (or evaluate) latrine usage rates, prevalence of open defecation, handwashing rates, or infant excreta disposal practices.

Recommendations

More information sharing and advocacy is required at the central government level to ensure that stakeholders are fully aware of the project, are aware of its links to other programs, and are convinced of its utility and relevance to the development of any future sanitation and hygiene policies and programs. Since there is some resistance to the “zero hardware subsidy” approach advocated in the draft national operational strategy, it is important to continue advocacy and consultation efforts in order to avoid alienating any stakeholders and limiting policy alignment around the strategy guidelines.

The project has encouraged a more strategic approach to district-level sanitation planning. This process should be encouraged, with a view to aggregating district sanitation action plans at the provincial level in order to identify gaps, compare district strategies, and highlight effective approaches and innovations.

Synergies with the ISSDP need to be strengthened. The first ISSDP (2004–08) focused largely on urban sanitation issues, but the original program had a broader mandate, and there will be potential for the second phase of the ISSDP (which is likely to start in 2008) to tackle the wider enabling environment constraints found in both the urban and rural subsectors. In particular, it is recommended that the project assist the ISSDP and the Government of Indonesia in preparing a national strategic plan for sanitation that identifies the groups and localities unserved by sanitation, the groups and localities that shoulder the highest costs of inadequate sanitation, any groups or localities with special sanitation challenges (congested and polluted communities, water-scarce areas, flood-prone areas, and so on); and that determines priorities for implementation.

The rural sanitation subsector needs a more formal division of responsibilities at the central government level. At present, management of sector projects and programs appears to be a major factor in determining departmental roles and responsibilities, which encourages ministries (especially those with overlapping mandates) to compete for control of any large programs. It is recommended that efforts be made to unbundle and re-allocate the main roles and responsibilities in the rural sanitation subsector, such that the Ministries of Health, Home Affairs, Public Works, Education, and Planning are all aware of their respective responsibilities for household sanitation, institutional sanitation,

school sanitation, environmental sanitation, hygiene promotion, monitoring of sanitation and hygiene outcomes, and so forth.

In addition, the roles and functions of the sanitation working group need to be clearly defined and clearly differentiated from those of the WASPOLA water and sanitation working group. It is also recommended that the project make efforts to ensure that rural sanitation issues feature regularly on the working group agenda, alongside routine discussions of rural sanitation progress, strategy, and issues.

The benefits of building local government capacity are often diminished by the government transfer system, whereby talented officials are transferred or promoted out of their jobs, resulting in local shortages of capacity. Sanitation skills are in particularly short supply and, therefore, it is proposed to establish a training system that can produce a cadre of trained sanitation professionals. It is recommended that the TSSM project examine the potential for developing some form of sanitation diploma in conjunction with local universities or technical colleges.

The MoH finances a national network of 1,700 community sanitarians, with one found in almost every rural health center. This huge capacity has been inadequately utilized. Sanitarians currently lack the incentives or resources to conduct the sanitation and health surveillance activities that are their primary responsibilities, thus many sanitarians are reported to devote more time to their private medical practices than to their health center role. Greater demand for, and verification of, sanitation and health surveillance data, with regular benchmarking activities (to create competition between rural health centers and between districts), should create stronger incentives for sanitarians to undertake these tasks.

One of the best opportunities for latrine upgrading is when the latrine pit fills for the first time—at this point households often consider moving the latrine closer to the house or improving on the design. Therefore, it is recommended that the sanitation marketing component should include activities to follow up on CLTS activities about one year after the initial triggering process. These sanitation marketing follow-up visits should focus on ensuring that latrine usage does not stop (due to lack of community interest or lack of follow-up by the total sanitation team) once the first latrine pit fills, and on encouraging latrine users to invest in simple upgrades to their original homemade latrines.

Securing sustainable finance for an effective sanitation incentive framework, preferably with reinforcing components at district, province, and national levels, should be the number one priority for the project. There remains scope to broaden financial partnerships, notably by encouraging local governments, donor agencies, NGOs, and nontraditional donors (for example, large corporations and soap companies) to finance and support the outcome-based incentive frameworks.

Although a little beyond the terms of reference of the project, there would be significant value attached to any effort to develop a long-term phased strategy that enables local governments to work toward the provision of more comprehensive environmental sanitation services such as solid waste management and wastewater management. Experience in South Asia suggests that more active and progressive local governments are usually keen to use the momentum, support, and finance gained from the achievement of collective sanitation outcomes, such as open defecation-free (ODF) status, to tackle wider environmental sanitation issues.

Finally, there is a continuing need for a joint review of rural sanitation and hygiene interventions in Indonesia. Despite increasing consensus on the benefits of the CLTS approach, there remain few data on either the lessons learned or the comparative cost-effectiveness of the different approaches.

1. Introduction

The Water and Sanitation Program (WSP) is in the start-up phase of a new Scaling Up Sanitation Project. The project applies the approaches of Total Sanitation and Sanitation Marketing (TSSM) to stimulate and scale up sanitation demand and supply. One of the central objectives of the project is to improve sanitation at a scale sufficient to meet the 2015 sanitation Millennium Development Goal (MDG) targets in Indonesia, Tanzania, and the Indian states of Himachal Pradesh and Madhya Pradesh.

The purpose of this consultancy was to carry out a baseline of the programmatic conditions needed to scale up, sustain, and replicate the total sanitation and sanitation marketing approaches in the province of East Java, Indonesia.

The baseline assessment of the enabling environment was carried out during the start-up phase of the overall project in July and August 2007. A follow-up assessment will be carried out at the end of project implementation in mid-2009.

The purposes of the baseline assessment are to: (1) assess to extent to which the programmatic conditions for scale up and sustainability are in place at the beginning of the project and (2), on the basis of the baseline assessment findings, recommend what should be done to address the gaps during project implementation, and determine whether conditions are conducive for scaling up and sustaining results at the end of the implementation period. The purpose of the final assessment (at the end of the implementation period) will be to determine whether suitable programmatic conditions are in place to meet the 2015 MDG targets and sustain these broader achievements over time. The fundamental question that the assessment is intended to answer is whether the country can continue to scale up after 2009 without assistance from the Global Scaling Up Sanitation project.

This report presents the main findings and recommendations from the baseline assessment of the enabling environment to scale up, sustain, and replicate sanitation improvements in East Java, Indonesia.

Assessment Framework and Methodology

In order to improve the comparability of the findings from the assessment in Indonesia with those from the assessments in Tanzania and India, a common assessment framework was developed by the WSP headquarters team and its specialist advisers in Washington DC. The assessment framework consisted of eight dimensions that are considered essential to the scaling up, sustainability and replication of total sanitation and sanitation marketing approaches in rural areas:

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

Definition of Scale-Up: Increase the scale, rate of provision, and sustainability of sanitation services to reach the two-year 2009 targets in the TSSM project and the MDG targets for 2015.

Table 1: Project Areas and Numbers of Beneficiaries

population in millions

Project areas (population)	People without access to sanitation (2006 estimate)*	People who will gain access to sanitation during two-year project (estimate)	Additional access to sanitation needed to meet 2015 MDG targets**
Tanzania (26.7 rural)	14.25	0.75	6.5
East Java, Indonesia (36.5 total)	18.60	1.40	10.0
Himachal Pradesh, India (5.5 rural)	4.30	0.70	1.2
Madhya Pradesh, India (45 rural)	43.60	1.10	20.0
Totals	80.75	3.95	37.7

Source: UN population data; JMP 2006 report.

* Best estimates given poor status of data.

** Accounts for population growth estimates

Assessment Dimensions

The eight assessment dimensions represent a conceptual framework for assessing scalability and sustainability. *Scale up* has been defined as an increase in the present scale, rate of behavior change, and sustainability of the program promoting TSSM.

1. Policy, Strategy, and Direction

Establishing a shared vision and strategy and ensuring the political will to implement a program is the starting point for scale up. Developing this shared vision and strategy in a collaborative manner is also the foundation for coordination and for creating motivation all levels. Policy is defined as the “set of procedures, rules and allocation mechanisms that provide the basis for programs and services. Policies set the priorities and often allocate resources for implementation. Policies are reflected in laws and regulations, economic incentives, and the assignment of rights and responsibilities for program implementation.”

2. Institutional Arrangements

Institutions at all levels must clearly understand their roles, responsibilities, and authorities. They must also have the resources to carry out their roles. In addition to clear roles and responsibilities, institutional arrangements must include the mechanisms for actors at all levels to coordinate their activities.

Programs are based on, or promote, the establishment of a public-private partnership. A *partnership* is a relationship where two or more parties, having compatible goals, form an agreement to share the work, share the risk, share the power, and share the results or proceeds. Partnerships need to be built at all levels among public, private, and NGO sectors, between communities and local governments, and so on.

3. Program Methodology

The program methodology consists of the program rules as well as specific activities and their timing and sequence. Each country will adapt and apply the program methodology, making it specific and appropriate to the country context. A workable program methodology that is clear and agreed upon by all key stakeholders is a key programmatic condition.

4. Implementation Capacity

Institutions at all levels must have the institutional capacity to carry out their roles and responsibilities. Institutional capacity includes adequate human resources with the full range of skills required to carry out their functions, an “organizational home” within the institution that has the assigned responsibility, mastery of the agreed-upon program methodology, systems and procedures required for implementation, and the ability to monitor program effectiveness and make continual adjustments.

5. Availability of Products and Tools

The ability of target consumers to adopt the promoted behavior(s) is highly dependent on the existence and availability of products and services that respond to consumer preferences and their willingness and ability to pay for them. Any and all relevant products and services need to be considered, specific to each country situation. As each project area will be conducting market surveys and market analysis in conjunction with the private sector partners, this assessment dimension will be dealt with in broad, general terms with a focus on the government role and its policy implications.

6. Financing

This dimension assesses the adequacy of arrangements for financing the programmatic costs. These costs include training, staff salaries, transportation, office equipment and supplies, and the development of communication and education materials as well as programmatic line items in budgets for program and promotion activities.

7. Cost-Effective Implementation

While it will not be possible to assess the cost-effectiveness of the approach, or how best to achieve economies of scale and scope, until the end of the project, data must still be collected during implementation to make this determination at the end of the project. Therefore, the focus in this assessment is to ensure that information will be collected from the outset and that the capacity to collect the information is in place—that systems and procedures for collecting cost information and capacity to use and collect it exist.

8. Monitoring and Evaluation

Large-scale sanitation programs require regular monitoring and periodic evaluation and, perhaps more importantly, the willingness and ability to use the monitoring process to make adjustments in the program. Effective monitoring will identify strengths and weaknesses in the program methodology, implementation arrangements, and cost efficiencies. Overall monitoring responsibility must be at the highest level of the program, but must be based on information collected at the local government or community level.

Methodology of Assessment

The baseline assessments in Indonesia were carried out by an international consultant with significant support from the WSP Indonesia country team, with overall direction and management by the WSP Indonesia Project Management Adviser (Nilanjana Mukherjee), the WSP Indonesia Sanitation Task Manager (Ratna I. Josodipoero), and the WSP Global Task Team Leader (Eddy Perez).

The baseline assessments were conducted through a series of one-to-one interviews with key stakeholders at national, province, district, and village level. In addition, some self-report forms were distributed in order to capture the views of stakeholders that the assessment team was unable to meet in person.

A generic interview guide and self-report form were prepared based on this assessment framework, and were further revised and developed by the consultant and the WSP Indonesia team in order to match the questions and language more closely to local contexts and norms. The Indonesia interview guide was used in each interview, although some dimensions and questions were not considered relevant (or appropriate) to some stakeholders (for example, asking local retailers about national strategy issues). All the dimensions of the assessment framework were covered, but not by every stakeholder.

Primary data sources comprised main stakeholders and present partners for the in-country program work, including but not limited to government agencies, international agencies, international NGOs, local NGOs, private sector businesses, and community-based organizations (CBOs). These primary data sources were contacted at all appropriate levels: national, provincial, district, and local.

Because of the limited time available for the assessment, only two (of the twenty-nine) districts in East Java were visited. Based on information from the ongoing community-led total sanitation (CLTS) activities in East Java, one above-average district and one below-average district were selected. In both cases, efforts were made to ensure that the districts selected were not exceptional cases—for example, Lumajang District—but were reasonably representative of the wider group of above- or below-average districts.

Bojonegoro was selected as the above-average district based on the reasonable performance of the 15 Water and Sanitation for Low-Income Communities Project, second phase (WSLIC-2) communities where CLTS was piloted. These communities averaged a 30 percent increase in latrine coverage following the CLTS interventions, resulting in a 50 percent increase in access to sanitation facilities when shared facilities were counted.

Pasuruan was selected as the below-average district based on Susenas 2004 data suggesting sanitation coverage of only 37 percent (ranked 25 out of the 29 districts) compared to a provincial average of 51 percent; and an Infant Mortality Rate (IMR) that is 30 percent higher than the provincial average.

Secondary data sources comprised key documents and potential influencers or secondary implementers such as media, ministries with no direct involvement, advocacy groups, and so on. Program activities in the very early stages were also considered, and several “potential” stakeholders/partnering organizations were interviewed.

Sampling Protocol

Sampling was purposive for all primary data sources.

Criteria for selection for both interviews and self-reports included stakeholders that:

- (1) have participated in a sanitation program (or related program) for at least 6 months;
- (2) represent a main workforce type—a decision maker, an implementer, or a mid-line supervisor/manager of the process/program; and
- (3) represent one of the different levels—national, regional, district, and local—of the organization that are involved in the program.

No self-report forms were completed. Despite considerable efforts during the Himachal Pradesh and Madhya Pradesh assessments in India, the response to the self-report forms was very poor—only a handful of forms were completed out of the dozens distributed, mostly by stakeholders that had already been interviewed, and these few forms did not contain any information that had not already been obtained through interviews. The use of the self-report forms was discussed during the initial assessment team meeting in Jakarta, and the WSP Indonesia team was unanimous in suggesting that the self-report forms would not work well in Indonesia (even if translated into Bahasa Indonesia). Therefore, the self-report forms were dropped for this assessment.

2. Context

East Java contains 16 percent of the 219 million total population of Indonesia. The rural-urban population split in East Java mirrors the national ratio, with 18.2 million (52 percent) rural inhabitants among the 35.6 million total population. East Java is dominated by tropical coastal and inland volcanic habitats, with a wide and somewhat unpredictable variation in the availability of water. East Java is divided into 29 districts, in which 31.9 million people live (in 657 subdistricts and 8,484 villages). The district population excludes that of the nine major cities, but includes both urban and rural areas, meaning that some 13.7 million people among the district population are urban residents. The Indonesia Demographic and Health Survey (DHS) 2002 suggests an average of 4.2 members per rural household, and a total of about 4.5 million rural households.

Health Data

The infant mortality rate (IMR) in East Java is 23 percent higher than the national average. The health data also suggest that the IMR in rural areas is about 33 percent higher than average, while nine districts in East Java have particularly high IMRs: all are greater than 65 per 1,000 live births, which is 86 percent higher than the national average.

According to the data from the Indonesia DHS 2002, East Java has the lowest acute respiratory infection (ARI) symptom rate (2.8 percent) of any province, compared with an average of 7.6 percent for Indonesia; East Java also has a low rate of prevalence of fever: 20.8 percent children had fever (based on two-week recall) compared with an Indonesian average of 25.9 percent. Likewise, the prevalence of diarrhea is marginally lower in East Java (9.8 percent) than in the rest of Indonesia (11 percent).

Poverty

Between 1976 and 1996, the rate of poverty in Indonesia declined from 40 percent to just over 11 percent and the population under the poverty line reduced from 54 million to 22 million. There is little doubt that incidence of poverty decreased dramatically in the 20 years prior to the 1997 financial crisis, coinciding with Indonesia's 7 percent per annum GDP growth trend.

However, the 1997 East Asian economic crisis led to a dramatic increase in the number of the poor. According to official estimates, the incidence of poverty rose by nearly 50 percent from February 1996 to December 1998. Following the post-crisis stabilization of the economy, in August 1999 the poverty rate returned to around the pre-crisis level of February 1996. Based on the 2004 national poverty line, about 36 million people (17 percent total population) currently remain below the poverty line.

There is considerable regional variation in depth and incidence of poverty. In 1999, the three most populated provinces (West, Central, and East Java) comprised about 50 percent of the total population but 60 percent of the total poor population. Consistent with this finding, poverty levels are marginally higher than average in the province of East Java: 20 percent (6.5 million people) of the population were below the poverty line in 2004, and seven districts were reported to have poverty levels above 25 percent.

The SUSENAS household survey data (2004) reveals substantial differences in the living conditions of rural households in East Java:

- 33 percent of houses have dirt floors (compared with only 11 percent in West Java and 22 percent nationally)
- 34 percent houses have non-brick walls (compared with 51 percent nationally)

Legal Framework

Environmental laws and regulations are well established in Indonesia, at least as a theoretical framework. An environmental legal system to match the level of developed countries has been promulgated from the Environmental Management Act, which is a basic law for environmental policy as a whole, to a variety of laws and regulations relating to water pollution, air pollution, waste management, environmental assessment, and standards concerning noise, vibration, and offensive odors. However, the current legal framework lacks an environmental monitoring system, which is a major prerequisite for implementing or enforcing such laws and regulations.

Law No. 23/1992 on Health contains a section on environmental quality that, in article 22, states that “improvements to produce sound environmental quality should be implemented in public places, settlements, working environment, public transportation and others. A healthy environment means improvement in water and air quality and better control of solid waste, wastewater, gas waste, radiation, noise, vector diseases and other health and safety issues.”

In 2004, the Government of Indonesia (GoI) devolved a number of functions to district governments under Law No. 32/2004, including responsibility for providing both urban and rural sanitation services.

Impact of the 2004 Tsunami

The international community signaled its firm commitment to assist countries affected by the 2004 tsunami at a summit held in Jakarta on January 6th, 2005. Donors have since pledged US\$1.6 billion in additional assistance for reconstruction and recovery efforts in the Aceh region (a billion is 1,000 million). Additional private sources (NGOs, corporate and private contributions) have also pledged significant assistance, reflecting the unprecedented response to this tragedy.

The ongoing post-Tsunami relief and reconstruction efforts have had a substantial impact on the development sector in Indonesia. The large-scale reconstruction efforts in Aceh have absorbed capacity and experience from other development activities in Indonesia, creating a shortage of mid-level water and sanitation sector professionals.

3. Rural Sanitation Improvement

The following section provides some background on rural sanitation improvement in Indonesia.

Evolution of Rural Sanitation in Indonesia

It is evident that public sector and donor investments will not suffice for Indonesia to achieve its sanitation MDG targets. While government investments, including donor funds, have remained around US\$27 million annually for the past 30 years, conservative estimates state that to achieve the sanitation MDG targets new investments of around US\$600 million will be needed each year from now until 2015. A number of large sanitation-improvement programs are underway now, but few of them cover more than a handful of provinces; thus, there has been little impact on national sanitation coverage.

Recent SUSENAS surveys suggest that rural sanitation coverage is now increasing faster than population growth, but not by much. A review of the JMP trend lines suggests that current (2006) rural sanitation coverage is about 41 percent (extrapolated from the JMP 2004 rural sanitation coverage estimate of 40 percent), and that rural sanitation coverage in 1990 was 37 percent (which sets the rural sanitation MDG at 68.5 percent). Over 40 percent of the population defecates in open pits or in rivers/ponds/fields/beaches, causing rampant and serious surface water pollution.

Only a 4 percent rise in rural sanitation coverage has occurred in 16 years—if progress continues at the same rate for another 9 years, Indonesia will achieve only 6 percent of the 31 percent increase in rural sanitation coverage needed to achieve its goal of halving the rural population without sanitation. ***At the current rate of progress, it will take another 126 years for Indonesia to achieve its rural sanitation MDG.***

Indonesia Sanitation Sector Development Program

The Indonesia Sanitation Sector Development Program (ISSDP) was established to strengthen and develop the sanitation sector. The ISSDP is a five-year program (2004–08) intended to develop an effective enabling and investment framework for sanitation, to stimulate sanitation demand through a targeted public awareness and marketing campaign, and to build local government capacity for sanitation planning, implementation, and management. The ISSDP works primarily with the BAPPENAS-led inter-ministerial working group and with local government in six cities. Although most ISSDP activities have an urban emphasis, demonstrated by efforts to build sanitation capacity and planning in six cities, some of the sanitation sector work is relevant to the TSSM project.

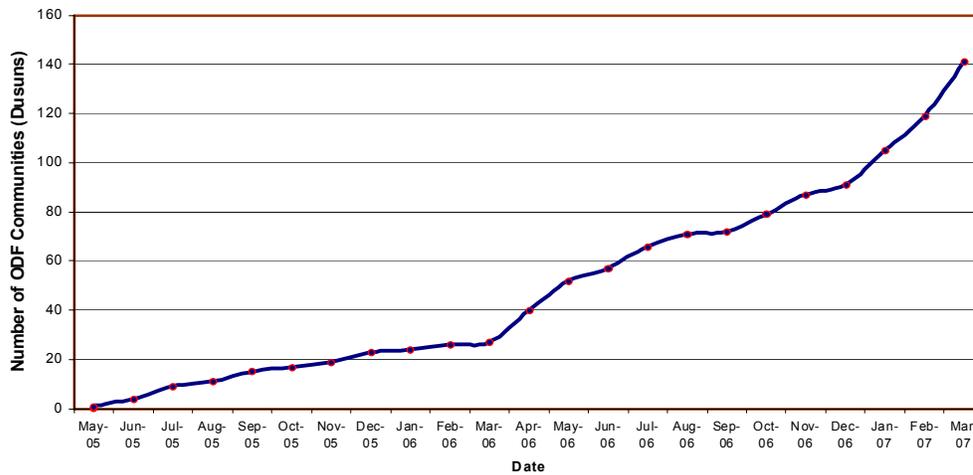
In particular, the “sanitation awareness raising and hygiene promotion” component of the ISSDP should provide direct inputs and learning for the marketing campaigns envisaged for the project. The ISSDP is contracting out this component to private sector consultants. The key elements of this sanitation awareness raising and hygiene promotion component include consumer and market research, hygiene behavior studies, identification of vulnerable population groups and market segmentation, design of national sanitation awareness and hygiene promotion campaigns, development and implementation of targeted campaigns for poor households and children in selected areas of the six cities, and an impact monitoring program for the awareness components.

CLTS in Indonesia

During December 2004, a high-level GoI team visited Bangladesh and India to see the results of the zero-subsidy CLTS approach. The visit sparked significant interest in testing the approach in the Indonesian context. In May 2005, field trials were launched in six districts in six provinces covered under two large-scale rural water and sanitation programs. After two years of field trials, the CLTS approach has become highly popular and successful and has spread spontaneously from the 11 initial sites to several hundred communities, with 131 communities achieving open defecation-free (ODF) status. CLTS has officially replaced revolving credit schemes and hardware subsidy packages in all existing and forthcoming rural water supply and sanitation projects.

Figure 1: CLTS Effect on ODF Progress

ODF Progress since CLTS introduced in 12 dusuns* in 6 districts in Indonesia since (May-July 2005)



*Dusun = hamlet 100-300 hhs. Desa/village comprises several dusuns (administrative unit)

Note: CLTS was introduced in 12 *dusuns* in 6 districts in Indonesia in May–July, 2006. A *dusun* = a hamlet of 100–300 households. A *desa* or village (an administrative unit) comprises several *dusuns*.

Source: WSP chart based on monitoring data from the WSLIC-2 project.

The spread of the CLTS approach is indicated not only by the growing numbers of ODF communities (as can be seen in Figure 1), but also by the number of institutions that have adopted it. Large water supply and sanitation (WSS) MDG projects investment such the Community Water Services and Health Project (CWSH) funded by the Asian Development Bank (ADB), PAMSIMAS (a new national program, also known as WSLIC-3) funded by World Bank, and Pro Air funded by GTZ have adopted it in their investment program. Local and International NGOs such as Project Concern International and Fatayat NU (a women's religious organization) are also implementing this approach.

Scaling Up Sanitation: The TSSM Project

The project has the primary goal of learning about scaling up and about effective and efficient sanitation interventions that improve health. The TSSM project is a large-scale effort to meet the basic sanitation needs of the rural poor who do not currently have access to safe and hygienic sanitation. That aim will be accomplished by developing the practical knowledge for designing sanitation and hygiene programs that are effective at improving health and are sustainable at *large scale* for rural areas. The project will test proven and promising approaches to create demand for sanitation; use marketing techniques to improve the supply of sanitation-related products and services; and strengthen the enabling environment for rural sanitation and hygiene through improved policy, better regulation, more effective institutional arrangements, increased finance and appropriate strategies.

The Water and Sanitation Program – East Asia and Pacific (WSP-EAP) decided to implement the project in the province of East Java because of its unusually good response to recent CLTS interventions.

Lumajang District in East Java has been the most prominent success story of the CLTS experience in Indonesia, and key stakeholders from East Java (including several local doctors) have been among the most prominent and vocal supporters of these new approaches to sanitation development.

In addition, East Java will not be covered by the forthcoming US\$275 million World Bank-supported WSLIC-3 (PAMSIMAS) project, soon to be the largest rural sanitation and hygiene improvement program in Indonesia. The PAMSIMAS program includes a US\$25 million component for *improving sanitation and hygiene behavior and services*, which uses a program design and methodology similar to those of the TSSM project; thus PAMSIMAS will be the vehicle for scaling up the implementation tools developed and field tested by the project across other provinces in Indonesia. The WSP Indonesia team views the project as a chance to accelerate rural sanitation and hygiene improvement in East Java, whilst benefiting from the unusually supportive provincial enabling environment. As detailed below, East Java also contains one of the largest populations of poor people of any province in Indonesia, and it is hoped that the sanitation improvements resulting from the project will have a major impact on poverty.

The project in Indonesia plans to work in every district of East Java Province. The intention is that about half of the 29 districts will take part in the first phase of the project, with interventions in the remaining districts starting in the project's second year.

The design of the project is demand-responsive. Building on prior CLTS successes in East Java, the WSP Indonesia team has conducted a series of district TSSM roadshows to explain the project, generate demand, and encourage district administrations to commit resources to the project. Districts that want to participate in the project have to submit a formal letter of intent confirming that they would like to take part in the project and are willing to finance district implementation activities (beyond the training and support activities financed through the project).

The current plan is to target 30 communities in each district (a total of 870 communities across the 29 districts) over the two-to-three year duration of the project, with the intention of achieving a minimum of 300 ODF communities.

The key project components are as follows:

1. provision of project roadshows and ownership workshops for selecting districts, subdistricts, and villages
2. identification of project institutional framework and technical assistance agencies
3. sanitation market assessment, development of local supply improvement program, and implementation of supply improvements
4. capacity building of local government agencies, local sanitation service providers, and community organizations to undertake their program roles
5. development and implementation of demand-generation activities for sanitation and hygiene improvement through both community-level initiatives and mass media channels
6. Monitoring and evaluation, documentation, and dissemination of lessons learned

4. Findings

Based on a literature review and a series of discussions with key actors, a narrative of key findings was prepared for each of the eight dimensions considered essential to scaling up the total sanitation and sanitation-marketing approaches in rural areas.

Policy, Strategy, and Direction

Political support and direction for rural sanitation and hygiene appear limited at present but are improving. However, there is an ongoing institutional struggle for control of the sector, which appears to be a significant constraint to sector reform and progress. Most stakeholders agree that the Ministry of Public Works (MoPW) is responsible for urban sanitation and that the Ministry of Health (MoH) is responsible for rural sanitation and hygiene, but the design of combined water supply and sanitation programs and the blurring of the distinction between rural and urban spaces complicates this institutional division and encourages institutions to wrestle for control of budgets and programs.

The forthcoming US\$275 million World Bank–supported Third Water and Sanitation for Low-Income Communities Project (WSLIC-3, also known as PAMSIMAS) will be implemented by the MoPW. The MoH pioneered many of the new approaches incorporated into WSLIC-3, such as CLTS, during its implementation of the previous WSLIC-2 project. The MoPW is experienced in the implementation of engineering schemes but has little expertise, experience, or local staff to undertake the social intermediation and software elements of the WSLIC-3 project. The intention is that the MoH will implement the rural sanitation and hygiene elements of the project, leaving the more technical water supply component to the MoPW. But institutional and procurement issues have already delayed the start-up of the project by about a year, illustrating the seriousness of this constraint.

Following procurement delays, the PAMSIMAS program is due to be launched in 2008. PAMSIMAS and the TSSM project propose to use similar methodologies, thus it was hoped that the lessons from the TSSM project in East Java would be fed into the implementation of the PAMSIMAS program. However, it appears likely that substantial learning from the TSSM project will not be discernible until at least a year or two into the implementation phase of the PAMSIMAS program. Nevertheless, PAMSIMAS will scale up the approaches being promoted by the TSSM project to another 5,000 communities across 15 provinces, thus ensuring a substantial scaling up of implementation.

Sanitation Working Group

Efforts by the ISSDP have raised awareness of sanitation issues in Indonesia, resulting in the formation of a new subsector institution known as the Sanitation Working Group. The subsector working group is chaired by the influential Ministry of Planning (BAPPENAS), but it is relatively new and has not yet created a distinct institutional space that distinguishes it from the more established WASPOLA-driven Water Supply and Sanitation working group. The ISSDP is an urban-focused project, thus the bulk of their efforts, and the agenda for the sanitation working group, center on urban sanitation issues. This urban bias was clear during discussions with senior government officials in Jakarta, whose comments constantly returned to urban activities and issues despite reminders that the assessment was focused on rural sanitation and hygiene.

Several stakeholders noted that rural sanitation is more straightforward than urban sanitation, and thus is thought to be less in need of support. Large-scale rural sanitation projects are already ongoing or planned (WSLIC-2, CWSH, PAMSIMAS, and a planned UNICEF program—see “Financing” in the “Findings” section), whereas few large-scale urban sanitation projects are being implemented (despite significant expenditures on planning and feasibility studies). In addition, key stakeholders within the rural subsector (notably MoH and BAPPENAS) appear to be reaching consensus on the most effective approaches for scaling up sanitation coverage, but there remains little agreement on the approaches needed within the urban subsector. This consensus is reflected in the MoH’s draft *National Operational Strategy for Rural Sanitation and Hygiene Improvement in Indonesia* (2007), the inter-ministerial committee for scaling up CLTS, and the Health Minister’s announcement in May 2006 that CLTS and handwashing with soap represent the two pillars of the ministry’s rural sanitation and hygiene program.

Preparations are underway for the first Indonesian Sanitation Summit (planned for November 2007), and for Indonesia’s participation in the first East Asian Ministerial Conference on Sanitation (EASAN) to be held in Beppu, Japan in late 2007. These events illustrate the growing importance of sanitation and provide significant opportunities for raising awareness and promoting new approaches.

Legislation and Regulation

The 2003 national policy “Development of Community-based Water Supply and Environmental Sanitation” refers to a number of supporting legal and policy statements, but all are of a general nature. One example is the Environmental Management Law No. 23 (1997) para.3, which says “enable sustainable development with respect to a sound environment in the development of every individual in Indonesia.”

Despite the existence of a profusion of environmental management laws at the national level, there was little awareness of their content or implications amongst sector stakeholders. No evidence of any enforcement or regulation of national laws or environmental standards was encountered during the assessment. Similarly, the local government stakeholders interviewed were unaware of any local bylaws pertaining to sanitation facilities, effluent disposal, or solid waste management.

Vision, Direction, and Targets

The Indonesia National Medium-Term Development Plan 2004–2009 (RPJMN) contained the goal of all districts and cities (*kabupaten* and *kota*) attaining ODF status by the end of 2009. Despite the ambitious scale and scope of this goal, no specific finance, programs, or other resources have been provided to assist in its achievement and, with only two years to go, most central and local government officials appear to believe that it is an unrealistic and unachievable target.

In 2006, the MoPW issued its National Action Plan (NAP), which targets 64.5 percent access to rural sanitation by 2009 and 71.4 percent access by 2015 (compared with the JMP MDG of 69 percent access to rural sanitation by 2015). However, the 2006 NAP is based on sanitation coverage figures from the SUSENAS survey data and, as noted earlier, these differ from those used by the JMP because the SUSENAS coverage figures include some unimproved sanitation facilities. The JMP methodology assumes that only 50 percent of these simple pit latrines are improved sanitation facilities, thus the JMP figure for access to rural sanitation (40 percent in 2004) is almost 20 percent lower than the official GoI figures. As with the RPJMN, the 2006 NAP appears to be a largely

theoretical exercise, with no evidence of any matching investments, implementation, or actions.

In part, the failure to operationalize the vision of an ODF country by 2009 reflects the increasingly decentralized nature of government in Indonesia. Several stakeholders noted the central government's difficulty to give priority to local governments except through large, centrally financed projects and programs. Given the historically low priority accorded to rural sanitation by district governments, their greater autonomy may now threaten continuing investment in rural sanitation unless local awareness regarding the negative impact of inadequate sanitation on economic growth and public health can be raised. In East Java, there is already evidence that the TSSM roadshows have been successful in raising district awareness and encouraging increased budget allocations to rural sanitation.

Community WSS Policy

In 1998, the GoI 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. The new community-based policy was approved in 2003, and a national level inter-ministerial working group funded by the GoI—often known as the WASPOLA working group—has been set up to guide the policy-implementation process.

The comprehensive, community-based policy has been endorsed by the relevant ministries as well as by several district governments. The second phase of the WASPOLA project (2004–08) has worked on scaling up implementation of the community-based water supply and environmental sanitation policy and expanding current policy reforms to cover institutionally managed services—for example, services managed by public sector utilities and private sector providers (in both the formal and informal sectors). However, the national strategy and investment plan for translating the policies into practice and scaling up sector reform remain unclear.

The decision to split the water supply and environmental sanitation (WSES) sector into *community-based* and *institutionally managed* services, rather than rural and urban services, is based largely on the policy requirements of water supply management. In the sanitation subsector, the national policy combines the challenge of providing community-managed sanitation services in congested urban slums with the very different challenge of improving household-managed sanitation services in rural communities. The TSSM project is dealing only with the rural subsector, where sanitation is not institutionally managed and where the unserved population is sufficiently large to warrant priority action.

The community-based water supply and environmental sanitation policy provides direction for sector reform by changing policy goals from achieving “coverage targets” measured in terms of the construction of facilities to the twin goals of *sustainability* and *effective use* of WSES services. Most of the directives are general in nature, including policies on water as an economic and social good, informed choice as the basis for a demand-responsive approach, environmentally based development, poverty focus, the active role of women in decision making, accountability in the development process, and the government's role as facilitator. However, the hygiene education policy directive explicitly addresses sanitation and hygiene improvements:

Despite the ongoing activity in policy development in the *water* sector in Indonesia, efforts to create an enabling framework for *sanitation* service delivery have been limited and have had little impact on the sector to date. *De facto* GoI policy currently treats basic sanitation (that is, toilets and septic tanks) as primarily a private responsibility. Therefore public finance of sanitation remains limited, with households and commercial establishments expected to make private investments in on-site sanitation improvements in order to conform to public health regulations.

National Sanitation Policy

The national policy for community-based water supply and sanitation provides broad principles for the planning and implementation of services, but it lacks the more detailed guidelines required for effective and coordinated development of services. In particular, the emergence of CLTS-based methodologies has highlighted the absence of formal guidance on minimum technical standards for improved sanitation facilities; the absence of subsidy policy; and the lack of guidance on strategic issues such as awareness raising, demand creation, improving the supply of goods and services, monitoring, evaluation, and knowledge management.

The MoH recognized the policy lacunae and, through the BAPPENAS-led Sanitation Working Group, developed a *National Operational Strategy for Rural Sanitation and Hygiene Improvement in Indonesia* (NOSRSHII). A draft of this document, produced in mid-2007, stated that the strategic objective will be total sanitation, which is defined as being achieved in a community, subdistrict, district, or nation, when all households shall:

- stop open defecation;
- use only their own or shared hygienic latrines for all human excreta disposal;
- wash their hands with soap and water after defecation, handling infant feces, and before touching food (for eating, feeding, or preparation);
- keep their latrines clean and functional;
- use safe drinking water and food handling practices; and
- dispose of domestic solid waste (including domestic animal waste) and domestic wastewater in a hygienic manner.

The draft national operational strategy defines a hygienic latrine as any excreta disposal facility that:

- does not contaminate water bodies;
- prevents contact between human beings and excreta;
- confines excreta in ways that make it inaccessible to flies, other insect vectors, and domestic or wild animals; and
- prevents emission of foul odors.

Policy Issue: Groundwater Contamination by On-Site Sanitation Facilities

Rising housing congestion and sanitation facility density has raised concerns that pit latrines, which usually dispose of liquid wastes into the soil through a porous leach pit, pose a risk to nearby groundwater-sourced water supplies. The general fear is that the pathogen-rich leachate from latrine pits will contaminate groundwater flows and enter groundwater supplies such as hand pumps, shallow wells, and boreholes.

However, while water supply contamination is a common problem, it is debatable whether on-site latrines pose a greater risk to groundwater quality than open defecation.

The risk of groundwater contamination by latrines is often lower than anticipated (because of soil filtration and rapid pathogen die-off rates in warm climates), and such contamination is difficult to attribute with any accuracy. Sanitary and water quality surveys conducted in Cambodia found similar levels of groundwater contamination in all wells, whether or not latrine were nearby, which led the researchers to conclude that the contamination derived from surface flows entering water points through inadequately protected headworks rather than, as popularly supposed, from nearby pit latrines. Therefore, in a context of high levels of open defecation, as in many rural communities in Indonesia, the contamination risk posed by open defecation may be more significant than that by on-site sanitation.

Two important policy impacts should be considered prior to adopting the principle that hygienic latrines should not contaminate water bodies. First, adopting this principle may encourage the promotion of dry latrines over pour-flush latrines and other water-based sanitation facilities, as these water-flushed latrines carry a considerably higher risk of groundwater contamination because of the much larger volume of water (the main pathogen transport medium) involved. Second, there is a significant risk that the adoption of this principle in providing policy will provide a disincentive to low-cost latrine development and improvement, with the unforeseen side effect that it prolongs open defecation and unsafe excreta disposal, thus (probably) posing a far greater hazard to water supplies than the facilities that the policy addresses. For a more detailed discussion of this important policy issue, please refer to the recent WELL factsheet “The Microbiological Contamination of Water Supplies.”

Subsidy Policy

The draft national operational strategy also proposes that:

- external incentives for household sanitation should be directed at the whole community (and be made available only after the desired behavior change has been verified);
- the construction of public sanitation facilities (at schools, markets, mosques, and government offices) may be subsidized; and
- local governments should adopt a consistent approach (within their district) to the use of household sanitation subsidies.

The draft guidelines in the national operational strategy support the CLTS approach by prohibiting the use of up-front hardware subsidies for household latrines. The total sanitation components of both the TSSM project and the PAMSIMAS program are based on a “zero hardware subsidy” approach. Thus, approval of the draft national operational strategy will improve wider policy alignment and encourage scaling up of the total sanitation approaches.

The zero hardware subsidy policy assumes that sanitation promotion and marketing will be sufficient to create demand for sanitation and encourage households to construct their own simple latrines. The positive outcomes of recent CLTS interventions in Indonesia appear to support this assumption, but there remain questions about both the health benefits and the durability of these simple latrines, especially when built by chronically poor households.

The technical principles in the draft national operational strategy provide a solid basis for determining whether latrines are hygienic or not—if the principles are met, then the

sanitation facility should provide adequate health (and other) benefits. However, the proposed guidelines contain little on the technical requirements of a durable and sustainable sanitation facility or on the proposed approach for households that face labor and resource shortages that prevent them from building even a simple latrine.

The assumption implicit in the total sanitation approach is that collective action will solve most of these problems—that the community will band together to provide labor and materials (an internal subsidy) for those genuinely unable to provide their own; and that, once each household in the community has been motivated to address its sanitation deficiency and build a latrine, the household will also be willing and able to repair, replace, and upgrade the latrine as necessary.

Definition of Improved Sanitation Facilities

The draft national operational strategy states that it follows the international definition of improved sanitation facilities used by the WHO-UNICEF Joint Monitoring Programme (JMP). Confusingly, the draft national operational strategy then redefines ‘basic sanitation facilities’ and ‘improved sanitation facilities’ using different parameters to those found in the JMP definitions. In addition, the draft national operational strategy promotes “shared hygienic latrines” whereas the JMP states that shared latrines are unimproved sanitation facilities and, therefore, do not count toward the sanitation MDG.

Despite the technical issues associated with the current draft, the national operational strategy will be an important step in the right direction. However, few stakeholders outside the small group that helped formulate the draft strategy (the WSP, the MoH, and BAPPENAS) appeared to know much about either the purpose of the strategy or its contents. The current lack of awareness may reflect the early stage of the strategy formulation process or a failure to conduct adequate consultation with stakeholders that are cautious about the promotion of total sanitation approaches, or unsure about moves toward collective incentives (rather than household subsidies).

Incentive Framework

No incentive framework is yet in place, although several stakeholders expressed interest in developing an outcome-based framework similar to those implemented in South Asia; options for such frameworks are under discussion by BAPPENAS and its partners. At present, this approach has not been tried in Indonesia and thus there is no central funding available for this purpose. Most of the options under discussion require the use of project funds for the provision of performance grants, or for the allocation of schemes as a reward for achieving pre-defined sanitation outcomes.

Recognizing the importance of developing a local model on which to base any national framework, the WSP is working to convince the provincial and district governments in East Java that they should finance an award system. The current TSSM proposal is that communities (*dusun*) that achieve ODF status will receive a non-financial award (public recognition of their achievement); these communities then will be able to access finance for school sanitation and hygiene facilities, and will also qualify to take part in an annual clean village competition that rewards subdistrict, district, and provincial winners with cash prizes presented at high-profile award ceremonies.

The proposed award framework lacks the universal financial incentive available through comparable schemes such as India’s *Nirmal Gram Puraskar* (NGP), which provides a financial reward to every village government that achieves well-defined sanitation

outcomes. Whilst each ODF community in East Java will receive some form of recognition, the financial elements of the proposed framework are likely to reach only an elite group of communities competing to be the cleanest village in their area.

There is an argument that the opportunity to attend the high-profile NGP award ceremony is the largest incentive for local leaders in India, but this argument neglects the significant investments and reinforcing activities that are associated with the NGP process: state- and district-level checks on NGP applications; independent verification of outcomes by third-party contractors (financed by the central government); national award ceremonies attended by every award winner (4,500 people in May 2007, all of whom were flown to Delhi and housed in good hotels); and performance grants (minimum US\$1,000) provided to each successful local government.

Investment in a comprehensive outcome-based incentive framework will be critical to the scaling up of the TSSM approaches, and it appears that greater efforts are needed at this stage to ensure that sufficient finance is allocated to the process.

Strategic Planning

At national level, there has been no strategic assessment of relative sanitation priorities or specific challenges found across the diverse islands of Indonesia, and little attempt to link sector targets (for example, the RPJMN goal of ODF status by 2009; the NAP coverage targets; or the sanitation MDG) with realistic investment and action plans. Furthermore, there is no evidence of a coherent plan to address both urban and rural sanitation development, to identify gaps between the two subsectors, or to encourage coordination of the currently separate planning processes, programs, and activities.

The TSSM project has begun a strategic assessment and planning process in East Java by asking each of the 29 districts to conduct baseline surveys, prepare comprehensive plans for achieving universal rural sanitation, and estimate the financial requirements of these plans. The initial project focus is on implementation in 30 rural communities in each district, but this wider planning and assessment process has raised awareness, introduced some more strategic thinking, and encouraged district governments to plan activities beyond those directly supported by the project.

At present, the project activities in East Java are not formally linked or coordinated with any other programs or projects, although the design remains similar to that of the PAMSIMAS program. The WSP hopes that the learning from the TSSM will eventually be incorporated into the PAMSIMAS program, which will be implemented in 15 provinces across Indonesia. However, the MoPW—the main implementing agency for PAMSIMAS—was unclear how the TSSM project was linked to PAMSIMAS at the time of the enabling environment assessment.

This disconnect reflects the current TSSM strategy of working directly with district governments in order to develop local ownership, local finance, and locally adapted models. This approach separates most of the project activities from national strategic planning and program development activities. As a result, few central government stakeholders have a clear understanding either of the approaches promoted by the TSSM project, or of how the project fits with other sector initiatives and projects.

Political Support

The WSP team is in the process of conducting project marketing roadshows in each district of East Java. These district roadshows have targeted elected leaders, departmental

heads, community organizations, NGO activists, and local media in order to raise political and administrative awareness of rural sanitation and hygiene issues and of local government responsibilities for these services under decentralization.

A demand-responsive approach has been used, with interested districts required to submit a letter of intent (LoI) confirming their interest and support for the project, as well as a formal commitment to finance their share of the project activities. This commitment includes:

- transport costs and expenses for staff taking part in training, monitoring activities, and project meetings;
- rewards for communities that achieve ODF status;
- costs of using “informal leaders” to trigger total sanitation in other communities; and
- cost of development activities (as per district plans).

At the time of the assessment, 14 out of the 29 districts were thought likely to take part in the first phase of the project. Since then, the WSP Indonesia team has confirmed that 10 districts committed to the first phase (October 2007 to April 2008), with another 5 districts starting six months later (May to October 2008) and the remaining 14 districts commencing implementation in year two (November 2008 to April 2009). The lower than expected participation in the first phase probably reflects the relatively short lead-in time for the project—several districts were unable to mobilize sufficiently quickly to approve budget allocations and resources, and thus decided to delay their participation in order to ensure better preparation and planning.

Each of the phase-one districts has committed to finance their share of activities according to their project plan. The average budget allocation for the first year was Rp 100 million per district (US\$12,000), amounting to Rp 0.99 billion (US\$120,000) across the 10 districts, with most of the phase-one districts also proposing higher budget commitments for the second year. The remaining 19 districts have pledged their commitment to the second phase of the project (due to start in 2008) and are planning similar or larger budget allocations.

Given previously low investments in rural sanitation by local governments, the district financial commitments to the project indicate a significant increase in local political support for rural sanitation development. This increased political support probably reflects three things: the recent success of the CLTS approach in East Java (notably in Lumajang District), which attracted a lot of positive publicity and political interest; investments in CLTS training and implementation (covering 12 districts and 72 communities in East Java) by the WSLIC-2 project; and the recent roadshows conducted by the project.

Political support at the provincial level is more difficult to ascertain. The decentralization process has left provincial governments with limited resources, but with fairly broad managerial and oversight responsibilities. As a result, provincial officials are often over-stretched and unable to pay close attention to the details of planning and implementation. In addition, the relatively small provincial budget means that most resources and political interest are tied to large centrally financed projects rather than to locally determined activities or priorities.

Nevertheless, the provincial health office (DinKes) reports that the provincial governor has attended CLTS workshops, and that the project is in line with the Government of East Java's philosophy for rural sanitation and hygiene improvement. As evidence of this support, DinKes noted that CLTS facilitators from all 29 districts and 9 cities in East Java are to be trained at a cost of US\$35,000, which will be jointly funded through central, provincial, and district development budgets.

The central government is investing more in rural sanitation and hygiene, but the majority of the investment is through soft loans for donor-formulated projects rather than government-led programs. However, the rapid success of the CLTS approach appears to have generated more interest in, and support for, rural sanitation. For example, the rural sanitation and hygiene improvement component of the forthcoming World Bank–supported PAMSIMAS project will invest US\$25 million across 100 districts, which is more than double the amount allocated to the rural sanitation and hygiene component in the previous (WSLIC-2) project. In addition, the direct government contribution to project costs has increased significantly, from only 13 percent of the total in the WSLIC-2 project up to 42 percent in the PAMSIMAS project, thus indicating a greater willingness to invest government funds in the rural water supply and sanitation subsectors.

Support for the Total Sanitation Approach

Support for the total sanitation approach is growing in Indonesia and is already significant among key stakeholders such as the MoH and BAPPENAS, as well as among the local governments in East Java. The two largest rural water supply and sanitation projects (World Bank–supported PAMSIMAS and the ADB-supported Community Water Sanitation and Health project) either already utilize a total sanitation approach or are planning to adopt it. In addition, several small but influential stakeholders, such as Plan Indonesia, are in the process of converting their projects to use total sanitation approaches.

However, policy alignment is by no means complete. Several key stakeholders—notably the MoPW, UNICEF, USAID, and CARE Indonesia—expressed concerns about the total sanitation approach and appeared reluctant to commit to an approach that involves limiting the provision of household sanitation subsidies. While most of these stakeholders seemed to agree that elements of the total sanitation approach were promising, common concerns included:

- the challenge of reaching poor households in remote islands without subsidies
- a non-integrated approach (weak on hygiene, water supply, and school sanitation)
- low quality, usability, and sustainability of the simple latrines built under CLTS (with a risk of reversion to open defecation if collective pressure eases)

While these are valid points, the concerns expressed about the total sanitation approach appeared to reflect ideological stances (often correlated with the urban experience and outlook of the stakeholders) rather than realistic and evidence-based evaluations of the effectiveness of the total sanitation approach in rural areas (for example, when compared with the effectiveness and cost-efficiency of alternative rural approaches).

The MoH has been encouraging stakeholders to use subsidies only in providing institutional sanitation facilities (school sanitation, bus stands, government offices) in the

hope that this allowance will enable those stakeholders that prefer a more supply-driven approach to continue supporting rural sanitation improvements without undermining CLTS efforts. Approval of the draft national operational strategy is, therefore, critical to long-term support for the total sanitation approach, as the strategy contains clear guidelines on subsidy policy that will dictate the nature of future interventions.

Despite the policy alignment problems, MoH enthusiasm for the total sanitation approach combined with positive publicity regarding its already rapid impact in Indonesia, and its adoption by several of the large sector projects, are resulting in strong demand for the approach. Fifty-four districts (15 percent nationally) are already implementing the total sanitation approach, and the MoH reports that its central team is struggling to keep up with the rising demand for training and support from district governments.

Support for the Sanitation Marketing Approach

Sanitation marketing is a new and little known concept in Indonesia. Most stakeholders were unclear about how it would differ from previous attempts to supply low-cost latrine materials to rural households. There is thus a risk that this component will be undervalued unless significant efforts are made to raise awareness of sanitation marketing's benefits and differentiate it from the unsuccessful supply-driven approaches used in the past (for example, the provision of free latrine material packages and of latrine pan molds for the production of cement pans).

Approval of the draft NOSRSHII will be critical to the sanitation marketing component, as the draft strategy contains guidelines that will prescribe the use of up-front hardware subsidies for household sanitation facilities. If approved, the subsidy guidelines should encourage a shift toward a more market-based and sustainable supply of sanitation goods and services. The district governments in East Java are expected to adopt the guidelines contained in the draft national strategy, providing an opportunity to pilot new sanitation marketing approaches and activities within a relatively well aligned and supportive policy environment. The lessons learned from piloting the sanitation marketing activities and draft national strategy in East Java can then be scaled up through other rural sanitation programs by implementing the final national strategy across Indonesia.

Institutional Arrangements

Donor-supported projects dominate the rural water supply and sanitation sector. The majority of recent projects (WSLIC-2, CWSH) use a project management unit (PMU) institutional model, with implementation managed by district PMUs (DPMUs) and facilitated by project consultants, contract facilitators, and local government officials. The PMU model is supposed to provide rapid and efficient implementation through the use of external experts (on contract) and selected counterpart staff, but tends to result in a strong project focus (ignoring wider local government priorities) and rarely succeeds in building sufficient local capacity to ensure sustainable service delivery once the PMU is disbanded on project completion.

Ownership Issues

The project is targeted largely at the provincial and district levels, with most current awareness raising and planning activities taking place in the districts. Significant efforts have been made to make the program demand-responsive: Following the roadshows, each district must articulate its demand for the program through a formal letter of intent and an

official budget commitment. As a result, the districts have a strong sense of ownership and a genuine interest in the program.

The WSP's intention is that the implementation of a successful program at provincial level will provide a model for other provinces and will encourage central support for larger-scale implementations across the country. The MoH is actively supporting CLTS interventions in Indonesia and was aware of the TSSM program and supportive of its objectives, but there is currently little GoI ownership of the TSSM program. The overall planning, management, policy and decision making of the TSSM program are managed by the WSP with little input from GoI counterparts in Jakarta.

As a result, few central stakeholders were aware of the details of the TSSM program or of how it fits with other sector initiatives. The Project Advisory Committee, which is supposed to be a national level inter-ministerial body that guides TSSM project implementation, was not functional at the time of the assessment. The WSP currently has some short-term staffing issues in Jakarta, in part because of the intensive activities associated with the start-up of the TSSM program in East Java. These staffing issues need to be resolved rapidly so that more time can be invested in raising the awareness, interest, and involvement of central government counterparts.

A related issue is the limited central or provincial funding of TSSM activities. The increasingly decentralized government system means that district budget allocations are becoming the main source of finance for implementation activities. Nevertheless, buy-in by central government is important for the spread of policies and strategies to other provinces and programs. Some central and provincial government funds and technical support are being provided for the district-level CLTS training courses in East Java, which are seen as part of wider capacity-building efforts, but there was little evidence that the TSSM program was integrated into central plans or budgets. However, the forthcoming PAMSIMAS program will require substantial finance from central and provincial governments, thus a higher level commitment and ownership of the TSSM policies and strategies have already been secured.

Coordination

The sanitation working group formed by the ISSDP in 2006 works in parallel with the existing water and sanitation working group (Pokja AMPL) established by WASPOLA. While it is important to encourage a separate sanitation working group, it appears that the distinctions between the two groups are unclear to many of the members, not least because the membership of the two groups appears to be almost identical. The sanitation working group is supposed to cover both rural and urban sanitation but, at present, its agenda is driven largely by the ISSDP, and hence it focuses mainly on urban issues.

Given the overlapping objectives of the ISSDP and the TSSM project, both centered on the need to improve the enabling environment for sanitation, it seems clear that these initiatives would benefit from closer coordination and planning. At present, despite many common stakeholders and interests, there are few formal links between efforts to improve urban sanitation and efforts to improve rural sanitation.

More coordinated implementation is underway following the adoption of the CLTS approach by several large projects, which is encouraging the use of common training resources, better-aligned policies, and more coordinated activities. However, firm linkages between the TSSM program and other large-sector programs have not yet been established or mapped out. This weakness probably reflects the current East Java focus of

the project, but it remains important that efforts are made to establish stronger links for coordinating efforts and scaling up the lessons learned in the TSSM project.

Few formal partnerships are evident between the project and central government. The MoH has been involved in the planning of the TSSM project and is partnering at provincial and district levels, but at this stage the central ministry cannot be considered an active partner. Similarly, BAPPENAS is aware of the TSSM project and is supportive, but is not actively involved in the planning, management, or monitoring of the project. The limited central partnerships reflect the provincial setting of the project and the fact that no project funds are flowing through the central government.

However, WSP Indonesia has been actively partnering the MoH and BAPPENAS in the development of the draft NOSRSHII. This document will be important to the scaling up and replication of the methodologies promoted by the TSSM project, so it is important that the WSP continue to support this partnership.

Implementation Partnerships

Close links have been formed with the World Bank–assisted WSLIC-2 project, which was used to expand the piloting of the CLTS approach in Indonesia. Fourteen of the twenty-nine districts in East Java were covered by the WSLIC-2 project, although their activities are due to wind up by December 2007. Where available, the project plans to utilize the capacity and institutional arrangements (DPMUs, trained project facilitators, monitoring systems) already put in place by the project. In the non-WSLIC districts, the project plans to establish WSLIC-style DPMUs managed by the local DinKes.

The WSLIC DPMU model utilizes contract facilitators for the majority of the outreach and social intermediation activities. The project will either contract the pre-trained WSLIC facilitators or, where these are unavailable, recruit and train new facilitators. Most of the WSLIC facilitators are young, inexperienced college graduates, and their performance under the WSLIC-2 project is reported to be highly variable. Few performance-related incentives are available to these short-term contract facilitators, thus outcomes tend to be driven more by their personal commitment than by institutional factors.

The TSSM project plans to broaden local implementation partnerships, with efforts already being made to encourage districts to involve local federations (for example, the local government–supported women’s federation), local religious groups, and local NGOs. In general, these organizations seem ready and willing to take part in project activities, but it remains unclear how effective their efforts will be without some form of institutional or financial incentive to encourage performance and long-term support.

The PKK women’s federation may be an exception, as it already operates an environmental health cadre of 5–8 women in each village (*desa*) and is a permanent institution that receives government funding (at least for some of its activities). Importantly, the head of the district PKK is normally the wife of the Bupathi (elected district leader), which ensures unusual political support for PKK activities.

Financial Partnerships

No formal financial partnerships have been entered, but the project is seen as part of the wider total sanitation movement, which is gaining increasing financial support from donors and local governments. Both the World Bank and the ADB have agreed on common approaches and aligned project guidelines with the total sanitation philosophy (for example, zero subsidy for household sanitation and the use of CLTS to trigger demand).

As noted earlier, UNICEF remains uncertain about both the zero hardware subsidy policy and the use of CLTS to trigger demand. However, strong pressure from the MoH and BAPPENAS on UNICEF's main donor, the Royal Netherlands Embassy, is urging UNICEF to re-appraise their stance and to harmonize policies with those of other key sanitation stakeholders.

Private Sector Partnerships

At present, there is little or no engagement with private service providers. However, the sanitation marketing component of the project plans to involve private sector agencies in market research, in capacity building programs, and in promotional activities with local manufacturers and service providers (for example, retailers, masons, and manufacturers). The project's sanitation marketing team is currently exploring the possibility of linking up with a major cement manufacturer (HOLCIM) to market cement-based sanitation products through their retailer and franchise networks.

Efforts are being made to convince large private corporations in Indonesia to finance a national handwashing campaign. The modalities of this support have not been defined, and there appear to be significant challenges involved in persuading Indonesian corporations to sponsor development activities unless clear advertising and public relations benefits are going to be generated. At the time of the assessment, no specific efforts had been made to involve private corporations or philanthropists in sponsoring TSSM activities.

Public Sector Partnerships

Despite joint participation in formal coordination bodies, cross-sectoral partnerships between central government bodies are weak. With the exception of the good relations between BAPPENAS and the MoH, the relationships between most other departments are united. In addition, there are few active linkages or collaborations between sanitation initiatives and health initiatives, such as the Coalition for Health Indonesia (KUIS), the Desa Siaga program, or the various campaigns for handwashing and hygiene promotion.

Cross-sectoral partnerships appear stronger at district level, particularly where the district head (Bupati) takes an interest in the sanitation activities. In East Java, the Phase 1 districts have already integrated the TSSM program into their 2007 budgets, plans, and ongoing activities. In the two districts visited, the planning (BAPPEDA), health, home affairs, and education departments were aware of the program, and were coordinating activities and resources appropriately.

Program Methodology

The program methodology builds on previous CLTS experience in Indonesia. The CLTS methodology is well regarded and well understood in Indonesia, particularly in East Java where the Lumajang success story has been widely disseminated. In contrast, sanitation marketing activities present a new and untried methodology in Indonesia, and thus it requires greater effort to raise awareness and build consensus on their suitability and effectiveness.

The TSSM district roadshows have been effective in raising awareness and priority for sanitation, and have resulted in a significant increase in local understanding of the program objectives and methodologies. The roadshows have also been used to assist the East Java Districts in developing district sanitation strategies and investment plans. Importantly, the district sanitation plans cover the entire district rather than just the 30 communities in each district to be targeted by the project, which has meant that the district governments have had to collect updated data on sanitation coverage and address the significant challenge of providing services to all of those currently without sanitation.

Program Targeting

The WSP Indonesia team has been advising district governments in East Java to avoid starting the TSSM project in areas that have recently implemented subsidy-based sanitation programs in order to avoid any confusion on policy and to limit the risk that these areas will be less responsive to the zero subsidy policy adopted by CLTS programs in Indonesia. This zero subsidy policy is in line with national guidelines, but it will become increasingly inappropriate as project coverage expands. However, the final decision on the selection of project communities and the phasing of interventions lies with the districts, dictated by their proposed strategy and budget allocations.

The TSSM project plans to target 870 of the 8,484 villages in East Java, about 11 percent of the total, and hopes to achieve a minimum of 300 ODF communities by the end of the project. While the scale of this direct intervention is significantly larger than that of any previous sanitation intervention in East Java (for example, only 72 villages in East Java were covered in the last year of the WSLIC-2 project), it is still small enough (at only 11 percent of the total) that it carries the risk that district governments select only above-average communities: those with active village leaders, active local NGOs and CBOs, and strong demand for sanitation improvements.

The project plans to be demand-responsive, with only communities that formally express their interest to local governments selected. In addition, the sanitation marketing component should reach a larger audience through its mass media campaigns and open capacity building programs, which should encourage the spread of project messages and methodologies to a wider population.

Nevertheless, a relatively small proportion of the district population is likely to be reached by the TSSM project, which means that the effectiveness of the total sanitation and sanitation marketing methodologies in non-selected communities and non-targeted areas, which are likely to have less supportive conditions, will remain uncertain at the end of the project. The project plans to assess whether demand or activity in the less able and less involved communities is improved by its efforts as part of its learning agenda.

Incentives for Nonperformers

The district performances under the WSLIC-2 project were variable. Some districts became interested in the CLTS approach and made rural sanitation a local priority, but commitment was lower in other districts. This variation highlights the importance of performance-based incentives. At present, there are few institutional incentives for local government facilitators and community leaders to implement CLTS effectively. Local successes have been personality-driven, with little done to sanction or reward performance. The project plans to develop an award system based on collective outcomes (for example, ODF communities), and it is promoting a national dialogue about the need for consistency in the certification systems used to verify and reward ODF achievement.

WSP Indonesia provided some examples of incentives and sanctions formulated by local leaders to encourage sanitation improvement. None of these examples were encountered during the assessment, but the following have been included in order to illustrate additional possibilities for local incentive systems:

- celebration of ODF status through a notice board or monument commemorating the local achievement (financed by local leaders)
- provision of a goat by the head of the village (to subvillages that achieve ODF status)
- cash rewards (Rp 50,000) to the best natural leaders and village heads (Rp 150,000) of villages that achieve ODF status
- honorable mention for best facilitator, sanitarian, and health center chief during district and national events
- business incentives (support for marketing palm flour) to communities that achieve ODF status (linked to complaints from international buyers about the use of polluted river water in washing the flour)

The project will organize both internal and external exposure visits. Stakeholders from East Java will share their experiences and see successful sanitation programs in other places, and stakeholders from other provinces and districts will be brought to East Java to learn from the project. The exposure visits should help to build consensus on approaches and help to spread the methodologies to stakeholders and populations beyond the current project.

Community Monitoring and Hygiene Promotion

The project plans to use a selection of tools from the methodology for participatory assessments (MPA) and Participatory Hygiene and Sanitation Transformation (PHAST) for community monitoring and hygiene promotion. An MPA/PHAST tool was developed and adapted for the WSLIC-2 project for monitoring its CLTS sub-projects, and has been relatively effective in meeting the project objectives.

However, the MPA/PHAST methodology is fairly complex and resource-intensive, requiring significant facilitator training, regular follow-up, and competent data analysis. Elements of the participatory methodology have proven extremely useful—for example, the dynamic social mapping process that facilitates regular wealth-disaggregated updates of sanitation coverage—but it remains to be seen how effective this approach will be when implemented without the constant support allowed by WSLIC-2 project resources.

Methodological Weakness: Safe Disposal of Infant Excreta

The safe disposal of infant excreta is one of the key hygiene behavior improvements required under any sanitation and hygiene intervention. At present, neither the total sanitation nor the sanitation marketing methodologies appear to include explicit approaches to address the promotion of this hygiene behavior change. The draft national operational strategy states that “only own or shared hygienic latrines [shall be used] for all human excreta disposal,” which implies that infant excreta should always be disposed to a hygienic latrine, and requires that safe infant excreta outcomes be targeted and monitored by the project.

Implementation Capacity

Resource allocations suggest that sanitation remains a low priority in Indonesia. There are no government officials with full-time responsibility for sanitation at central, provincial, or district levels. Responsibility for sanitation is usually allocated in addition to other roles and responsibilities, thus the time available for the management of sanitation activities, and the attention paid to the outcomes, varies considerably.

Provincial staff in the DinKes are particularly overstretched as staffing levels were cut back during the decentralization process, leaving limited staff to cover a large number of subsectors, programs, and projects.

The relatively small WSP program team is also overstretched in managing district-level activities across the 29 districts of East Java. As a result, there is limited WSP capacity for the central activities required to improve the enabling environment.

Despite the capacity building conducted by the WSLIC-2 project (in 14 of the 29 districts), the WSP Indonesia team considers that district-level implementation capacity needs strengthening. The WSLIC-2 project focused largely on water supply development and management, thus local capacity for rural sanitation and hygiene improvement remains limited. Therefore, the project is in the process of contracting two private resource agencies to support district implementation activities at a cost of US\$150,000 per year. These agencies will employ a coordinator in each district for the duration of the program, and the WSP has assigned a full-time provincial program coordinator to be based in Surabaya, which should relieve some of the pressure on the WSP team.

Community-Level Capacity

At the community level, rural health centers (*puskesmas*) and community midwives (*bidan desa*) provide the main source of implementation capacity. Each *puskesmas* employs a sanitarian tasked to monitor public health and sanitation within the jurisdiction of the health center, but a permanent lack of resources (no transport, no funds for fuel or allowances) limits activities to the bare minimum. As the cadre of sanitarians already holds the long-term support and monitoring role, the challenge will be to provide sufficient incentives and resources to ensure that the sanitarians undertake their previously neglected sanitation-related duties.

The MoH employs 50,000 *bidan desa* in Indonesia, which means that there is one in almost every rural community. The *bidan desa* appears the ideal interface for sanitation and hygiene promotion and monitoring activities within the community, but their workload is already significant—thus it may be counterproductive to add to their responsibilities by engaging them directly in sanitation activities. However, at the least,

the *bidan desa* should be involved in any training activities, and should be consulted before and during any health or hygiene-related activities.

Hygiene-Promotion Capacity

There is a shortage of professionals with experience or skills in sanitation or hygiene promotion. Many of those who profess to be sanitation specialists have a technical background in the design of sewer networks, but have little or no practical knowledge of hygiene behavior change or the complex socioeconomic factors that influence the demand and uptake of improved sanitation facilities.

Availability of Products and Tools

A more detailed analysis of the availability of sanitation goods and services will be conducted under the sanitation marketing assessment, thus only limited fieldwork and assessment were conducted in this area. The main finding was that East Java has a relatively well developed market system—rural communities are rarely far from the market, and most goods are reasonably priced compared with prices in more remote Indonesian islands where, for example, cement prices can be very high. In addition, there appear to be few constraints to market supply—retailers face few unnecessary restrictions on their business practices, and there was no evidence of any significant market gaps.

Stakeholders in Surabaya reported that sanitary wares were readily available in most market places, and that a range of low-cost goods were available, with plastic latrine pans costing as little as Rp 11,000 (US\$1.20) and ceramic “gooseneck” latrine pans costing about Rp 120,000 (US\$14). However, no plastic pans were spotted during the fieldwork visits, and retailers in the two districts stated that they had not encountered or heard about any plastic pans while buying sanitary wares from wholesalers in Surabaya.

A short visit to a sanitary ware retailer in the town of Pasuruan, East Java, appeared to confirm these reports: six different models of ceramic pedestal latrine were available (probably reflecting more urban tastes), as well as three different models of ceramic gooseneck latrine pan (costing from Rp 120,000 to 130,000). The retailer stated that he bought his wares from Surabaya, used his own transport to bring the wares back to Pasuruan, and paid the standard 10 percent value added tax on the wares. The retailer also noted that lower-quality ceramic pans were available in Surabaya from Rp 50,000 (US\$6), but that the glaze on these cheap pans was easily chipped, thus he did not stock them. Average sales from this retailer were reported to be about 100 pans per month, but sales were said to be decreasing because of growing competition (although only four sanitary ware retailers operate in Pasuruan).

A review of data from the SUSENAS household surveys revealed that about 20 percent of the population of East Java live below the poverty line, and that 33 percent of rural houses in East Java have earthen floors and non-brick walls. The housing data suggest that, in order to match latrines with local housing types, building materials, and construction capacity, efforts should be made to promote simple latrines with earth floors and non-brick walls (at least for the poorest third of the target population).

Financing

The GoI's external debt burden is extremely high. Economic growth resulted in a higher nominal GDP in 2004 (US\$258 billion), but the ratio of external debt to GDP has decreased only slightly, from 57 percent (in 2003) to 53 percent. As a result of this heavy debt burden, the GoI is reluctant to borrow funds for anything other than essential investments, and has a bias toward programs that produce tangible outputs.

During the preparation of the PAMSIMAS program in 2005, this reluctance translated into an unofficial policy of the Ministry of Finance to restrict non-hardware components in infrastructure loan programs to less than 10 percent of the total investment. This unofficial policy was problematic for community-driven development programs, given the trend for sanitation and hygiene interventions to invest more heavily in software activities and capacity building. The WSLIC-2 project incorporated a “community and local institutions capacity building” component that covered facilitation, training, participatory identification, and preparation of community-level projects, development and production of promotional materials, institutional strengthening of district and local agencies, and public information activities. This component alone accounts for 32 percent of WSLIC-2 external project costs (US\$34.2 million), which illustrates the severe constraint that a 10 percent cap on non-hardware costs would impose on future sanitation and hygiene interventions.

Since 2005, this constraint has eased considerably. The success of the CLTS approach in Indonesia, and the high-level support that this success generated, appear to have been significant factors in raising the financial ceiling for software support through loan-based programs. Following a one-year program preparation period, the US\$275 million PAMSIMAS program contains significant software components, yet the government's share of total program costs has increased from only 13 percent of the WSLIC-2 project to 42 percent of the much larger PAMSIMAS program.

Central Control of Project Finance

Sustainable finance appears to be a major subsector constraint. Most rural sanitation finance is currently controlled by centrally managed GoI projects PMUs—a recent WASPOLA study found that, despite decentralization, 73 percent of water supply and sanitation funds remain centrally controlled. This short-term project finance is used explicitly to meet fixed project objectives, usually in specific project-defined locations, thus making difficult any strategic planning or expansion of investment by local governments.

In part, this continuing centralization reflects the low priority and investment accorded to sanitation by local governments. Few reliable data are available on local government budget expenditures. Anecdotal evidence suggests that very little is spent on rural sanitation, with limited district expenditures usually spent on environmental sanitation infrastructure such as open drains and solid waste collection. However, the WSLIC-2 project required that its partner districts contribute 8 percent of project costs, and this figure has been used as a guideline for district contributions to the TSSM program.

Underutilization of Local Government Funds

Recent reports of a significant underutilization of local government funds indicate both implementation capacity weaknesses and the potential for larger investments in rural sanitation. At present, some local governments are struggling to spend their annual

budget allocations, presenting an opportunity for the project if it is able to assist local governments in the strategic planning, design, and management of interventions to improve rural sanitation and hygiene.

As noted earlier, the 10 districts taking part in phase 1 of the project in East Java have already committed a total of about Rp 1.0 billion to the first year of the program (Table 2). Given previously poor allocations to rural sanitation, this commitment, when combined with additional pledges to allocate larger amounts in 2008, represents a substantial step forward. However, the amounts remain low, averaging only Rp 100 per capita per year (US\$0.01) in 2007, equivalent to an annual investment of about Rp 920 (US\$0.11) per unserved household.

Table 2: East Java: District Financial Commitments to Rural Sanitation

District	2007 Rp millions	2008 Rp millions	Unserved population	Investment per capita (Rp)	Investment per unserved (Rp)
Bangkalan	300	100	228,000	336	1,316
Jember*	264	264	1,704,000	117	155
Sumenep	168	168	569,000	161	295
Pamekasan	140	140	297,000	187	471
Trenggalek	132	132	297,000	195	444
Situbondo*	80	80	507,000	128	158
Nganjuk*	63	100	419,000	61	150
Lumajang	60	197	605,000	60	99
Pasuruan	60	200	896,000	42	67
Tulungagung	50	50	361,000	51	139
Probolinggo*	50	50	793,000	48	63
Kediri	37	221	681,000	25	54
Pacitan	25	25	80,000	46	313
Ngawi	20	20	429,000	23	47
Total	Rp 1,449	Rp 1,747	7,866,000	Rp 99	Rp 184

Source: WSP Indonesia

* Phase II districts (originally Phase I but now moved to Phase II)

The East Java DinKes estimate that the CLTS process alone costs Rp 10 million per village (including facilitator training and implementation), which equates to about Rp 6,800 per capita (US\$0.80). These figures are considerably lower than CLTS cost estimates from Cambodia and India, which are typically about US\$10 per household (US\$2 per capita), but still suggest that the investment required to facilitate the CLTS process (without costing household contributions, sanitation marketing, or other hygiene promotion activities) in 50 percent of the rural communities in East Java will approach Rp 50 billion (US\$5.9 million), or about Rp 6.3 billion (US\$730,000) per year over the eight years until 2015.

The current budget of the East Java DinKes for all health-related activities is about Rp 1.4 billion; the amount committed to the TSSM sanitation activities by the districts will rise to Rp 1.75 billion in 2008. Therefore, it is clear that significant efforts are necessary to raise government investment to the level required to facilitate effective interventions and leverage household investments sufficient to achieve the sanitation MDG in East Java.

Several large projects with rural sanitation and hygiene components are either ongoing or about to start up. PAMSIMAS (also known as WSLIC-3) is the largest, but even this

US\$275 million project will cover only 7 percent of the country through the 5,000 villages that it plans to assist (out of the national total of 72,000 villages). The two ADB-supported Community Water Services and Health (CWSH) projects plan to cover another 1,400 villages in Sumatra and Kalimantan (including 400 tsunami-affected villages in the Aceh region). The planned coverage of these major projects will be less than 10 percent of the national total, and the implementation problems faced by previous large projects in Indonesia suggest that the final coverage achieved is likely to be lower still.

Outcome-Based Incentive Framework

A critical issue is the lack of financing for an outcome-based incentive framework. Several stakeholders, notably BAPPENAS and the MoH, expressed an interest in developing an incentive framework along the lines of those implemented in South Asia (Box 1), but there is little evidence yet that the GoI is willing to finance a centrally administered fund. The project aims to pilot some sort of award and incentive system in East Java, and it appears that most stakeholders are waiting to see how this system works within the Indonesian context before committing to any larger schemes.

While a GoI-financed incentive system is important for the long-term sustainability of any such framework, there are several alternative mechanisms that may provide funds for incentive systems that strengthen the national case for outcome-based financing.

The first is the use of project scheme allocations as incentives for sanitation improvement: in India, some district governments have started prioritizing infrastructure schemes to communities that achieve collective sanitation outcomes; similarly, in Pakistan, community infrastructure projects are linking scheme approval to the achievement of ODF status. The second approach is the introduction of clean village competitions at the district or province level. These competitions do not require huge investments, as award finance is usually only required for the top handful of communities each year, but the competitions can be linked to high-profile promotional ceremonies and campaigns.

Institutional Incentives: Different Models in South Asia

There are several different types of incentive system operating in South Asia, but all of the successful ones are based on rewarding collective outcomes:

- post-ODF cash transfers to poor households (that is, nothing to non-poor households)
- post-ODF community cash transfers (earmarked for infrastructure development)
- rewards for achieving collective sanitation outcomes (prestigious ceremonies, trips to the capital, meetings with senior politicians and administrators)
- annual sanitation competitions (clean village awards to the top villages in each area, district, or province)

Another facet of successful incentive systems is that multiple incentives and verification systems are provided by different tiers of government, thus reinforcing the promotion and monitoring of the collective outcomes:

- community cash awards by central government (for example, NGP)
- clean village competitions financed by the state or province government
- project incentives (for example, allocation of new schemes) provided by districts

The most successful of the incentive systems is the Nirmal Gram Puraskar (NGP) in India. The NGP combines community cash transfers with prestigious awards to elected village heads (and other officials), using independent verification (contracted out) of sanitation outcomes with random checks on the verification results. The NGP also examines hygiene and environmental sanitation: The NGP criteria include ODF status, hygiene behavior, solid waste management, wastewater management, and general village cleanliness and quality of life.

The NGP awards have grown dramatically since their inception in 2005, with about 20 million people living in the 5,246 villages benefiting from “totally sanitized” conditions:

- 2005: 481 applications from 6 different states resulting in 40 NGP awards
- 2006: 1,421 applications from 16 different states resulting in 769 NGP awards
- 2007: 9,745 applications from 24 different states resulting in 4,437 NGP awards

Pakistan is currently piloting a phased performance grant system intended to move progressive local governments toward its environmental sanitation objectives. A progressively increasing performance grant is awarded on the achievement of the collective outcome required by each phase:

- Phase 1: Defecation-free status (ODF plus universal handwashing + universal sanitation)
- Phase 2: Litter free-status (solid waste management plus reconfirmation of defecation-free status)
- Phase 3: Foul water-free status (safe drainage and wastewater disposal plus reconfirmation of defecation-free and litter-free status)

The Khushal Pakistan Fund recently announced that scheme allocations in the US\$200 million program, which is executed through a national NGO, would be dependent on the achievement of ODF targets in its project villages. During the current calendar year, the Khushal Pakistan Fund is expected to reach 9.7 million people in 1.36 million households spread across 73 districts of Pakistan; there is huge demand for Khushal Pakistan Fund schemes, thus this policy decision creates a massive incentive for communities and local governments to invest in stopping open defecation and improving local sanitation facilities.

Financing of School and Institutional Sanitation

The project will not finance the construction of sanitation facilities in households, schools, or public institutions. This policy differs from that of the WLSIC-2 project, which provided 100 percent finance for the construction of school facilities. It also differs from that of the forthcoming PAMSIMAS program, which proposes to finance school facilities only after the communities using the school are verified as ODF.

The project hopes to leverage finance for school and institutional facilities from existing government budgets, donor projects, and community and private contributions. However, it is not clear whether sufficient incentive exists for communities or local governments to give any priority to investment in these facilities. The project proposes to mobilize community pressure on local government by incorporating requirements for school and institutional sanitation into local sanitation awards. This approach mirrors that of the NGP model in India: no community or local government can win the NGP award without first ensuring that sustainable facilities are in use in all schools, government offices, market places, and public areas. As a result, communities and village governments that have successfully achieved ODF status and are keen to win the NGP award apply significant pressure on local politicians and higher tiers of government in order to leverage funds for the construction of their school and institutional facilities.

The sustainability of school and institutional sanitation services is another major issue. School budgets are rarely large enough to pay for the regular cleaning and maintenance of their sanitation facilities. Local government budget constraints and financial leakage (that is, funds not reaching schools or service providers) have led to a range of alternative solutions—from student-based cleaning and maintenance to parent or CBO-financed services. Few of these management models have been successful at any scale—school services remain functional where teachers and communities are interested and committed, but elsewhere school sanitation facilities often fall into disrepair and disuse.

Busy and underpaid teachers have few incentives to take on additional sanitation duties, while parents and head teachers often feel that these services should be financed by the government. Sustainable financing of school and institutional facilities remains a weakness in most sanitation improvement strategies; this is an area that the project needs to address.

Cost-Effective Implementation

In Indonesia, the number of latrines constructed remains the main metric for rural sanitation. None of the sanitation stakeholders interviewed were able to provide information on the total cost of their sanitation and hygiene interventions, the cost per community sanitation and hygiene intervention, the cost per household sanitation and hygiene intervention, or the cost per effective implementation—that is, the cost per latrine in use, per improvement in hygiene behavior, or per health improvement. Generally, the central problem was that sanitation costs were aggregated with water supply costs in the project design and in its accounting systems, and that common community development and promotional activities were used for both water supply and sanitation improvements, making it extremely difficult to separate out costs.

The development objective of the WSLIC-2 project was “to improve the health status, productivity, and quality of life of poor communities in underserved rural villages in the project provinces.” The following indicators were proposed: functioning sanitation systems, cost per system and cost per capita served, knowledge and practice of good

hygiene and health, and disease rates. In practice, the WLSIC-2 project measured access to latrines (including access to shared household latrines), but did not make routine examinations of either the outcomes (whether latrines remain in use, whether open defecation takes place, whether people wash their hands) or impacts of its sanitation interventions, notwithstanding the final impact evaluation planned for 2008. While most of the proposed project indicators were available for water supply systems, no data were available on the average cost per system or cost per capita served by the WSLIC-2 sanitation interventions.

The project intends to develop a detailed system to monitor its performance and cost-effectiveness, but few data were available at the time of the assessment. Therefore, the following cost-effectiveness indicators were assessed in order to produce some baseline estimates of cost-effectiveness that can be compared against the more rigorous data emerging from subsequent TSSM studies of impact evaluation and cost-effectiveness:

- cost per ODF community
- cost per household that gains access to improved sanitation facilities
- cost per additional dollar invested in sanitation by others
- cost per diarrheal death averted (linked to data from the TSSM Impact Evaluation and from clinical monitoring systems)

ODF Success Rate

One of the key elements of the total sanitation methodology is the focus on achieving collective outcomes, rather than just counting latrines. The project design in East Java assumes a 35 percent success rate for its total sanitation component, which means that roughly one in three project communities achieve ODF status. This estimated success rate compares well with the national average of 37 percent (149 ODF communities among the 400 communities in which the CLTS process has been started).

Cost per ODF Community

At present, only limited cost data are available for CLTS interventions in Indonesia. The East Java DinKes estimates that the CLTS process, including facilitator training and implementation activities, costs about Rp 10 million (US\$1,200) per village. Assuming about 350 households per village, this equates to an implementation cost of about Rp 29,000 (US\$3.40) per household, or Rp 58,000 (US\$6.80) per household without sanitation. Based on the predicted 35 percent ODF success rate, the cost per ODF community for the total sanitation methodology is estimated at about Rp 29 million (US\$3,360).

These calculations neglect several important cost elements, including related sanitation marketing costs, follow-up and outcome monitoring costs, and any project costs (for example, share of project overheads and staff costs). Given the paucity of cost and effectiveness data, and the unknown costs and success rates of activities like sanitation marketing that have not yet been implemented in East Java, it remains difficult to estimate the total cost per ODF community. For the purposes of developing some baseline indicators and targets with which to monitor improvements to the enabling environment, it has been estimated that the total cost per ODF community is currently about Rp 58 million (US\$6,720)—that is, roughly double the cost of the total sanitation component. It has also been estimated that improvements to the enabling environment (for example, better training and more integrated approaches leading to higher success rates, scaled up implementation leading to economies of scale) might allow this cost to be

reduced by some 40 percent by the end of the TSSM project, to Rp 36 million (US\$4,240) per ODF community.

At present, there are no mechanisms for assessing the cost of government involvement in sanitation interventions. Significant *DinKes* and *puskesmas* time and resources are required to implement effective large-scale sanitation interventions, but their routine costs (salaries, training, overheads) are rarely counted in cost assessments.

Monitoring and Evaluation

The only regular non-project based sanitation monitoring data come from the annual SUSENAS household survey. The Indonesia Demographic and Health Survey (IDHS) is another important source of sanitation and health data, but is less frequent (every three to five years). The SUSENAS survey covers more than 30,000 households across Indonesia, with households sampled so that the results are representative at the district level (even though only about 500 households are surveyed in each district). The SUSENAS survey provides a reasonable picture of sanitation coverage, but there remain some differences between the sanitation facility categories in the SUSENAS questionnaire and the JMP categories for improved sanitation facilities.

SUSENAS captures information on sanitation facility ownership (private, shared, or public), on the facility type (water-sealed flush latrine, dry latrine), and on the excreta disposal location (septic tank, latrine pit, water body, field, garden, or other). As noted earlier, these survey options need to be better aligned with national and international definitions of improved (and unimproved) sanitation facilities to ensure that unimproved facilities are not mistakenly counted as improved facilities, and to allow easier usage of the data. The DHS survey is better aligned, disaggregating shared and public sanitation facilities (which are not considered improved facilities by the JMP), and differentiating pour-flush latrines from dry pit latrines.

Table 3: Indonesia: Rural Sanitation Coverage Estimates

Facility	DHS 2002 (%)	SUSENAS 2004 (%)	East Java (%)
Septic tank	27	26	51
Pour-flush latrine	10	—	
Pit latrine	17	34	
Shared/public	6	—	14
Unsafe latrine	7	3	—
Open defecation (no latrine)	34	40	35
Latrine coverage	54	60	65
Improved sanitation facilities	45	43	< 51

Given the broad categories used by the SUSENAS survey, the JMP coverage estimates for Indonesia count only half of “pit latrines” (as measured by the SUSENAS) as improved sanitation facilities. The JMP assumption is that this category includes a large number of pit latrines likely to be unhygienic (failing to separate human excreta from human contact). As a result, the JMP recalibrates the SUSENAS 2004 sanitation coverage down from 60 percent to 43 percent, which brings the coverage estimate within 2 percent of that from the DHS 2002 (see Table 3). However, the JMP does not use individual survey datapoints as the source of its sanitation coverage estimates—instead a

best-fit line is created from the recalibrated datapoints. The most recent JMP assessment estimates that the rural sanitation coverage in Indonesia was 40 percent in 2004, or about 11 million improved sanitation facilities among the 27.4 million rural households.

Table 4: District Characteristics in East Java

District	Population (2004)	Poverty (% , 2004)	IMR (2000)	Population density (2000)	Sanitation coverage (% , 2004)
1. Pacitan	546,000	32	38	392	85
2. Gresik	1,072,000	9	42	754	77
3. Bangkalen	893,000	22	70	639	74
4. Madiun	660,000	20	44	633	69
5. Malang	2,371,000	14	48	785	65
6. Tulungagung	975,000	17	29	889	63
7. Blitar	1,121,000	17	37	670	62
8. Lamongan	1,256,000	20	46	708	61
9. Pamekasan	750,000	25	74	870	60
10. Nganjuk	1,039,000	20	44	795	60
11. Ponorogo	880,000	27	40	613	59
12. Magetan	628,000	24	38	893	58
13. Trenggalek	676,000	29	33	539	56
14. Kediri	1,486,000	17	40	1,016	54
15. Ngawi	855,000	17	42	628	50
16. Mojokerto	975,000	20	43	1,312	49
17. Sudoarjo	1,698,000	4	40	2,464	47
18. Tuban	1,088,000	23	50	572	47
19. Banyuwangi	1,555,000	17	56	257	46
20. Sumenep	1,046,000	18	69	493	46
21. Bojonegoro	1,226,000	27	50	505	45
22. Sampang	847,000	39	90	608	43
23. Jombang	1,185,000	19	44	1,247	42
24. Lumajang	1,007,000	22	55	539	40
25. Pasuruan	1,429,000	15	69	1,188	37
26. Jember	2,237,000	19	74	883	24
27. Probolinggo	1,044,000	30	79	628	24
28. Situbondo	627,000	25	68	368	19
29. Bondowoso	717,000	51	80	421	13
East Java (districts)	31,899,000	20	48	749	51

Note: shading denotes below average parameters (dark shading = bottom quintile)
Source: SUSENAS 2004; Government of East Java website

There appears to be some association between sanitation coverage and infant mortality rate (IMR) in East Java: low sanitation coverage is generally associated with high infant mortality, with the exception of a couple of districts (for example, Jombang) with above-average population densities and below-average poverty rates (suggesting more urban contexts). However, it should be noted that behavioral factors often confound associations between sanitation coverage and child health, as people with access to latrines do not necessarily cease open defecation, they may be exposed to health risks from other households that continue to practice open defecation, and they may be affected by other hygiene practices.

The SUSENAS data also highlight significant differences across East Java, with sanitation coverage ranging from only 13 percent in Bondowoso District (the poorest district) to 85 percent in Pacitan District (the smallest district).

Figure 2: Sanitation Coverage in East Java



The Indonesia DHS also provides data on child excreta disposal practices in rural areas. These data suggest that child excreta disposal practices in East Java are, on average, better than in the rest of Indonesia:

- safe disposal (use toilet; dispose to toilet or bury): 41 percent Indonesia, 60 percent in East Java
- throw feces outside dwelling or yard; 42 percent Indonesia, 32 percent in East Java
- rinse feces away (into drain or at water point); 5 percent Indonesia, 2 percent in East Java

- use washable diapers (washed by water point); 11 percent Indonesia, 6 percent in East Java

Given average latrine ownership of about 50 percent in East Java, the DHS data suggest that every household with a latrine is practicing safe child excreta disposal (60 percent safe disposal). This finding may reflect the difficulty in ensuring that survey respondents admit to poor hygiene practices (particularly when related to children) in front of external surveyors. However, even if true, these data highlights the fact that at least 40 percent of households in East Java are not disposing safely of child excreta, an issue critical to health outcomes that needs to be targeted by the TSSM project.

The disaggregated district data indicate that Sampang District (on the island of Madura) and Bondowoso District are particular problem areas in East Java: these two districts have the lowest literacy level (64 percent and 72 percent respectively, which is 25 percent below average), the worst IMR rates (90 and 80 deaths per 1,000 live births, which is almost double the average), and the highest poverty rates (39 percent and 51 percent, or more than double the average in Bondowoso). Bondowoso has the lowest sanitation coverage in the province, averaging only 13 percent (according to Susenas 2004 data), while Sampang ranks 22nd for sanitation coverage. Therefore, the TSSM team needs to make special efforts to discover the reasons for the unusually bad conditions and outcomes in these two districts.

Outcome Monitoring

There is a need for regular monitoring of sanitation outcomes such as latrine usage, prevalence of open defecation, handwashing, and the disposal of infant excreta. Some of these outcomes are currently recorded by project-based monitoring systems, but these monitoring systems cover only project communities (which comprise less than 10 percent of the national total). They are not linked to central databases, they are not harmonized or combined with other monitoring systems, and they are not sustainable (because of their project-based funding). As a result, with the exception of the SUSENAS data, there are almost no national or provincial data on sanitation coverage or outcomes.

Local sanitation surveillance is the responsibility of the *puskesmas* sanitarian. However, the low demand for sanitation data has meant that little or no sanitation surveillance is undertaken by most sanitarians. There are 1,700 sanitarians employed nationally, thus a significant monitoring capacity exists if incentive and demand can be created for routine sanitation monitoring and reporting.

Another important monitoring mechanism is independent verification of sanitation outcomes. In India, the central government contracts out this verification function to independent agencies (consultants, NGOs, universities), thus reducing the risk of any conflict of interest for local governments that would otherwise assess their own performance. While this independent verification system examines only collective outcomes in communities that apply for the national sanitation award, it has generated a series of provincial- (state) level monitoring and review mechanisms in an effort to improve the success rate of local applicants. As a result, awareness of both the outcome criteria and the sanitation situation is greatly increased.

5. Conclusions

One of the key difficulties in framing the baseline assessment of the enabling environment for rural sanitation in East Java was to try and disaggregate the activities, outcomes, and impacts that are likely to be the direct (or indirect) result of TSSM interventions from the counterfactual—the results that would have occurred if rural sanitation improvement had continued in East Java without any assistance or support from the WSP-managed TSSM project.

Policy, Strategy, and Direction

A significant acceleration in progress is required to meet Indonesia's national and international sanitation targets. Political awareness and priority for rural sanitation remain low and are not helped by inter-ministerial battles over project resources or by a bias toward urban sanitation. Yet district support for rural sanitation appears to be growing, aided in East Java by the good publicity surrounding recent CLTS interventions. In addition, the MoH reports that more than 60 districts across the country have already implemented CLTS-based sanitation interventions and that demand for CLTS training is now outstripping the capacity of its central team of trainers.

The rapid impact of the CLTS approach in Indonesia has led to an unusual degree of consensus and policy alignment among key stakeholders. Policy alignment is not complete, as several stakeholders—notably the MoPW—remain resistant to the low subsidy and basic technologies promoted by the total sanitation approach. Nevertheless, the adoption of common policies, facilitator training courses, and implementation methodologies by many of the largest donor and NGO sanitation programs has created an excellent enabling environment. The launch of the PAMSIMAS program in 2008 will spread implementation of the TSSM approaches to another 5,000 communities and a further 15 provincial governments, thus ensuring a substantial scaling up of rural sanitation and hygiene improvement in Indonesia.

The draft *National Operational Strategy for Rural Sanitation and Hygiene Improvement in Indonesia* represents another important step forward. In its current form, the national operational strategy encourages policy alignment around the TSSM approaches, and thus it will spread the project policies and methodologies and scale up their application. The draft national operational strategy also defines the minimum requirements of a hygienic latrine, thus setting the minimum level of service for rural sanitation. While the proposed definition of *latrine* is based on sound principles, two levels of sanitation service (basic and improved facilities) are described using definitions that differ from the JMP definitions used to measure MDG progress, thus risking unnecessary confusion and complication. Furthermore, the draft guidelines propose that shared sanitation facilities be considered hygienic facilities, even though the JMP categorizes shared facilities as “unimproved sanitation facilities.” These policy differences are significant but, nevertheless, approval and implementation of the national operational strategy will provide a strong indicator of wider consensus and support for the approaches and policies promoted by the project.

The TSSM district roadshows have already proved successful in raising awareness and budget allocations for rural sanitation. The project will target just over 10 percent of the 8,484 villages in East Java, but it also encourages districts to prepare longer-term action plans and budgets for MDG achievement and universal sanitation coverage within their

jurisdictions. District budget commitments in East Java already demonstrate the value of this process—several districts have committed considerably more funds than expected to the early phases of the TSSM program and are planning well beyond the relatively modest project targets. The district roadshow methodology is easily replicable in other provinces, but it should be noted that its success in East Java may reflect strong local support for CLTS rather than the innate value of the methodology.

Support for the sanitation marketing approach was less clear-cut. The novelty of this approach, which has not previously been utilized in Indonesia, means that most stakeholders were unsure what sanitation marketing would entail and how it would fit with the more familiar total sanitation approach. Nevertheless, concern about how best to provide long-term sanitation services to rural communities, and how to enable poor households to upgrade their facilities and climb the sanitation ladder, illustrate the importance of promoting and developing sustainable market-based sanitation services.

Most of the sanitation marketing activities in East Java will be financed by the project while the modalities and activities are developed and refined. When complete, the lessons learned from piloting the sanitation marketing activities and draft national strategy in East Java can then be scaled up through other rural sanitation programs, such as the PAMSIMAS program, and through implementation of the national operational strategy across Indonesia.

Institutional Arrangements

There appears to be limited ownership of the TSSM project in central government, which may weaken the project's chances of national replication and scaling up. This lack of central ownership reflects project financing and management arrangements: none of the project funds pass through central government, and the project steering committee, which should oversee project implementation and ensure government involvement, had not been constituted at the time of the enabling environment assessment.

The establishment of a separate sanitation working group is a good indicator of sector progress, but at present the respective roles and functions of the combined WASPOLA water and sanitation working group (Pokja AMPL) and the separate sanitation working group are not clearly stated or differentiated. Furthermore, the sanitation working group was initiated through the efforts of the ISSDP, thus its agenda is often dominated by urban issues and priorities.

In contrast to the lack of central ownership, intensive promotional efforts at district level have produced strong local ownership and commitment to the TSSM project. The stark differences in ownership found at central and district levels reflect the one-province implementation of the project, which has led the WSP Indonesia team to focus its initial efforts within East Java. Central government involvement and interest are likely to increase once implementation of the project is fully underway, but additional efforts may be required to build ownership and commitment in central government.

The project proposes a more decentralized institutional arrangement than previous large-scale sanitation interventions. Building on the WSLIC-2 model, the TSSM project will utilize DPMUs staffed by local health officials and supported by short-term contract facilitators. The key difference from previous projects is that the district government (rather than a central project management unit) will provide oversight with assistance and capacity building from a project-contracted resource agency. In addition, most of the

funding for running the DPMU and its activities will be provided by the district government through its routine budget allocations, contributing to a far more sustainable institutional model than previous projects.

Effective scaling up of the project methodologies through this institutional arrangement will largely depend on the quality and commitment of the project facilitators. However, the current arrangements lack any performance incentives for these contract facilitators, who are usually only on short-term (one year) contracts. The project is examining alternative and complementary options for social intermediation in East Java, with local religious and women's groups likely to provide some form of competition and monitoring for the contract facilitators. A more institutional incentive system will be required for replication in other areas.

The WSP Indonesia team was an active partner in the development of the draft national operational strategy led by BAPPENAS and the MoH. The strength of this partnership, which builds on the WSP's important role in the introduction and piloting of CLTS in Indonesia, allowed the WSP to guide the strategy development process and ensure that the policies and guidelines adopted in the project are mirrored in the national operational strategy. Some stakeholders complained that the WSP's influence on policy has crowded out other opinions, but the key stakeholders (MoH and BAPPENAS) appeared content with the evidence-based policies that the WSP promoted.

In general, cross-sectoral partnerships in central government are weak. In particular, the more infrastructure-focused ministries, such as Public Works, appear to favor very different policies and objectives to those found in the MoH and BAPPENAS. Given shared responsibilities for sanitation and hygiene improvement, for example in the combined implementation of the PAMSIMAS program by the MoPW and MoH, these differences present a serious constraint to sector progress. In addition, there appear to be few links between health programs, many of which contain hygiene improvement components, and sanitation programs.

Program Methodology

The project methodologies build on recent CLTS experience in East Java and Indonesia and on sanitation marketing experience from Vietnam. However, the TSSM project will be the first intervention to attempt to combine these methodologies. One of the advantages of this combined approach is that the sanitation marketing component provides opportunities to tackle some of the sustainability issues associated with the total sanitation component through more sustainable, market-based channels. The versatility of the combined methodology should counter many of the criticisms voiced by stakeholders in Indonesia, but—as with the CLTS approach—there will be many doubts unless and until solid evidence of its success emerges from the project.

In East Java, the district roadshows have been effective in increasing awareness, understanding, and support for the proposed program methodologies. The preparation of district sanitation strategies (which address the challenge of providing sanitation services to all those currently unserved) that has taken place following the roadshows is proving to be an effective methodology for increasing commitment to the project—both through raised awareness of the scale and scope of the challenge and through post-project scaling up—as district governments realize their responsibility for the investment and interventions required to reach the sanitation MDG and beyond.

The project targets only 11 percent of the rural communities in East Java, and thus is unlikely to address the challenges found in communities facing more difficult technical conditions or more resistant social problems. While the sanitation marketing component may reach a wider audience through its mass media campaigns and capacity-building efforts, there remains a risk that districts will choose easier targets for their initial interventions, leaving the program methodologies untested and unproven in more difficult contexts.

Both the methodologies focus on generating demand for household sanitation facilities, so they lack effective mechanisms for providing and maintaining school and institutional sanitation facilities. In South Asia, this weakness has been tackled either by providing external finance for school and institutional facilities or by including school and institutional sanitation outcomes in the criteria used to award incentives. The project does not include funds for school or institutional facilities, so the WSP Indonesia team propose to adopt the incentive approach—leveraging funds from local governments through incentive systems that require ODF status for both communities and institutions. However, the incentive system for East Java has not yet been finalized, and it remains unclear where sufficient finance exists to fund either the incentives or the construction of institutional facilities.

Implementation Capacity

Capacity remains a major implementation constraint at national, provincial, and district levels. The WSP currently lacks the capacity to implement the central activities needed to improve the enabling environment; there is a shortage of trained, professional sanitation staff throughout the subsector; and the provinces have inadequate capacity to undertake the management, policy-making, strategic planning, M&E, and knowledge management activities that will be central to scaling up, sustaining, and replicating the successful sanitation approaches.

The project plans to strengthen district sanitation capacity in East Java using contracted resource agencies to train district staff, assist with the planning and design of activities, and develop local monitoring and support systems. However, one of the key constraints is at the *puskemas* level, where sanitarians lack the resources (vehicles, fuel, allowances) to undertake the routine sanitation and health surveillance tasks assigned to them by the health department. Most sanitarians are happy to undertake these tasks when supported by project funds or given some incentive (such as a request for information from the district health office), but few institutional incentives exist at present.

Availability of Products and Tools

The sanitation marketing component offers a good opportunity to improve the supply of sanitation goods and services. There have been few successful examples of the non-private supply of sanitation facilities in East Java, with most previous projects adopting a heavily subsidized approach built around the promotion of project technologies (for example, cement latrine pans) for which little genuine demand appeared to exist.

In general, East Java appears to have a relatively well developed market system: most rural communities are well connected with local markets; product availability is good; and prices are reasonably low (US\$6–15 for pour-flush ceramic latrine pans). Local

sanitary ware retailers do not report any serious business constraints, and there appear to be few gaps in the market.

Housing data from the SUSENSAS 2004 survey reveal that one third of rural houses in East Java have earth floors and non-brick walls, suggesting that the most appropriate and sustainable latrine designs for poor households are likely to be those that utilize local building materials (mud, bamboo, palm fronds) rather than market-bought materials.

Financing

The success of the CLTS approach has contributed to raising the financial ceiling for software support. This is evidenced by the significantly increased government contribution to the software-heavy PAMSIMAS program (42 percent, compared with only 13 percent in WSLIC-2).

District sanitation expenditures are usually spent on public services such as drainage or solid waste collection rather than on promoting household sanitation facilities. However, deepening decentralization means that district governments are increasingly interested in local economic growth rather than central government objectives, and thus they are more open to preventive investments that produce long-term economic, health, and social benefits (such as the reduced medical bills, better school attendance, increased productivity, lower water resource pollution, and higher well-being derived from sanitation and hygiene improvements).

Another key factor is the current underutilization of local government funds. Despite the abundance of local needs, inadequate planning and management skills result in many local governments failing to utilize available development funds. Support in strategic planning is an important factor in assisting district governments to allocate and utilize funds more effectively, as evidenced by district commitments to the project in 2007, which averaged US\$12,000 per district. While this level of annual investment will be insufficient to facilitate interventions at a large enough scale to meet the sanitation MDG in East Java, it represents a substantial increase over previous local sanitation investments, and confirms the value of targeting advocacy and promotional activities at district decision makers.

The project recognizes the importance of introducing a multilayered incentive system for sanitation and hygiene improvement in East Java, and the WSP Indonesia team is currently exploring the different options. However, the sources of finance for the incentive frameworks are uncertain, and the novelty of the concept means that it may take some time to obtain firm commitment from either the government or the donor community to finance an outcome-based incentive system in Indonesia. Nevertheless, there seems broad agreement among most stakeholders that an incentive framework would be a useful addition to existing sanitation interventions, and that the development of a workable framework in East Java would provide a useful model for replication in the rest of Indonesia.

The project hopes to leverage finance for school and institutional facilities from existing government budgets, donor projects, and community and private contributions. However, it is not clear whether sufficient incentive exists for communities or local governments to give any priority to investment in these facilities. The sustainability of school and institutional sanitation services is another major issue. Few of the existing management models have been successful at any scale—school facilities remain functional where

teachers and communities are interested and committed, but they fall into disrepair and disuse in places where stakeholders are less committed.

Cost-Effective Implementation

None of the key sanitation stakeholders in Indonesia were able to provide either cost or effectiveness data for their sanitation and hygiene interventions. As a result, no cost-effectiveness data were available to compare against the project results.

The WSLIC-2 project documentation states that cost per system and cost per capita data would be monitored, but in practice only water supply systems were assessed. The final WSLIC-2 impact evaluation, to be undertaken in 2008, will provide impact data on hygiene behavior change and health improvement. It appears unlikely, however, that it will be possible to disaggregate or attribute particular project impacts to either the water supply or to sanitation or hygiene improvements.

Although no cost data were available from Indonesia, a recent sanitation review in Cambodia found that a total sanitation approach was considerably more cost efficient than alternative approaches: CLTS project cost was US\$10 per latrine (plus an average household contribution of US\$0–10 per latrine) compared with typical project costs of US\$45–200 per household under comparable subsidy-based projects.

The sanitation marketing methodology for the project was still being designed and costed at the time of the assessment. However, the market- and demand-based nature of this component, which relies on the marketing, distribution, and sale of locally desirable and affordable products and services, should ensure that it remains more cost-effective than comparable supply-driven approaches.

Monitoring and Evaluation

It is difficult to reach clear conclusions regarding sanitation coverage in Indonesia because of mismatches between the definitions of “improved sanitation facilities” used by the JMP and the Indonesian national surveys. The national sample survey data typically indicate higher coverage figures than the JMP, because these data include a category of “pit latrine” that is likely to contain some unimproved facilities. Given the nature of the data collection instruments, the lower JMP figures are likely to be closer to reality. However, from 2007 onward, the national survey definitions will be made consistent with those of the JMP.

At present, there is no routine monitoring of sanitation outcomes in Indonesia. Few Indonesian sanitation programs appear to collect any routine information on (or evaluate) latrine usage rates, prevalence of open defecation, handwashing rates, or infant excreta disposal practices.

The absence of any reliable evidence of the outcomes and effectiveness of previous sanitation and hygiene interventions makes it extremely difficult to build consensus on what works, or on the relative advantages and disadvantages of the different approaches promoted by government, donor, and NGO stakeholders.

6. Recommendations

The following recommendations are based on the findings of this baseline assessment, with practical suggestions provided under each of the eight dimensions of the conceptual framework of the assessment.

Policy, Strategy, and Direction

Given pockets of resistance to the zero hardware subsidy approach advocated in the draft national operational strategy, it is important to continue advocacy and consultation efforts both to avoid alienating any stakeholders and to avoid limiting policy alignment around the strategy guidelines. In addition, it is recommended that the improved sanitation facilities defined in the national operational strategy either be renamed (as upgraded sanitation facilities, or something similar) or, preferably, that the definition be more closely aligned with the JMP definition of “improved sanitation facilities.” Furthermore, the JMP continue to categorize shared sanitation facilities as unimproved facilities, which means that shared facilities cannot be counted toward the sanitation MDG; it also means that all Indonesian surveys and coverage estimates must disaggregate shared facilities from private facilities.

More information sharing and advocacy is required at central government level to ensure that stakeholders are fully aware of the project, that they are aware of its links to other programs, and that they are convinced of its utility and relevance to the development of any future sanitation and hygiene policies and programs. It is also important that concerted efforts be made to raise government awareness (at all levels) of the costs of inadequate sanitation and the potential benefits from effective sanitation investments. In this regard, the recent Economics of Sanitation Initiative (ESI) study in Indonesia should provide valuable advocacy material.

The project has encouraged a more strategic approach to district-level sanitation planning. This process should be encouraged with a view to aggregating district sanitation action plans at provincial level in order to identify gaps, compare district strategies, and highlight effective approaches and innovations. It is recommended that the WSP Indonesia team invests more time and resources into ensuring that the provincial government is both fully involved in the project and fully committed to sustaining and scaling up the sanitation improvements when the program finishes. The provincial sanitation action and investment plan should include detailed strategies for non-performing districts, as well as an exit strategy for the project. Once this provincial planning process has been tested and refined, it will provide a useful model for strategic sanitation planning in other provinces.

The basic premise of the project is that the approaches developed in East Java will provide the basis for interventions elsewhere in Indonesia—but this assumes that conditions in East Java are representative of the rest of Indonesia. The CLTS has been more successful in East Java than almost anywhere else in Indonesia, which questions the relevance and replicability of the lessons learned in East Java. Therefore, it is important that the project documents and shares the details of its successes and failures, and that it identifies any unusual factors that might influence local performance and results. Without this transparency, there is a risk that any successes will be put down to the special circumstance, history, and context of East Java.

It is also possible that longer orientation periods may be needed before implementing the methodologies in other provinces to develop similar levels of understanding and support for the proposed interventions. At a minimum, it is recommended that a series of exposure visits and high-level advocacy activities should precede the implementation of the district roadshows in any new province.

Institutional Arrangements

The rural sanitation subsector needs a more formal division of responsibilities at central government level. At present, management of sector projects and programs appears to be a major factor in determining departmental roles and responsibilities, which encourages ministries (especially those with overlapping mandates) to compete for control of any large programs. It is recommended that efforts be made to unbundle and reallocate the main roles and responsibilities in the rural sanitation subsector, such that the Ministries of Health, Home Affairs, Public Works, Education, and Planning are all aware of their respective responsibilities for household sanitation, institutional sanitation, school sanitation, environmental sanitation, hygiene promotion, monitoring of sanitation and hygiene outcomes, and so forth.

In order to encourage more effective coordination and monitoring of the sanitation activities undertaken by the various ministries, stakeholders, and programs, it is recommended that a national sanitation unit be established. While this sort of institutional reform is well beyond the remit of the project, the larger PAMSIMAS program will examine the scope for national and provincial sanitation units, providing an ideal opportunity for advocacy by the project on the need for some form of national sanitation institution.

In addition, the roles and functions of the sanitation working group need to be clearly defined and clearly differentiated from those of the WASPOLA water and sanitation working group. It is also recommended that the project make efforts to ensure that rural sanitation issues feature regularly on the working group agenda, alongside routine discussions of rural sanitation progress, strategy, and issues.

At the district level, the project should also explore options for providing performance incentives to project facilitators. The current arrangements offer little reward to effective or hardworking facilitators, nor do they provide disincentives for ineffective or disinterested facilitators. Options for benchmarking facilitator performance, for rewarding star performers, and for recognizing innovation should be piloted through the project.

Synergies with the ISSDP need to be strengthened. The first ISSDP (2004–08) focused largely on urban sanitation issues, but the original program had a broader mandate, and there will be potential for the second phase of the ISSDP (which is planned to start in late 2008) to tackle the wider enabling environment constraints found in both the urban and rural subsectors. In particular, it is recommended that the project assist the ISSDP and the GoI in the preparation of a national strategic plan for sanitation that identifies the groups and localities unserved by sanitation, identifies the groups and localities that shoulder the highest costs of inadequate sanitation, identifies any groups or localities with special sanitation challenges (congested and polluted communities, water-scarce areas, flood-prone areas and so on), and determines the priorities for implementation. The intention is that the national plan will help to improve the coordination and harmonization of existing

urban and rural sanitation activities as well as highlight any areas or issues that are not covered by either subsector.

The project also needs to strengthen links with other sanitation programs and health programs. Many of the large-budget health programs in Indonesia contain hygiene improvement components, which often involve expensive mass media campaigns. However, there is currently little coordination (or positive reinforcement) of the hygiene messages promoted by the wide array of health and sanitation programs being implemented in Indonesia. Improved linkages with long-term health programs will assist both the scaling up and replication of the project methodologies.

Program Methodology

The current program methodologies allow districts to prioritize and select the communities that receive project interventions. Given that only 11 percent of the communities in East Java will be targeted under the project, it is likely that the districts will target communities with above-average chances of success: communities with above-average sanitation coverage, communities with favorable social conditions, and communities with dynamic and committed leaders. This approach means that the program methodologies may not be tested in the more difficult contexts likely to be encountered during the subsequent scaling up of project. Therefore it is recommended that a proportion of the project target communities (perhaps 10 percent) should be chosen from communities known to have difficult physical conditions or resistant social problems, in order to ensure that the methodologies developed are suitable for the full range of conditions and contexts.

In the past, a large proportion of school sanitation facilities fell into disrepair because of the limited budget available for operation and maintenance. Therefore, it is recommended that the project explore the possibility of reallocating some proportion (say 10 percent) of the development funds available for the construction of school and institutional facilities to finance the recurrent costs of school and institutional facilities in communities that achieve universal household and institutional sanitation. While this approach will reduce the number of facilities constructed, the provision of operation and maintenance budgets as a reward for successful sanitation outcomes may improve the chances that school and institutional toilets remain functional for longer, thus steadily increasing the stock of functional school and institutional toilets in the province.

Implementation Capacity

The benefits of building local government capacity are often diminished by the government transfer system, whereby talented officials are transferred or promoted out of their jobs, resulting in local shortages of capacity. Sanitation skills are in particularly short supply and, therefore, it is proposed to establish a training system that can produce a cadre of trained sanitation professionals. It is recommended that the TSSM project examine the potential for developing some form of sanitation diploma in conjunction with local universities or technical colleges.

At the local level, there is an urgent need to bring more stakeholders into the sanitation development process. The project has already examined options for expanding implementation through local religious and women's groups, but it is recommended that

further efforts be made to identify NGOs, CBOs, and government cadres that could be mobilized and involved in intensive local promotional campaigns.

The MoH finances a national network of 1,700 community sanitarians, with one found in almost every rural health center. This huge capacity has been inadequately utilized. Sanitarians currently lack the incentives or resources to conduct the sanitation and health surveillance activities that are their primary responsibilities, thus many of them are reported to devote more time to their private medical practices than to their health center role. Greater demand for, and verification of, sanitation and health surveillance data—with regular benchmarking activities (to create competition between rural health centers and between districts)—should create stronger incentives for sanitarians to undertake these tasks.

Availability of Products and Tools

The total sanitation approach appears effective in persuading rural households with no experience of fixed-point defecation to invest in low-cost homemade latrines. At this stage of the behavior change process, most poor households are reluctant to invest much more than their time and any freely available local resources in the construction of their latrine. However, as the use of these homemade latrines becomes more comfortable and familiar, many households become willing to invest slightly more in the construction of their latrine.

One of the best opportunities for latrine upgrading is when the latrine pit fills for the first time. At this point, households often consider moving the latrine closer to the house or improving on the design. Therefore, it is recommended that the sanitation marketing component should include activities to follow up on CLTS activities about one year after the initial triggering process. These sanitation marketing follow-up visits should focus on ensuring that latrine usage does not stop once the first latrine pit fills (as a result of lack of community interest or lack of follow-up by the total sanitation team) and on encouraging latrine users to invest in simple upgrades to their original homemade latrines.

It is recommended that the project develop a low-cost toilet catalogue for East Java. This informed-choice catalogue should be updated annually to include the best homemade latrines (developed by rural households) and the best market products (emerging from the sanitation marketing efforts). In addition, the project should institute an annual best-toilet competition, with a prize awarded to the most innovative low-cost toilet design from each area. The best-toilet awards should be presented at a high-profile ceremony, and the winning designs should be added to the toilet catalogue.

Financing

In India, an effective incentive framework appears to have been the biggest single factor in raising awareness, building political support, achieving collective outcomes, and scaling up sanitation progress. Therefore, securing sustainable finance for an effective sanitation incentive framework—preferably with reinforcing components at district, province and national levels—should be the number one priority for the TSSM program.

There remains scope to broaden financial partnerships, notably by encouraging local governments, donor agencies, NGOs, and nontraditional donors (for example, large

corporations and soap companies) to finance and support the outcome-based incentive frameworks.

One of the main criticisms of the *Nirmal Gram Puraskar* (NGP) award system is that some local governments have used coercive, supply-driven interventions in order to win the one-time only award, with little attempt to ensure sustainability or monitor long-term outcomes. Two different approaches are emerging to tackle the sustainability problem: the first is to develop a multilayered system of sanitation incentives, each with different financing sources, objectives, and verification systems (for example, national awards for achieving fixed outcomes, annual state clean village competitions, and district level allocation of development schemes based on outcomes). The second approach is the formulation of a phased system of incentives such as the one currently being piloted in Pakistan, which requires verification of the sustained practice of earlier sanitation outcome phases before awarding the performance grant for the next phase outcome. This approach encourages attention to sustainability and steady progress up the environmental sanitation ladder.

Investments in the development of a locally adapted incentive framework for East Java will generate substantial dividends in the replication and scaling up of the project methodologies across Indonesia and Southeast Asia, as outcome-based incentive frameworks are easy to transfer and replicate once evidence of their cost-effectiveness and scale benefits have been demonstrated.

Environmental Sanitation

Although it is a little beyond the terms of reference of the project, there would be significant value attached to any effort to develop a long-term phased strategy that enables local governments to work toward providing more comprehensive environmental sanitation services such as solid waste management and wastewater management. Experience in South Asia suggests that more active and progressive local governments are usually keen to use the momentum, support, and finance gained from the achievement of collective sanitation outcomes, such as ODF status, to tackle wider environmental sanitation issues.

Cost-Effective Implementation

At present, very few cost-effectiveness data are collected, and there remains only limited demand for this information from national institutions and program managers. Therefore, the project needs to make significant efforts to build simple, reliable systems to record and report this information at subdistrict, district, and province levels.

One of the issues to address is the difficulty in separating out sanitation costs from combined water supply and sanitation costs. Most sector programs and projects cover both water supply and sanitation and rarely separate out the sanitation-specific costs, even when sanitation interventions involve separate activities and resources. Common training activities, shared project resources, and integrated implementation activities (for example, the preparation of community action plans that cover water supply, sanitation, hygiene, and other development activities) make it very difficult to assess the real costs of sanitation interventions. Special efforts need to be made to encourage sector institutions, programs, and projects to disaggregate sanitation expenditures.

Monitoring and Evaluation

There is a need to align the *national operational strategy* guidelines and national surveys such as the SUSENAS more closely with international definitions and categories. Recent information from the WSP Indonesia team suggests that the sanitation questions in the annual SUSENAS household survey have now been revised in line with the JMP Core Questions, and that the new survey format will be used in the 2008 SUSENAS. It is also important that the *national operational strategy* delineates clearly between the areas in which it follows international categories and definitions, and the areas in which deliberate decisions have been taken to use alternative categories and definitions.

Project-based monitoring systems are rarely sustainable, recommending the need for government systems for provincewide data collection. The sanitarian network (1,700 nationally) should play an important role in this data collection and in the regular comparison of local sanitation outcomes with local health data.

The project plans to develop further the community monitoring systems used to monitor CLTS progress under the WSLIC-2 project. While the participatory tools used for the community monitoring produces rich, disaggregated information about project communities, it will also be important to develop some more simple and sustainable monitoring tools that enable district governments to make strategic sanitation plans, monitor sanitation performance and progress, and allocate resources efficiently.

Finally, there is a continuing need for a joint review of rural sanitation and hygiene interventions in Indonesia. Despite increasing consensus on the benefits of the CLTS approach, there remain few data on either the lessons learned or the comparative cost-effectiveness of the different approaches.

Many stakeholders lack the specialist knowledge needed to design impact evaluations; the government is often not informed of impact evaluation findings; and impact evaluations findings are rarely comparable (because different methodologies and indicators are used). Therefore, it is recommended that the TSSM project consider the development of a standard sanitation impact evaluation tool and a government database to collect and report on evaluation findings. It should be government policy that every project should conduct the proposed standard baseline and final evaluations (at a minimum—additional evaluation components can be added as required), and that the evaluation results should be submitted to the proposed government sanitation unit.

7. Enabling Environment Indicators

The following indicators (Table 5) are proposed in order to establish a clear picture of the current enabling environment for sanitation in Indonesia and to recommend possible targets to achieve by the end of the TSSM project. While some of the data included in the indicator framework are currently unavailable, it is hoped that further investigation by the WSP Indonesia team will provide sufficient data to complete the baseline indicators.

Table 5: Enabling Environment Indicators

Indicator	Baseline (2007)	Target (2009)	Comments/Action required
1. Policy, strategy & direction			
<i>Collective action policy:</i>			
Household subsidy after latrine use	No	No	
Household subsidy after ODF	No	No	
Collective incentive after ODF	No	Yes	Performance grants
<i>Province strategic action plan:</i>			
Consultation workshops (number)	0	7	Stakeholder consultation; develop plan; advocacy for approval;
Action plan approved	No	Approved	awareness campaign;
Plan implemented (number of districts)	0	14	implementation in 50 percent districts
2. Institutional arrangements			
<i>Improved management & coordination:</i>			(Gap = months since last meeting)
National WS meeting (gap)	-	3 months	
Province sanitation meeting (gap)	-	1 month	Needs to be formed?
Dist WS meeting (avg. gap)	-	6 months	Average across districts?
3. Program methodology			
<i>Scale of program:</i>			
District applications (number)	60	300	Including other programs with similar policies/approaches (for example, total sanitation plus)
Districts implementing (number)	54	150	
<i>Applications for awards:</i>			
National applications	0	600	No awards at present
Provincial applications	0	300	No awards at present
Assessment of applications	No	Yes	Independent assessment required
4. Implementation capacity			
<i>Knowledge management:</i>			
Exposure visits (people per year)	0	200	
Best practice seminars (annual)	0	4	
Technology catalogues (number)	0	4	One per division.
Fieldnote publication (number)	0	1	Wider dissemination of learning
5. Availability of goods & services			
<i>Technology options:</i>			
Promoted by govt (number)	5	10	Based on informed choice manual
Found in poor households (number)	2	4	Based on rapid appraisal
<i>User satisfaction:</i>			
percent satisfaction with household latrine	Not known	75 percent	
<i>School sanitation:</i>			
Primary school coverage	Unknown	+20 percent	Data on school sanitation required

Operation and maintenance budget (per school per year)	Rp 0	Rp 1.2m	
<i>Rural services (outside kecamatan):</i>			Found outside kecamatan center: Intended to capture any scaling up of supply (other than from direct project interventions)
Production centers (non-project)	1,740	2,500	
Private retailers (non-project)	4,000	5,000	
Experienced masons (non-project)	24,000	30,000	
6. Financing			
<i>Financial commitments to sanitation:</i>			
Gol budget allocation (amount)	Rp 9-14bn	Rp 20bn	For rural sanitation & hygiene
Gol award finance (annual)	No	Yes	
East Java award finance (annual)	No	Yes	From own funds
District investment (annual avg)	Rp 100m	Rp 220m	10 Phase I districts in 2007
District investment (annual total)	Rp 992m	Rp 6,380m	Target: US\$750,000 per annum
<i>Multilayered incentive schemes:</i>			
National awards (number of villages)	0	300	
Province awards (amount)	0	Rp 600 m	
District awards (amount)	0	Rp 25 m	
7. Cost-effectiveness			
<i>Effectiveness:</i>			
CLTS triggering complete (number)	0	870	CLTS not yet started
ODF communities (number)			Independent verification required
ODF-success rate (percent)	0	300	5 percent increase in success rate
Cost per award application	35 percent	40 percent	40 percent increase in cost-effectiveness
Cost per ODF community	-	Rp 20m	
Cost per new latrine	Rp 58m	Rp 36m	US\$5 per new latrine
	Rp 85,000	Rp 42,500	
8. Monitoring and evaluation			
<i>Health impact evaluations (rapid):</i>			
WSP finance	0	2	
Govt finance	0	2	
Other stakeholder finance	1	2	TSSM baseline impact evaluation
<i>Public health approach:</i>			
Review of health data (province)	No	Yes	Health data collection needs improving; introduce community-level monitoring.
District review of health data (number)	0/29	14/29	
Community-level monitoring	14/29	29/29	Only in WSLIC-2 districts

8. Action Plans

The recommendations arising from the Enabling Environment Assessment are presented here in the form of two action plans—one for actions to be implemented at national level (Table 6), and another for actions to be implemented within the province of East Java (Table 7).

Table 6: Indonesia: National Action Plan

Action	Detailed Outputs	Results	Actor
Short Term Action Plan (1–6 months)			
1. Outcome-based Incentive Framework	<ul style="list-style-type: none"> Formulate incentive options and mechanisms Conduct consultation workshops to present and identify viable options Develop PAMSIMAS incentive options 	<ul style="list-style-type: none"> Range of locally appropriate incentive options agreed High awareness of the benefits of a sanitation incentive system 	WSP-EAP with BAPPENAS & MoH
2. Sanitation Subsector Reforms	<ul style="list-style-type: none"> Formulate proposals to reduce institutional fragmentation (allocate clearer roles and responsibilities) Develop proposal for a National Sanitation Unit (link with PAMSIMAS component) Formulate proposals for training of cadre of sanitation and hygiene specialists (sanitation university) 	<ul style="list-style-type: none"> Recognition of overlaps and constraints within subsector Data on the costs and requirements of a national sanitation unit Data on the costs and benefits of specialist sanitation training 	WSP-EAP with World Bank Sanitation Working Group
3. Sanitation Monitoring & Evaluation	<ul style="list-style-type: none"> Formulate proposals for better alignment of SUSENAS with national and international facility definitions Assess options for improving national sanitation monitoring (including collective outcomes, impacts etc) Develop TORs for a consultancy to prepare a simple, generic impact evaluation tool for use by all sanitation 	<ul style="list-style-type: none"> Internationally comparable national sanitation coverage data Improved awareness of sanitation outcomes TORs for consultancy (to develop impact evaluation tool) 	WSP-EAP (with sanitation working group)

	stakeholders		
4. Knowledge Management	<ul style="list-style-type: none"> Arrange exposure visits (Indonesia to South Asia, Cambodia etc) Conduct a Joint Review of rural sanitation and hygiene in Indonesia (link to National Sanitation Summit and EASan preparation) Hold advocacy events to promote the benefits of sanitation improvement (use ESI and EASan material) 	<ul style="list-style-type: none"> Raised awareness of new sanitation approaches Share lessons learned and generate consensus on the way forward Raise awareness and political priority for sanitation 	WSP-EAP Sanitation Working Group WSP-EAP
5. Sanitation Financing	<ul style="list-style-type: none"> Evaluate the effectiveness of the CLTS approach in reaching the poorest Conduct a rapid assessment of the sustainability of school sanitation (different options for provision and management) 	<ul style="list-style-type: none"> Data on sanitation outcomes and impacts among very low-income households Evidence of the low sustainability of school sanitation facilities 	WSP-EAP WSP-EAP (with sanitation working group)
6. Strategic Sanitation Planning	<ul style="list-style-type: none"> Assist in the finalization of the NOSRSHII Compile data on the nature and scale of the rural sanitation challenge 	<ul style="list-style-type: none"> Formal national sanitation policy and guidelines Analysis of strategic sanitation challenges 	WSP-EAP Sanitation working group
Medium-Term Action Plan (7–12 months)			
1. Outcome-based Incentive Framework	<ul style="list-style-type: none"> Finalize proposals for national sanitation incentive schemes Develop outcome verification systems Lobby for approval of budget allocations 	<ul style="list-style-type: none"> PAMSIMAS performance grant system in place (not in E Java) Budget approval for national sanitation incentive fund 	WSP-EAP with sanitation working group
2. Sanitation Subsector Reforms	<ul style="list-style-type: none"> Present reform proposals to working groups and decision-makers Use consultation workshops to develop consensus on the creation of separate institutional spaces for each Ministry Lobby for approval of re-assignment of staff and budget to a national sanitation unit Develop training materials for 'sanitation 	<ul style="list-style-type: none"> Agreed sanitation roles for MoH and MoPW (and others) Budget approval for a national sanitation unit Generic materials available for training of sanitation and hygiene specialists 	WSP-EAP through WASPOLA and Sanitation Working Group WSP through PAMSIMAS Separate project required

	university'		Sanitation Working Group
3. Sanitation Monitoring & Evaluation	<ul style="list-style-type: none"> Conduct consultation workshops on the alignment of sanitation questions and categories in household and project surveys Formulate proposals for a monitoring unit (within the national sanitation unit) Manage the development of a generic impact evaluation tool (link with findings of TSSM Impact Evaluation) 	<ul style="list-style-type: none"> Consensus on the minimum requirements and definitions for sanitation surveys More harmonized, reliable, and comparable data from sanitation impact evaluations 	WSP-EAP
4. Knowledge Management	<ul style="list-style-type: none"> Arrange internal exposure visits (other provinces to visit East Java) Hold advocacy events to promote the benefits of sanitation improvement (use evidence-based TSSM findings) 	<ul style="list-style-type: none"> Promotion of the new approaches used in E Java Raised awareness and priority for rural sanitation 	WSP-EAP
5. Sanitation Financing	<ul style="list-style-type: none"> Assess whether additional finance or credit options are required for the poorest households Formulate proposals for sustainable financing of school sanitation 	<ul style="list-style-type: none"> Recommendations for reaching the poorest Development and operational costs of school sanitation facilities 	WSP-EAP, WSLIC-2, MoH WSP-EAP, UNICEF (with sanitation working group)
6. Strategic Sanitation Planning	<ul style="list-style-type: none"> Hold workshops to disseminate the policies and guidelines in the national operational strategy Assist in the preparation of strategic action plan for universal rural sanitation 	<ul style="list-style-type: none"> Dissemination of national sanitation policies and guidelines Dissemination of the strategic action plan 	Sanitation Working Group WSP-EAP with sanitation working group
Long-Term Action Plan (13–24 months)			
1. Outcome-based Incentive Framework	<ul style="list-style-type: none"> Assist in the implementation of national incentive schemes Assist in outcome verification Assist in organization of high profile national award ceremonies 	<ul style="list-style-type: none"> Establishment of national incentive fund PNPM community cash transfer system in place 	WSP-EAP
2. Sanitation Subsector Reforms	<ul style="list-style-type: none"> Assist collaboration between MoH and MoPW on national sanitation programs Assist in capacity building of the 	<ul style="list-style-type: none"> Establishment of a national sanitation unit Establishment of a sanitation 	Sanitation Working Group

	national sanitation unit <ul style="list-style-type: none"> Assist in establishment of sanitation university 	university (and training of subsector specialists)	Requires separate project
3. Sanitation Monitoring & Evaluation	<ul style="list-style-type: none"> Lobby for the revision of the SUSENAS sanitation questions (in line with the proposals emerging from the consultation process) Lobby for approval of the budget for a monitoring unit (within the national sanitation unit) Assist in field testing of the generic impact evaluation tool (and ensure that the standard impact indicators are included in national monitoring systems) 	<ul style="list-style-type: none"> Revised SUSENAS survey Approval for monitoring budget Two WSP-financed rapid sanitation impact evaluations Two externally financed rapid sanitation impact evaluations 	Sanitation Working Group WSP-EAP
4. Knowledge Management	<ul style="list-style-type: none"> Document lessons learned Promote lessons learned in Indonesia in IYS events in East Asia 	<ul style="list-style-type: none"> WSP field note International understanding and recognition of TSSM learning 	WSP-EAP
5. Sanitation Financing	<ul style="list-style-type: none"> Revise TSSM program policies to allow for recommendations for reaching the poorest Lobby for more sustainable financing of school sanitation 	<ul style="list-style-type: none"> Clear guidelines for reaching the poorest (and monitoring disaggregated outcomes) Approval of sustainable finance framework 	WSP-EAP Sanitation Working Group
6. Strategic Sanitation Planning	<ul style="list-style-type: none"> Review the policies and guidelines in the national operational strategy Formulate proposals for the harmonization of sector programs with the strategic action plan Develop matching investment and implementation plans 	<ul style="list-style-type: none"> Refinements to national sanitation policies Revisions to existing and planned sector programs Raised awareness of the investment and implementation required for universal sanitation 	Sanitation Working Group

Table 7: East Java: Provincial Action Plan

Action	Detailed Outputs	Results	Actor
Short Term Action Plan (1–6 months)			
1. Outcome-based Incentive Framework	<ul style="list-style-type: none"> Design, finance and implement a provincial clean village competition Remaining WSLIC-2 funds used to finance collective incentives Develop plans for pilot incentive funds (at district and province levels) Formulate the post-ODF strategy for East Java (environmental sanitation options in a ladder of incentives) Design, finance and implement an independent verification system 	<ul style="list-style-type: none"> Establishment of provincial clean village competition Details of incentive fund shared with potential investors Raised awareness on the need for post-ODF strategies Establishment of an independent verification system (for sanitation outcomes) 	<p>WSP with GoEJ</p> <p>WSP with WLSIC-2</p> <p>WSP with local govts</p> <p>WSP with GoEJ</p>
2. Sanitation Subsector Reforms	<ul style="list-style-type: none"> Formulate proposals for a Provincial Sanitation Unit Pilot implementation of national operational strategy Work to bring more partners into the process (universities, women's groups, NGOs, health providers and programs) 	<ul style="list-style-type: none"> Establish costs and requirements of a provincial sanitation unit Feedback on national sanitation policies and guidelines Larger pool of service providers and facilitators 	<p>WSP with GoEJ (link with PAMSIMAS proposals in other provinces)</p> <p>WSP with districts.</p>
3. Sanitation Monitoring & Evaluation	<ul style="list-style-type: none"> Baseline surveys (sanitation coverage and collective outcomes) Develop post-intervention outcome monitoring and follow-up strategies Collect health data (clinical data) and identify monitoring weaknesses 	<ul style="list-style-type: none"> Detailed information on local sanitation situation Raised awareness of need for monitoring and follow-up Raised awareness of variations in district disease burden and health costs 	<p>District Govts</p> <p>WSP with GoEJ</p> <p>WSP with local govt</p>
4. Knowledge Management	<ul style="list-style-type: none"> District advocacy (political commitment building package) Develop informed choice catalogues (based on local designs) Introduce a latrine competition (award for 	<ul style="list-style-type: none"> Increased political support and priority for sanitation Raised awareness of low-cost sanitation options Local innovations shared with a 	<p>WSP with GoEJ</p> <p>WSP with resource agencies</p> <p>WSP with GoEJ</p>

	the best local latrine design)	larger population	
5. Sanitation Financing	<ul style="list-style-type: none"> Develop cost-effectiveness indicators and collection systems Propose financing mechanisms for school sanitation 	<ul style="list-style-type: none"> Clear understanding of need for regular collection of reliable cost and impact data Recognition of real costs of school sanitation 	WSP with GoEJ WSP with GoEJ
6. Strategic Sanitation Planning	<ul style="list-style-type: none"> Undertake demand assessments (part of the sanitation marketing component) Provide support and training in strategic planning to districts 	<ul style="list-style-type: none"> Raised awareness of demand constraints (and drivers) Increased capacity for strategic planning 	Resource agencies
Medium-Term Action Plan (7–12 months)			
1. Outcome-based Incentive Framework			
	<ul style="list-style-type: none"> Extend clean village competition to phase 2 districts Introduce sanitation incentive fund Campaign to market new sanitation incentives Pilot post-ODF strategy in award winning communities Extend verification system to cover environmental sanitation 	<ul style="list-style-type: none"> Raised awareness of clean village criteria and awards Increased range of incentives Raised awareness and interest in sanitation Use success of award winning communities to leverage funds for environmental sanitation 	WSP with GoEJ WSP with GoEJ (and resource agencies)
2. Sanitation Subsector Reforms	<ul style="list-style-type: none"> Recruit and train staff for the provincial sanitation unit (use PAMSIMAS model) Sign district MoUs agreeing sanitation guidelines, standards, subsidy policy and penalties Ensure non-government representation in all sanitation working groups and committees 	<ul style="list-style-type: none"> Establishment of provincial sanitation unit Implementation of national operational strategy Recognition of potential contribution of non-government stakeholders to sanitation improvement 	MoH (through PAMSIMAS) WSP with district govts WSP with GoEJ
3. Sanitation Monitoring & Evaluation			
	<ul style="list-style-type: none"> Sanitation Week: annual community reviews (follow up for pit filling and upgrading – link to sanitation marketing; diarrhea assessments) District impact reviews (compare health data with sanitation outcomes) 	<ul style="list-style-type: none"> Renewed community interest and commitment for sanitation improvement Raised district and community awareness of disease burden Initial data on benefits of 	WSP with local govts

		<ul style="list-style-type: none"> Pilot the generic impact evaluation tool (use to examine short-term benefits of collective outcomes) 	collective sanitation outcomes	
4. Knowledge Management	<ul style="list-style-type: none"> District Performance Reviews (every six months – joint reviews and benchmarking by a group of districts) Updates to informed choice catalogues (add competition winners and new designs) 	<ul style="list-style-type: none"> Performance reports (sharing lessons learned & identifying gaps and weaknesses) Create culture of innovation and flexible learning 	WSP with GoEJ Resource agencies	
5. Sanitation Financing	<ul style="list-style-type: none"> Collect sanitation cost data Review credit systems and sanitation outcomes for poorest households Lobby district governments to reward ODF communities with recurrent budgets for school sanitation 	<ul style="list-style-type: none"> Sufficient data for cost-effectiveness analysis Raised awareness of sustainability and benefits among the poorest Increase options for sustainable financing of school sanitation 	WSP with local govts	
6. Strategic Sanitation Planning	<ul style="list-style-type: none"> Assist in the preparation of District Sanitation Action Plans (for reaching MDG and providing universal sanitation) 	<ul style="list-style-type: none"> Detailed understanding of sanitation challenges and opportunities 	Resource agencies with local govts	
Long-Term Action Plan (13–24 months)				
1. Outcome-based Incentive Framework	<ul style="list-style-type: none"> Conduct high profile campaign to publicize clean village awards and benefits Enlarge financial support for sanitation incentive fund Lobby for ladder of incentives (ODF award used to finance environmental sanitation services and so on) Review sustainability of outcomes in award winning communities 	<ul style="list-style-type: none"> Raised awareness of awards and higher priority for sanitation Ability to reward growing numbers of ODF communities Increased finance for outcome-based infrastructure grants Identification of any weaknesses in the incentive framework 	WSP with GoEJ	
2. Sanitation Subsector Reforms	<ul style="list-style-type: none"> Assist the provincial sanitation unit to identify non-performing districts Use graduates of the 'sanitation university' to improve performance in non-performing districts 	<ul style="list-style-type: none"> Apply pressure to non-performing districts Identify reasons for non-performance 	WSP with GoEJ	

3. Sanitation Monitoring & Evaluation	<ul style="list-style-type: none"> Use detailed impact evaluations (and clinical data) to identify any sanitation and hygiene costs not reduced by existing approaches (for example, worm infestations, personal hygiene) 	<ul style="list-style-type: none"> Increased capacity in non-performing areas 	WSP and Sanitation Working Group
4. Knowledge Management	<ul style="list-style-type: none"> District Performance Reviews (every six months – joint reviews and benchmarking by a group of districts) Updates to informed choice catalogues (add competition winners and new designs) 	<ul style="list-style-type: none"> Weaknesses in program methodology identified 	WSP with GoEJ
5. Sanitation Financing	<ul style="list-style-type: none"> Review cost-effectiveness data (for both household and school sanitation) 	<ul style="list-style-type: none"> Benchmarking of district performance 	WSP with GoEJ
6. Strategic Sanitation Planning	<ul style="list-style-type: none"> Harmonize sector programs with District Sanitation Action Plans Develop matching investment and implementation plans 	<ul style="list-style-type: none"> Use cost-effectiveness data as basis for promotion of policies and approaches Roadmap for reaching sanitation MDG and working toward universal sanitation. 	WSP with GoEJ

References

- BAPPENAS. 2007. "National Operational Strategy for Rural Sanitation and Hygiene Improvement in Indonesia (draft)." Jakarta: Government of Indonesia.
- Elledge, M., F. Rosensweig, and D. Warner. 2002. *Guidelines for the Assessment of National Sanitation Policies*. Washington DC: Environmental Health Project Strategic Report 2, July.
- Frias, J. 2007. "Rural Sanitation Strategies to Meet the Sanitation MDGs: An Example from rural Jawa Timur." Jakarta: Water and Sanitation Program. Powerpoint presentation.
- GoI (Government of Indonesia). 2003. *National Policy: Development of Community-Based Water Supply and Environmental Sanitation*.
- Hawkins, P. 2007. "Mission Report 08 Jan–02 Feb 2007: Development of a National Enabling Framework for Sanitation." Indonesia Sanitation Sector Development Project, Report.
- JMP (WHO-UNICEF Joint Monitoring Programme). 2006. *Meeting the MDG Drinking Water and Sanitation Target: The Urban and Rural Challenge of the Decade*. Geneva: WHO Press.
- RGNDWM. 2005. "Nirmal Gram Puraskar: A National Award under Total Sanitation Campaign." New Delhi: Rajiv Gandhi National Drinking Water Mission, Government of India website: www.ddws.nic.in
- Robinson A. 2005. *Scaling Up Rural Sanitation in South Asia: Lessons Learned from Bangladesh, India and Pakistan*. New Delhi: The World Bank, Water and Sanitation Program South Asia.
- . 2007. "Rural Sanitation and Hygiene in Cambodia: The Way Forward?" Water and Sanitation Program East Asia and Pacific.
- Sugden S. 2006. "The Microbiological Contamination of Water Supplies." WELL Factsheet
- World Bank. 2005. *Indonesia: Economic and Social Update*. Jakarta: The World Bank. Half-yearly update report.
- WSP (Water and Sanitation Program). 2007a. *An Approach that Works: Community-Led Total Sanitation in Rural Areas*. New Delhi: The World Bank, Water and Sanitation Program South Asia.
- . 2007b. *TSSM Total Sanitation & Sanitation Marketing: Scaling Up Community-Led Approaches to Safe, Healthy Sanitation and Improved Hygiene Behavior*. Jakarta: Water and Sanitation Program-East Asia and the Pacific.

Appendix A: Glossary

In order to ensure a common understanding of the concepts and terms used in the report, the following definitions are provided:

CLTS: *Community-led total sanitation* is the original variant of the “total sanitation approach,” a process to inspire and empower rural communities to stop open defecation and start using sanitary toilets, without offering external subsidies for the purchase of hardware such as toilets pans and pipes. CLTS uses a participatory analysis of community sanitation to identify key triggers to motivate a community to take collective action to change its sanitation status. The CLTS facilitator should never lecture or advise on sanitation habits, and should not provide external solutions, such as toilet designs, in the first instance. The goal of the facilitator is to help community members to see for themselves that open defecation causes ill health and an unpleasant environment, and thus inspire and empower them to find locally appropriate sanitation solutions.

Community-Based Water Supply and Sanitation Services: These services are managed and controlled by communities or community-based organizations without the need for formal legalization, and are distinct from services managed by legally registered institutions, such as services managed by public sector utilities and private sector providers (in both the formal and informal sectors).

Handwashing: Hands become contaminated with fecal material after anal cleansing, or after cleaning children’s bottoms or handling their feces. Rinsing with water alone is not enough to remove sticky microbe-containing particles from fingers or hands. Some form of soap is required: hands need to be rubbed with soap and water until fully covered with soapsuds, then rinsed off with water.

Hygiene promotion: Hygiene promotion is a planned approach to prevent diarrheal disease (and other health problems) through the widespread adoption of safe hygiene practices—for example, campaigns to encourage regular handwashing with soap at critical times. Note: hygiene promotion is usually a much broader intervention than sanitation promotion, which focuses solely on the safe management and disposal of excreta.

Informed choice: Demand-based programming places the community in the role of decision maker in the selection, design, financing, and management of their water supply and sanitation system. In order to effectively implement a demand-responsive approach, the government should play a role as facilitator to provide informed choices to the community regarding the development and construction of sound infrastructure and services, taking into account local financial, technical, environmental, social, and institutional factors. Informed choices are provided in participatory sessions, covering technology and service options based on willingness to pay, to provide insight on the service provision schedule and know-how, management of funds and responsibilities, and management of services.

PHAST: Participatory Hygiene and Sanitation Transformation (PHAST) is a methodology for community hygiene behavior change and improved management of community water supply and sanitation facilities. PHAST uses trained facilitators to initiate and oversee a series of participatory activities that assist community groups to identify health and hygiene problems, analyze locally prevalent disease transmission routes, identify barriers to transmission, plan physical and behavioral interventions to break disease transmission links, construct facilities, change behaviors, and monitor their progress. PHAST is different from CLTS in that PHAST uses a set series of activities to initiate changes in management and behavior relating to water supply, sanitation, and hygiene, whereas CLTS is a less rigid methodology with the sole objective of stopping open defecation in whole communities.

Program software: These are activities that support and promote the provision of program services and facilities—for example, media campaigns, capacity-building activities, community hygiene promotion sessions, and so on. Note: program software must be differentiated from program hardware (infrastructure), which includes tangible program products and facilities such as toilets, soakaways, handwashing facilities, and so on.

Rural: *Rural* describes that which is not urban. In Indonesia, *urban areas* are defined using complex criteria that include population density (more than 5,000 per square kilometer), the proportion of the population engaged in non-agricultural occupations (less than 25 percent), and the number of “urban” facilities available.

Sanitation: *Sanitation* describes interventions for the safe management and disposal of excreta, with the principal safety mechanism being the separation of excreta from all future human contact. The term *improved sanitation* is used in this report to denote private facilities that provide safe management and disposal of excreta. The WHO-UNICEF Joint Monitoring Programme (JMP) offers the following simple definitions of *improved sanitation facilities* that provide “sustainable access to basic sanitation”:

- pit latrine with slab;
- ventilated improved pit latrine;
- composting toilet; and
- flush or pour-flush to latrine pit, septic tank, or piped sewerage.

Unimproved sanitation facilities, which do *not* provide adequate access to basic sanitation, include:

- pit latrine without slab (open pit);
- shared or public sanitation facilities;
- hanging latrine;
- bucket latrine; and
- flush or pour-flush to elsewhere (street, yard, ditch, open drain, or other location).

Sanitation marketing: This is an approach that utilizes the power of the small- and medium-scale private sector in the provision of sanitation services and uses techniques of commercial marketing and behavior change communication to create demand.

Sanitation promotion: This encourages the safe management and disposal of excreta through the widespread adoption of safe sanitation facilities and practices—for example,

programs promoting the construction and universal use of improved sanitation facilities (see *sanitation* definition above).

Total sanitation approach: This is a community-wide approach whose main aim is universal toilet use (total sanitation) in each community covered. The total sanitation approach focuses on stopping open defecation on a community-by-community basis through recognizing the problems caused to all by open defecation within and around the community, and ensuring that every household uses either their own low-cost toilet or a shared toilet situated close to their home. The total sanitation approach is a broader variant of community-led total sanitation (see definition above) that may involve financial incentives (for example, post-construction subsidies provided by the Total Sanitation Campaign in India); the promotion of broader environmental sanitation objectives such as drainage and solid waste management; and the promotion of hygiene improvement activities such as handwashing.