Enabling Environment Assessment for Scaling Up Sanitation Programs: Madhya Pradesh, India

Andy Robinson and Rajiv Raman

Global Scaling Up Sanitation Project
January 2008

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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<th>Description</th>
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<tbody>
<tr>
<td>Anganwadi</td>
<td>Nursery school or (courtyard) childcare center</td>
</tr>
<tr>
<td>ADC</td>
<td>Assistant district collector (also known as assistant district magistrate)</td>
</tr>
<tr>
<td>APL</td>
<td>Above poverty line</td>
</tr>
<tr>
<td>BPL</td>
<td>Below poverty line</td>
</tr>
<tr>
<td>CBO</td>
<td>Community-based organization</td>
</tr>
<tr>
<td>CCDU</td>
<td>Communication and Capacity Development Unit</td>
</tr>
<tr>
<td>CLTS</td>
<td>Community-led total sanitation</td>
</tr>
<tr>
<td>Crore</td>
<td>10,000,000 (ten million)</td>
</tr>
<tr>
<td>CRSP</td>
<td>Central Rural Sanitation Programme</td>
</tr>
<tr>
<td>DC</td>
<td>District collector (or district commissioner, or district magistrate)</td>
</tr>
<tr>
<td>DLM</td>
<td>District-level monitoring</td>
</tr>
<tr>
<td>DRDA</td>
<td>District Rural Development Agency</td>
</tr>
<tr>
<td>DWSM</td>
<td>District water and sanitation mission</td>
</tr>
<tr>
<td>GoI</td>
<td>Government of India</td>
</tr>
<tr>
<td>GoHP</td>
<td>Government of Himachal Pradesh</td>
</tr>
<tr>
<td>IEC</td>
<td>Information, education, and communication</td>
</tr>
<tr>
<td>JMP</td>
<td>WHO-UNICEF Joint Monitoring Programme for Water Supply and Sanitation</td>
</tr>
<tr>
<td>Lakh</td>
<td>100,000 (one hundred thousand)</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and evaluation</td>
</tr>
<tr>
<td>NGO</td>
<td>Nongovernmental organization</td>
</tr>
<tr>
<td>NGP</td>
<td><em>Nirmal Gram Puraskar</em> (clean village award)</td>
</tr>
<tr>
<td>ODF</td>
<td>Open defecation free</td>
</tr>
<tr>
<td>Panchayat</td>
<td>Indian administrative system: literal meaning is an assembly of five</td>
</tr>
<tr>
<td></td>
<td>respected elders; <em>gram panchayat</em> is an elected body at village level.</td>
</tr>
<tr>
<td>PHED</td>
<td>Public Health Engineering Department</td>
</tr>
<tr>
<td>RDD</td>
<td>Rural Development Department</td>
</tr>
<tr>
<td>RGN DWM</td>
<td>Rajiv Ghandi National Drinking Water Mission</td>
</tr>
<tr>
<td>RSM</td>
<td>Rural sanitary mart</td>
</tr>
<tr>
<td>SDM</td>
<td>Subdivisional magistrate</td>
</tr>
<tr>
<td>SRSP</td>
<td>State Rural Sanitation Programme</td>
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<tr>
<td>TSC</td>
<td>Total Sanitation Campaign</td>
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<tr>
<td>TSSM</td>
<td>Total sanitation and sanitation marketing</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>WSP</td>
<td>Water and Sanitation Program (South Asia)</td>
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<tr>
<td>ZP</td>
<td>Zila Parishad (district council)</td>
</tr>
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Global Scaling Up Sanitation Project
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 Millennium Development Goal (MDG) targets in Indonesia, Tanzania, and the Indian states of Himachal Pradesh and Madhya Pradesh.

The baseline enabling environment assessment was carried out during the start-up phase of the overall project in May and June 2007. A follow-up assessment will be carried out at the end of project implementation in approximately May or June 2009. The main objective of this assessment was to establish a baseline of the programmatic conditions needed to scale up, sustain, and replicate the Total Sanitation and Sanitation Marketing (TSSM) approaches in the Indian states of Himachal Pradesh and Madhya Pradesh.

In order to ensure consistency in the assessment findings, the WSP developed a conceptual framework for assessing the enabling environment for sanitation. This framework was 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 TSSM 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 CAMPAIGN

One of the key differences between the methodology for the TSSM project in India and that in either Tanzania or Indonesia is the preexistence of a successful, large-scale rural sanitation program. The Total Sanitation Campaign (TSC) is a huge and ambitious program—in its current phase, the national TSC budget exceeds US$800 million—with a goal in the next five-year phase (2008–12) of providing toilets to 115 million households in order to achieve open defecation–free (ODF) status across the whole country.

The TSC is already operating at scale in Madhya Pradesh: starting in 2000, it was initiated in all 45 districts by 2003, and has since been co-opted in the three new districts created since 2003. The universal implementation of the TSC by the Government of Madhya Pradesh (GoMP) signals a shift from latrine construction to the more demand-driven and people-centered strategy inherent in the TSC.

Following a mid-term review of the TSC, a set of revised TSC guidelines was issued in 2004. These revised guidelines highlighted two outcome-based objectives:

- elimination of open defecation to minimize risk of contamination of drinking water sources and food; and
- conversion of dry latrines to pour-flush latrines.

BASELINE ASSESSMENT OF ENABLING ENVIRONMENT

In general, the enabling environment for rural sanitation in India is already extremely good. The TSC provides a solid financial and policy framework for the national goal of universal sanitation by 2012, which is well in excess of the MDG goal pursued by the TSSM project; and the TSC is well supported by the Nirmal Gram Puraskar (NGP) incentive program, which rewards local governments that achieve centrally defined sanitation outcomes.

Although the TSC has been operating since 1999, it is only since 2004 that it has promoted the elimination of open defecation and the achievement of collective sanitation outcomes. In the last few years, the TSC and NGP guidelines have provided a well-understood framework for sanitation and hygiene improvement, with most state and district governments now actively engaged in sanitation promotion and sanitation-related activities.

The TSC provides a broad financial and policy framework for sanitation improvement in India, but allows individual states and districts the freedom to develop local policies and interventions according to their specific needs and priorities. This freedom limits central control of program methodology, but allows more progressive local governments to develop and implement new approaches and policies. As a result, there is a wide variation in the effectiveness and outcomes of the TSC in different states.

<table>
<thead>
<tr>
<th>Area</th>
<th>TSC expenditure (Rs million)</th>
<th>Household toilets (number)</th>
<th>TSC progress (%)</th>
<th>BPL toilet usage (%)</th>
<th>2007 NGP awards (number)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Himachal Pradesh</td>
<td>86</td>
<td>102,428</td>
<td>16</td>
<td>100</td>
<td>28</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>1,639</td>
<td>1,748,874</td>
<td>23</td>
<td>65</td>
<td>191</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>2,132</td>
<td>3,127,223</td>
<td>34</td>
<td>87</td>
<td>1,974</td>
</tr>
<tr>
<td>All India</td>
<td>30,353</td>
<td>33,261,001</td>
<td>29</td>
<td>81</td>
<td>4,959</td>
</tr>
</tbody>
</table>
The performance data suggest that the TSC is not performing well in Madhya Pradesh: the district-level monitoring survey data imply that toilet usage among below poverty line (BPL) households averages only 50 percent, while Madhya Pradesh has spent 56 percent of the amount invested by Maharashtra in its TSC program, but received less than 10 percent of the number of NGP awards.

**POLICY, STRATEGY, AND DIRECTION**

The most successful element of the current sanitation interventions is undoubtedly the NGP awards. These awards have been successful in raising awareness, interest, and political support as well as in starting to make local governments question the effectiveness of existing supply-driven methods. However, this progress is in spite of the overwhelmingly supply-driven approach adopted by the Public Health Engineering Department (PHED), which allows rural households no choice of facility, no involvement in the construction (other than the digging of the latrine pit), and no control over the quality or functionality of the constructed facility.

Local governments are becoming aware that their objective is to achieve collective sanitation outcomes—ODF communities and NGP criteria—but the PHED provides little support in this work, preferring instead to focus on building standard latrines for BPL households using the cash incentives provided by the TSC program. The proposed shift in control of the TSC program from the PHED to the Rural Development Department (RDD) should make it easier to tackle some of these issues. The RDD has better relations with local governments, thus tends to be more responsive to their needs and priorities, and most stakeholders feel that the RDD is likely to be more open to the use of new approaches than the PHED.

Support for the total sanitation approach remains low, largely because it is seen as mutually exclusive to individual household subsidies. Despite the growing body of evidence from other states that poor households can build improved sanitation facilities without up-front subsidies, most stakeholders continue to claim that Madhya Pradesh is poorer and less developed than other states and, therefore, that no progress can be made without a substantial subsidy program.

**INSTITUTIONAL ARRANGEMENTS**

Both state- and district-level management of the TSC in Madhya Pradesh are inadequate. The PHED has allocated a couple of senior officers to the TSC program, but these officials have several other important duties and thus do not see the TSC as their primary role, and they receive little other support or finance from the state government for the management of the TSC program. The shift to the RDD will provide an opportunity to improve TSC management.

At district level, recent UNICEF-led efforts to recruit district TSC coordinators have had mixed results: a few district coordinators are working well, several others have left their posts after less than one year, and several more posts remain unfilled. The failure to establish well-organized sanitation units at the district level reflects a lack of interest by the districts, as there is no shortage of funds—the TSC program allocates 5 percent of the total for program administration, including staffing costs and monitoring and evaluation costs. The administration budget remains underutilized in almost every district.

There is a shortage of professional community development and sanitation expertise in Madhya Pradesh. In most areas, government officials from a variety of local departments perform the program outreach, social intermediation, and promotional activities, with little training or professional support. At present, it appears that the GoMP is making insufficient use of the expertise that is available through nongovernmental organizations (NGOs) such as WaterAid, probably because of the adversarial approach taken by many of these NGOs (most of whom are extremely critical of TSC program governance).
The recent success in achieving 190 NGP awards (in 2006–07) is probably to the result of some exceptional communities and local leaders, as well as of intensive government efforts in a relatively small group of communities (less than 1 percent of all gram panchayats in Madhya Pradesh). This success will be difficult to replicate as the pressure to scale up grows—when the TSC program tries to tackle less-active and progressive communities, and when less-committed government officers are asked to extend their efforts to more and more communities every year.

A central problem is that many GoMP officials are not yet convinced of the need to move away from existing supply-driven approaches. Very few reliable assessments have been made of the effectiveness of different TSC methodologies, thus there is little local evidence available with which to convince policy makers or implementation teams.

There are few resource constraints under the TSC program. Forty-five district TSC projects were sanctioned by 2003, providing US$165 million for rural sanitation within Madhya Pradesh. Given the large government machinery and the massive budget, the TSC program starts with more implementation capacity than almost any other national sanitation program.

However, the TSC does face capacity constraints from a shortage of professional expertise in three fields: social intermediation, sanitation improvement, and hygiene promotion. Despite the huge sums involved in the TSC program, most promotional efforts are led by government officials with little training or expertise in social marketing or techniques for sustainable behavior change. Government efforts have been successful in the relatively small groups of communities targeted during the initial phases of the TSC program, but it is already apparent that the same staff-intensive approach, which usually depends on multiple visits by local administrators, will not work at the larger scale required to achieve district and state sanitation targets.

Government efforts are focused almost entirely on meeting TSC and NGP program requirements (disbursing incentives, providing monitoring data, and completing financial utilization reports) with few attempts to undertake anything that may improve the enabling environment, ensure sustainable outcomes, or increase the cost-effectiveness of future implementation.

Despite the availability of a substantial budget (approximately US$100,000 per district) for “alternate delivery mechanisms,” and a similar amount allocated for revolving funds that increase the availability and affordability of sanitation goods and services, few districts’ projects have undertaken activities to examine household demand or improve local sanitation supply chains.

Most district TSC projects promote only one latrine model to BPL households (and often no models for above poverty line, or APL, households). This model is based on the standard PHED latrine design, with some slight variations according to local costs. As a result, despite massive expenditures, existing TSC activities have done little to develop or improve sustainable supply chains for sanitation goods and services.

The TSC district projects provide ample and predictable finance over a five-year time horizon, thus allowing strategic planning and encouraging large-scale implementation. Additional sanitation finance is available to successful communities through the NGP awards and state clean village competition.

The NGP incentive framework is working well in Madhya Pradesh, with the number of awards increasing from only 1 in 2006 to 190 in 2007. But 65 percent of these awards came from 5 high-performing districts, while 21 districts received no awards. High-level interest in the NGP awards
means that the number of successful applications is likely to rise further next year, but there are concerns that political pressure for quick results may give rise to coercive approaches and unsustainable outcomes.

**COST-EFFECTIVE IMPLEMENTATION**

The effectiveness of the TSC program is, increasingly, measured by the number of local governments that achieve ODF and NGP status. Insufficient data were available to make any useful assessment of the current ODF success rate in Madhya Pradesh. Figures from other national programs (and from Himachal Pradesh) average about 35 percent, suggesting that, even if the approaches adopted in Madhya Pradesh follow best practice, alternative and complementary approaches will need to be developed to increase the success rate and tackle the remaining 65 percent of communities.

Reaching the MDG target requires increasing the state sanitation coverage by as much as 42 percent, so the predicted ODF success rate will be sufficient to reach the MDG only if almost every gram panchayat in Madhya Pradesh is targeted over the next five years. However, sanitation coverage also increases in communities that do not eliminate open defecation. The TSC online monitoring suggests a remarkable 20 percent increase in sanitation coverage over the last couple of years, but these figures must be tempered by the knowledge that at most 50 percent of these latrines are in use. Therefore, considerably faster and more effective progress will be needed in order for non-ODF communities to contribute significantly toward the sanitation MDG.

Data on cost-effectiveness is important for developing consensus on the best approaches for large-scale implementation. The WSP needs to strengthen the case for using the community-led total sanitation (CLTS) approach by documenting the relative cost-effectiveness of the various approaches tried in Madhya Pradesh, in particular when programs scale up and begin to target less-active and committed communities and local governments. The cost-effectiveness data can also be used to benchmark district performance.

**MONITORING AND EVALUATION**

Current monitoring and evaluation systems are fragmented and inadequate. The TSC online monitoring system, which is the main monitoring and reporting portal for the TSC, monitors only physical (number of toilets) and financial (expenditure) progress.

The TSC district-level monitoring (DLM) survey, which examines sanitation coverage and BPL household latrine usage, suggests that, on average, only 56 percent of BPL households in Madhya Pradesh are using their latrines. But even this low usage figure may not represent typical outcomes in the state, as sanitation coverage among the survey respondents averaged about 60 percent, which is significantly higher than the average across the state.

**RECOMMENDATIONS**

The transfer of responsibility for the TSC to the RDD presents an opportunity for the development of new policies, strategy, and approaches to sanitation improvement. The less technical nature of the RDD should allow a move away from the technology-based, supply-driven approaches favored by the PHED engineers toward more appropriate, outcome-based policies and approaches.

In particular, there is a need for state-level guidelines that promote collective sanitation outcomes. The current lack of consensus on the effectiveness of supply-driven approaches (versus demand-responsive approaches) recommends that the TSSM project should undertake joint evaluations that provide evidence of the poor sustainability and limited benefit (hence wasted investment) of supply-driven approaches in Madhya Pradesh.
It is also recommended that the state government match its sanitation goals to those of the national government, which wants universal sanitation for India by 2012. Therefore, the TSSM project should assist the state government and districts to develop strategic sanitation action plans that, in aggregate, provide a realistic roadmap toward universal sanitation in the state by 2012.

An alternative partnership model is required to ensure that a cadre of trained sanitation and hygiene specialists is available throughout the state, and to encourage the use of TSC funds to finance private (or community) efforts to achieve sustainable sanitation outcomes.

The absence of a state sanitation committee or sanitation units at either state or district level is a major constraint. The lack of state-level capacity or resources for sanitation strategy and policy development, and for the regular monitoring and evaluation of district projects, have hindered state guidance of the TSC program. The TSSM project will provide some important short-term support and capacity building, but there is a need for a state-financed sanitation unit to manage TSC and NGP activities, and for a high-level sanitation committee to provide direction and drive toward wider state objectives.

There is an urgent need for convincing evidence of the relative cost-effectiveness of the various approaches being used (or promoted). Once compiled, this evidence should be used in an advocacy campaign on the importance of tackling inadequate sanitation, alongside evidence (from elsewhere) that effective methodologies can achieve significant sanitation improvements even in challenging contexts (such as among poor, illiterate, or disadvantaged groups).

The sanitation marketing methodology should focus primarily on the supply of sanitation goods and services to APL households. Based on the June 2007 TSC monitoring data, APL households comprise 56 percent of the target TSC households; only 18 percent of these APL households have been served to date, compared with 29 percent of the target BPL households. The sanitation marketing component of the TSSM needs to formulate and market a range of latrine options that are attractive to APL households.

Significant capacity-building efforts are underway (largely through UNICEF and the Communication and Capacity Development Unit, or CCDU), but the institutions responsible for the capacity building have little or no involvement in the TSC activities, and there is little evidence of improved implementation on the ground. Therefore, it is recommended that efforts be made to monitor the effectiveness of these large-scale capacity-building activities, including any changes in process, increased efficiency, or improved outcomes and impacts.

More information is required on the number and nature of the different products, retailers, and service providers (for example, masons) available in Madhya Pradesh; and on the latrine options that are considered affordable and desirable by the different market segments (for example, food poor, poor, nonpoor with water supply but no latrine, nonpoor with traditional latrine, and remote communities).

The increasing importance of the NGP program, whose proposed 2008–12 budget is likely to be larger than that of the TSC program, requires that further investigation be undertaken into the sustainability of the sanitation outcomes generated by the NGP, and into the effective use of the financial rewards garnered by NGP winners (that is, do these funds result in additional sanitation improvements, and does this money repay previous sanitation investments by local governments, or is it used for non-sanitation-related activities).

It is also recommended that the GoMP develop some form of screening process to examine NGP applications before passing them on to the Government of India (GoI). This process (already followed in progressive states such as Maharashtra) reinforces the need for rigorous adherence to the NGP criteria, provides secondary verification of collective outcomes, and limits the expectations of badly prepared applicants.
In light of the sustainability and impact questions raised against the TSC and NGP programs, it is also recommended that the TSSM project consider the development of a more phased incentive framework:

- providing the 10 percent finance allocated to environmental sanitation after achieving ODF status;
- providing performance grants to village governments that achieve post-NGP outcomes; and
- financing recurrent costs in communities that sustain sanitation outcomes.

Data on cost-effectiveness are important for developing consensus on the best approaches for large-scale implementation. The WSP needs to strengthen the case for using the CLTS approach by documenting the relative cost-effectiveness of the various approaches tried in Madhya Pradesh, in particular when programs scale up and begin to target less-active and committed communities and local governments. The cost-effectiveness data can also be used to benchmark district performance.

There remains a need for more regular independent monitoring of sanitation outcomes, and for matching assessments of the extent to which these outcomes translate into positive impacts and benefits. Although the TSSM project impact evaluation component is likely to address many of these issues, it is also recommended that the TSSM project develop a simple, generic impact evaluation tool that can be used by state sanitation bodies, and that evaluation data be compiled into state and national databases.
1. Introduction

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 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 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 May and June 2007. A follow-up assessment will be carried out at the end of project implementation, in approximately May or June 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 if 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 TSSM 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 Madhya Pradesh, India.

Assessment framework and methodology

In order to improve the comparability of the findings from the assessments in India with those from the assessments in Tanzania and Indonesia, 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 Services
- Financing and incentives
- Cost-Effective implementation
- Monitoring and Evaluation
**Definition of scale up:** To 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 (see Table 2).

### Table 2: Project Areas and Numbers of Beneficiaries

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

Source: UN population data; JMP 2006.
* 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 total sanitation and sanitation marketing.

#### 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 nongovernmental organization (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

Although 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 the 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 India were carried out by a two-person team consisting of an international and national consultant, supported by the WSP state coordinators in Himachal Pradesh and Madhya Pradesh, with overall direction and support from the WSP country task manager for the TSSM project (Soma Ghosh Moulik) and the WSP India country team.

The baseline assessments were conducted through a series of one-to-one interviews with key stakeholders at national, state, division, district, block, gram panchayat, and village levels. In addition, some self-report forms were distributed in order to capture the views of any 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 consultants and the WSP India team in order to match the questions and language more closely to local contexts and norms. The India-specific 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 will comprise 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 will need to be contacted at all appropriate levels—national, state, district, and local—when needed and possible.

Secondary data sources will comprise document review and any potential influencers or additional secondary implementers such as media, ministries with no direct involvement, advocacy groups, and so on. In those countries where program activities have not yet
begun or are in the very early stages, consideration must be given to interviewing “potential” stakeholders/partnering organizations as well.

No self-report forms were completed. Efforts were made to complete self-report forms during the Himachal Pradesh assessment, but the response was very poor—only a handful of forms were completed (out of the dozens distributed), mostly by stakeholders who had already been interviewed. On review, it was clear that these few forms did not contain any information that had not already been obtained through interviews. As a result, the self-report forms were not utilized during the assessment in Madhya Pradesh.

**Sampling Protocol**

Sampling will be purposive for all primary data sources. Criteria for selection for interviews included:

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

Because of the limited time available for the assessment, only two (of the forty-eight) districts in Madhya Pradesh were visited. Based on information from the ongoing TSC activities, one above-average district and one below-average district were selected.

*Hoshangabad* was selected as an “above-average district” based on its TSC performance: Hoshangabad was home to 18 out of the 190 *Nirmal Gram Puraskar* (NGP) award winners (2007) in Madhya Pradesh, making it the fourth highest achieving Madhya Pradesh district after Jabalpur, Indore, and Seoni. Unlike several of the other high-performing districts, which have received significant support from UNICEF, Hoshangabad is a home-grown success that illustrates what can be achieved using only local resources.

*Sagar* was selected as the “below-average district” following reports of disappointing progress. Despite being home to an enthusiastic divisional commissioner, the divisional headquarters, and a UNICEF zonal consultant, the Sagar Division (comprising eight districts) has not yet won a single NGP award.
2. Context

Madhya Pradesh is often called the “Heart of India” because of its landlocked location in central India. Until 2000, when the state of Chattisgarh was carved out from its boundaries, Madhya Pradesh was the largest state in India. It is now the second largest, covering 308,000 square kilometers, but is only the seventh most populous with about 60 million inhabitants, resulting in a population density that is 40 percent lower than the national average.\(^3\)

In 2003, Madhya Pradesh formed three additional districts by further subdividing its existing districts, bringing the state total to 48 districts, which contain 313 blocks and close to 23,000 *gram panchayats*. There is a significant tribal population in Madhya Pradesh: 89 blocks (28 percent) are considered “tribal blocks,” and one-third of all children attend residential tribal schools.

\[\text{Figure 1: Infant Mortality Rate}\]

Madhya Pradesh also has low human development indicators: the under-five mortality rate is the highest of any state in India at 137 deaths per 1,000 live births (compared with an all-India average of 95 under-five deaths per 1,000),\(^4\) and reaches an incredible 152 deaths per 1,000 live births (15 percent) in rural areas. Although infant mortality rates in Madhya Pradesh have dropped by 19 percent since the 1998 National Family Health Survey (NFHS), they remain 23 percent higher than the All India average (see Figure 1). Furthermore, incomes are low, and Madhya Pradesh is reported to have the lowest per capita expenditure on food of all Indian states,\(^5\) reflecting widespread poverty and lack of livelihood security.

\[\text{Source: GoI 2006; data taken from National Family Health Surveys (NFHS) I, II, and III.}\]

Global Scaling Up Sanitation Project
Sanitation: The Scale of Challenge

The practice of open defecation has long been traditional in rural India. According to the 2001 census data, only 21.9 percent of the rural population in India own latrines (Figure 2). In addition, the supply-driven nature of previous sanitation interventions, whereby highly subsidized sanitation facilities were provided to rural households unconvinced of their benefits, means that some of these latrines are not used.

Simple linear projections of rural population growth show that, in order to achieve the target of universal sanitation by 2012, accelerated progress is required. Recent progress has been good, with some surveys estimating that 2.8 million individual household latrines have been constructed annually over the 2001–05 period. However, at this rate, universal sanitation will not be achieved until 2024. In addition, latrine usage remains a problem: sample surveys carried out by Government of India (GoI) assessment teams in 478 districts (under the district-level monitoring, or DLM, program) indicate that actual latrine usage is around 80 percent nationally, with significant variation across and within states.

![Figure 2: Trend in Rural Sanitation Coverage: India](source)

Access to improved sanitation in Madhya Pradesh is particularly low. The 2001 census reports 8.9 percent rural sanitation coverage in Madhya Pradesh, while other surveys suggest that even this figure may have been an overestimate. A number of districts in Madhya Pradesh face water scarcity problems, which further inhibits efforts to promote the use of sanitation facilities and improved hygiene behavior, as water is generally required for anal cleansing, toilet flushing, handwashing, and so on.

Legal Framework

The Constitution of India determines that water supply, sanitation, and other public health services are state responsibilities. However, the 73rd and 74th constitutional amendments
allow states to pass the responsibility and powers for water supply and sanitation down to the Panchayati Raj Institutions.

In Madhya Pradesh, the Panchayati Raj and Gram Swaraj Act 1993 delegates responsibility for rural water supply and rural sanitation to the *gram sabha*, including the following functions:

- sanitation
- regulation of the construction of household latrines, urinals, drains, and water closets
- construction, maintenance, and clearing of public streets, latrines, drains, and other public facilities

Despite the existence of a Model Public Health Act 1987 (revised) prepared by the GoI, and the clear responsibility of the state for public health services, Madhya Pradesh has not adopted a Public Health Act. As a result, there is no legislative framework for the regulation of public health services in the state.
3. Total Sanitation Campaign

One of the key differences between the methodology for the Global Scaling Up Sanitation Project in India and that in either Tanzania or Indonesia is the preexistence of a successful, large-scale rural sanitation program. As described in more detail in the following section, the Total Sanitation Campaign (TSC) is a huge and ambitious program. In its current phase (2003–07), the national TSC budget exceeds US$800 million, with a goal in the next five-year plan (2008–12) of providing 115 million household toilets and achieving open defecation–free status across India by 2012.

The TSSM project will work through the TSC in Madhya Pradesh. Prior to the start of the project, the Water and Sanitation Program (WSP) India team was in the process of establishing a working relationship with the Government of Madhya Pradesh (GoMP), following its demand for support of their TSC program. The TSSM project will enable the WSP team to broaden the support provided, to leverage TSC resources and sector opportunities at the national level, to enhance preexisting engagements at the state level, and to facilitate achievement of the TSSM objectives and outcomes.

Evolution of the Total Sanitation Campaign

India’s first nationwide program for sanitation was the Central Rural Sanitation Programme (CRSP), which was initiated in 1986. This program focused on providing household sanitation facilities and relied on a hardware subsidy to “generate demand” for pour-flush toilets. In light of the relatively poor national sanitation coverage, a Revised CRSP (RCRSP) was launched in April 1999. The revised program advocated a shift from a high-subsidy to a low-subsidy regime, greater household involvement and demand responsiveness, the promotion of a range of toilet options to advance increased affordability, and strong emphasis on information, education, and communication (IEC) and social marketing. The program envisaged complementary systems such as trained masons and supply of building materials through rural sanitary marts and production centers, and called for a thrust forward on school sanitation as an entry point for encouraging wider acceptance of sanitation by the rural population.

After pilots in selected states, the program was announced as the Total Sanitation Campaign (TSC), for roll-out on a national level in 2003. The program included assistance for construction of individual household toilets, sanitary complexes for women, school sanitation, and the setting up of alternative delivery systems such as rural sanitary marts. The recognition that water and sanitation in schools are critical to the formation of proper attitudes and habits for hygiene, sanitation, and safe water use, and that schools are powerful channels for communicating hygiene messages to households and communities, was stated in its emphasis on school sanitation programs. Likewise, measures were advocated to raise awareness levels and improve hygiene behavior, while simultaneously advocating the “capacity-building” of program delivery staff and other stakeholders through training initiatives.

The TSC, launched by the GoI in 1999, is a comprehensive national program to improve rural sanitation coverage, promote latrine use, and eliminate the practice of open defecation.
defecation. The TSC is already operating at scale in Madhya Pradesh: starting in 2000, it was initiated in all 45 districts by 2003, and has since been co-opted in three additional districts.

The universal implementation of the TSC by the GoMP signals a shift from latrine construction to the more demand-driven and people-centered strategy inherent in the TSC. The key objectives of the TSC are to:

- improve the quality of life in the rural areas;
- accelerate sanitation coverage in rural areas;
- generate felt demand for sanitation facilities through awareness creation and health education;
- provide rural schools and nursery schools with sanitation facilities, and promote hygiene education and sanitary habits among students; and
- encourage cost-effective and appropriate technologies in sanitation.

The approach adopted in this campaign aims at motivating rural households to build latrine facilities and encouraging their use. Thus, the emphasis is on designing strategies to motivate individual households so that they realize the need for good sanitation practices, and, as a result, in time not only construct toilets but also have the members of the family use them. In addition, the program also aims at modifying and improving personal hygiene behavior.

Following a mid-term review of the TSC, a new set of revised guidelines was issued in 2004. These guidelines accorded emphasis on sanitary arrangements, not merely on the construction of household latrines. Three outcome-based objectives were highlighted:

- eliminate open defecation to minimize risk of contamination of drinking water sources and food
- convert dry latrines to pour flush latrines
- eliminate manual scavenging practice

The School Sanitation and Hygiene Education component was strengthened; and the provision of toilets was extended to _anganwadi_ centers (AWCs), all levels of schools (primary, middle, secondary, and so on), and all establishments of the _gram panchayat_. The GoI sought to re-orient the focus of the sanitation program to achieving the outcome of an open defecation–free (ODF) environment. Thus, not only individual households, but also communities, village, and _panchayat_ governments started to be targeted.

**TSC Methodology**

The Department of Drinking Water Supply (DDWS) is responsible for the TSC, through the mission director of the Rajiv Gandhi National Drinking Water Mission and its CRSP. In most states, either the Rural Development Department (RDD) or the Public Health Engineering Department (PHED) are given responsibility for state-level management of the TSC program, with a State Water and Sanitation Mission, which is a multistakeholder body—that is, including all relevant government departments and nongovernment stakeholders mandated as the main body responsible for planning, supervising, and
monitoring the implementation of drinking water and sanitation programs in the districts. The program management arrangements also provide for suitable institutional arrangements at the district and subdistrict levels. The fund flow for centrally sponsored programs such as the TSC is directly to the district, with the matching state share being released when the utilization and request is put in by the district agency.

The TSC operates through district projects of three to five years in duration, each jointly financed by the GoI, the state government, and the beneficiary households. The funding split varies according to the program component, but averages about 65 percent from the GoI, 23 percent from the state government, and 14 percent from the beneficiaries. The TSC financial framework specifies exactly how the project funds are to be earmarked and divided between components and funding sources (see Table 3).

### Table 3: TSC Components: Revised Earmarking and Funding Pattern

<table>
<thead>
<tr>
<th>Component</th>
<th>Amount earmarked (percent)</th>
<th>Relative contribution (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>GoI</td>
</tr>
<tr>
<td>IEC campaigns and start-up activities</td>
<td>Up to 15</td>
<td>80</td>
</tr>
<tr>
<td>Alternate delivery mechanisms (production centers, sanitary marts)</td>
<td>Up to 5</td>
<td>80</td>
</tr>
<tr>
<td>(i) Individual latrines for BPL households (ii) Community sanitary complexes</td>
<td>Amount required for full coverage</td>
<td>60</td>
</tr>
<tr>
<td>Individual latrines for APL households</td>
<td>Nil</td>
<td>n.a.</td>
</tr>
<tr>
<td>Institutional sanitation (anganwadi, school, and public facilities)</td>
<td>Amount required for full coverage</td>
<td>70</td>
</tr>
<tr>
<td>Administration (training, overheads, M&amp;E)</td>
<td>Less than 5</td>
<td>80</td>
</tr>
<tr>
<td>Solid and liquid waste management (capital costs only)</td>
<td>Up to 10</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: GoI DDWS 2006.

Note: The table uses the revised pattern as per March 2006 modifications in TSC guidelines (which updated the January 2004 guidelines).

The district has to submit a project proposal (in line with the guidelines issued by the GoI) and a project implementation plan to the state government to avail itself of the GoI funding. Each state is required to establish appropriate institutional arrangements to facilitate project implementation by districts and monitor that implementation. Specialist consultants from the fields of communication, human resource development, monitoring and school sanitation, and hygiene education can be appointed as consultants at the state level, and where required at the district level.
The states remain free to devise their own specific approaches within the broad framework provided by the program. Several states—notably Maharashtra and West Bengal—have modified the TSC guidelines to accord better with their existing sanitation initiatives. These modifications include the use of part of the funds provided for latrine subsidies to promote improved sanitation and hygiene practices. In addition, the TSC guidelines provide a flexible framework for district projects, allowing different...
methodologies to be adopted depending on the different contexts, demands, and capacities within the district.

Although the program delivery strategy in most states follows the overall TSC framework, the structure and institutional linkages varied with the situation of local self-government systems and the mode of development program administration in the state. In states where the Panchayati Raj Institutions system is mature and financial and functional devolution has taken place, the fund flow continues down to the subdistrict (block) level for awareness creation and overall program management, while in other states the program (and fund) management is centralized with the district administration and subdistrict tier functionaries are directed and managed from the district level.

TSC Latrine Subsidies

Under the TSC, financial incentives may be paid to below poverty line (BPL) households up to 80 percent of the cost of a Rs 625 basic latrine unit (usually a single pit latrine without a superstructure), and 60 percent for latrine models costing up to Rs 1000. However, the TSC guidelines state that:

_The construction of household toilets should be undertaken by the BPL household itself; and on completion and use of the toilet by the BPL household, the cash incentive can be given to the BPL household in recognition of its achievement._ GoI TSC Guidelines (2004,) p.9 para. 9(d).

In addition, the TSC guidelines clearly state that individual rural households should have a choice as to the type of latrine that is built:

_The physical implementation gets oriented toward satisfying the felt needs, wherein individual households choose from a menu of options for their household latrines. The built-in flexibility in the menu of options gives the poor and disadvantaged families opportunity for subsequent upgradation depending on their requirements and financial position._ GoI TSC Guidelines (2004) p.7 para. 7.

TSC Guidelines Revised in 2006: Raised Subsidy

Further revisions to the TSC guidelines were issued in March 2006, stipulating that the incentive for BPL household latrines was to increase from Rs 500 to Rs 1,200. This apparently inflation-driven revision doubled the maximum latrine cost to Rs 2,000, in large part because the basic low-cost unit was now deemed to require a superstructure. This revision represented a substantial change for the TSC, both in terms of the higher financial requirements of the campaign because the amount of the BPL latrine incentive had increased by 240 percent, and the increased construction and monitoring requirements now that an adequate superstructure must be provided before completion and usage can be verified.

TSC Guidelines Revised in 2006: Full Coverage of BPL Households and Schools

In addition, the 2006 revisions state that financing for household latrine incentives should now cover the “actual amount required for full coverage [of the BPL households]”. 
Similarly, financing for institutional toilets (including school and anganwadi toilets) now includes the “actual amount required for full coverage” and community contributions, which were previously set at 10 percent, are no longer required for school and anganwadi toilets.

Importantly, the revisions introduced solid and liquid waste management as a component of the TSC (up to 10 percent of project outlay), and included provisions for establishing a revolving fund (up to Rs 50 lakh) for the provision of sanitation loans (with a maximum of Rs 2,000 per household) to members of self-help groups and cooperative milk societies.\(^8\)

As a result of the March 2006 TSC revisions, each district has been asked to resubmit a revised project proposal (based on the higher latrine incentives and new cost-sharing arrangements). The GoI estimates that the budget for the revised TSC (to be included in the 11\(^{th}\) Five-Year Plan) will be Rs 5,700 crore (US$1.4 billion),\(^9\) with the overall program objective of achieving universal rural sanitation coverage by 2012.

**TSC Incentive Framework**

Taking note of the need to empower local government institutions and promote community-based action for sanitation and hygiene, states such as Maharashtra and Tamil Nadu announced innovative incentive frameworks for Panchayati Raj Institutions, including the *Sant Gadge Baba Gram Swachayata Abhiyan* (2000) and the *Clean Village Campaign* (2003), both of which promoted competition among local governments to achieve preset standards for environmental cleanliness and collective sanitation outcomes. In 2002, the Government of Maharashtra also initiated the *Hagandhari Mukt Abhiyan*, which was the first program that attempted to motivate panchayats to move toward ODF status within their entire jurisdiction.

Following the success of state incentive schemes such as the Sant Gadge Baba scheme, the GoI introduced the NGP (clean village award) in October 2003. Villages (*gram panchayats*) are eligible to apply for the NGP award on achieving the following collective outcomes:

1. 100 percent sanitation coverage of individual households
2. 100 percent school sanitation coverage (with separate facilities for boys and girls)
3. free from open defecation
4. maintenance of a “clean environment”

*Gram panchayats*, blocks, and districts are eligible for the award, as are individuals and organizations that contributed significantly to achieving the goals within a particular area. The cash award ranges (depending on population size) from Rs 0.5 to 5 lakh (for *gram panchayats*) and Rs 10 to 20 lakh (for blocks, that is, with all their *gram panchayats* being covered) to Rs 30 to 50 lakh (for districts, with 100 percent blocks and *gram panchayats* covered).\(^{10}\) Individuals and organizations can win cash awards of between Rs10,000 and 50,000. The cash incentive provided to Panchayati Raj Institutions is to be utilized for improving and maintaining sanitation facilities in their respective areas, with
a focus on the safe disposal of solid and liquid wastes and maintenance of sanitation standards.

In addition to the financial incentive attached to the award, the NGP benefited from an early decision to add some prestige and profile to the NGP awards by asking the President of India to make the awards in person. As a result, the initial winners of the NGP awards, who were mostly elected village leaders (Sarpanch or Pradhan), were then honored by the President at a prestigious ceremony attended by ministers and high-ranking officials from all over India. The prestige and positive publicity generated by this high-profile award ceremony was far greater than anticipated, giving considerable impetus to local government involvement in the TSC, and resulting in strong interest and competition for the NGP awards at all levels of government.

Unfortunately, the unprecedented success of the NGP award has had unexpected side effects. In the last two years, the number of NGP awards has increased dramatically, from 40 NGPs at the first ceremony in 2005 to 4,959 NGPs in May 2007, with a commensurate increase in the number and spread of NGP applications (see Table 4).

<table>
<thead>
<tr>
<th>Table 4: Growth in Nirmal Gram Puraskar Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
</tr>
<tr>
<td>NGP applications</td>
</tr>
<tr>
<td>NGP awards</td>
</tr>
<tr>
<td>States involved</td>
</tr>
</tbody>
</table>

Source: Personal communication by WSP India.

This rapid expansion has stretched the resources available to provide independent assessments of the applications, necessitated a reduction in the amounts awarded to smaller gram panchayats (from Rs 200,000 down to Rs 50,000), and made it impossible for the President to congratulate each recipient personally. As a result, the NGP awards were delayed in 2007 (from January to May), and several stakeholders complained that the positive impact of the awards has been diminished by the reductions in financial rewards and prestige.

Nevertheless, the number of states proffering applications has increased from only 6 (West Bengal, Maharashtra, Tamil Nadu, Tripura, Kerala, and Gujarat) at the outset to 22 states in 2006–07. The ever-widening catchment of NGP applicants reflects the growing political and popular interest in the awards, which has important knock-on effects that improve and increase support and involvement in the TSC.

As the NGP is an open and one-time only award, the GoI hopes that every gram panchayat in India will qualify for it and apply before 2012. Therefore, the GoI estimates that the 11th Five-Year Plan (2008–12) budget for the separately financed NGP needs to be Rs 6,000 crore (US$1.48 billion), which is Rs 300 crore (US$74 million) higher than the TSC budget over the same period.
TSC Progress

The GoI operates an online monitoring system for the TSC, which requires that each district provide monthly updates on its physical and financial progress. Tables 5 through 9 summarize the situation as at end June 2007.

Table 5: Physical Progress: Individual Household Latrines

<table>
<thead>
<tr>
<th>number of latrines</th>
<th>Target</th>
<th>Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BPL households</td>
<td>APL households</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>108,017</td>
<td>543,032</td>
</tr>
<tr>
<td></td>
<td>(30)</td>
<td>(13)</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>3,368,972</td>
<td>4,273,749</td>
</tr>
<tr>
<td>All India (millions)</td>
<td>56.3</td>
<td>58.7</td>
</tr>
<tr>
<td></td>
<td>(35)</td>
<td>(23)</td>
</tr>
</tbody>
</table>

Source: http://ddws.nic.in/

Table 6: Physical Progress: Institutional Toilets

<table>
<thead>
<tr>
<th>number of institutional toilets</th>
<th>Target</th>
<th>Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>School</td>
<td>Anganwadi</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>6,926</td>
<td>1,090</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>76,128</td>
<td>10,592</td>
</tr>
<tr>
<td>All India</td>
<td>1,009,814</td>
<td>362,926</td>
</tr>
</tbody>
</table>

Source: http://ddws.nic.in/

Table 7: Financial Progress: Excluding Beneficiary Contributions

<table>
<thead>
<tr>
<th>Rs crore</th>
<th>Project outlay*</th>
<th>Project approved (%)</th>
<th>Project released (% of approved)</th>
<th>Expenditure reported (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Himachal Pradesh</td>
<td>42.3</td>
<td>36.3 (86)</td>
<td>11.2 (31)</td>
<td>8.3 (23)</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>761.8</td>
<td>660.8 (87)</td>
<td>193.0 (29)</td>
<td>141.1 (21)</td>
</tr>
<tr>
<td>All India</td>
<td>12,495</td>
<td>7,802 (62)</td>
<td>3,600 (46)</td>
<td>2,463 (32)</td>
</tr>
</tbody>
</table>

Source: http://ddws.nic.in/
* Includes beneficiary contributions
### Table 8: Financial Progress: Excluding Beneficiary Contributions

<table>
<thead>
<tr>
<th></th>
<th>Project outlay*</th>
<th>Project approved (%)</th>
<th>Project released (% of approved)</th>
<th>Expenditure reported (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Himachal Pradesh</strong></td>
<td>10.6</td>
<td>9.1</td>
<td>2.8</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>(86)</td>
<td></td>
<td>(31)</td>
<td>(23)</td>
</tr>
<tr>
<td><strong>Madhya Pradesh</strong></td>
<td>190.4</td>
<td>165.2</td>
<td>48.3</td>
<td>35.3</td>
</tr>
<tr>
<td></td>
<td>(87)</td>
<td></td>
<td>(29)</td>
<td>(21)</td>
</tr>
<tr>
<td><strong>All India</strong></td>
<td>3,123.8</td>
<td>1,950.5 (62)</td>
<td>899.8</td>
<td>615.5</td>
</tr>
</tbody>
</table>

* Source: http://ddws.nic.in/
* Includes beneficiary contributions

### Table 9: Growth in Nirmal Gram Puraskar Awards: Madhya Pradesh

<table>
<thead>
<tr>
<th>Number</th>
<th>2004–05</th>
<th>2005–06</th>
<th>2006–07</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGP applications</td>
<td>0</td>
<td>14</td>
<td>557</td>
</tr>
<tr>
<td>NGP awards</td>
<td>0</td>
<td>1</td>
<td>190</td>
</tr>
<tr>
<td>Districts involved</td>
<td>0</td>
<td>4</td>
<td>35</td>
</tr>
</tbody>
</table>

* Source: http://ddws.nic.in/*
4. Findings

Based 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

At the time of the assessment, the TSC program in Madhya Pradesh was managed by the Public Health Engineering Department (PHED). However, recent high-level discussions, led by the chief minister, suggest that responsibility for the TSC program (and for Swajaldhara, the rural water supply program) will soon be transferred to the RDD. Inevitably, this change of departmental ownership and control is likely to have a significant impact on the overall direction and vision for the TSC program. The Madhya Pradesh Secretary of Rural Development confirmed that this shift is likely to take place in the near future, but was unwilling to discuss the details of any future strategy or direction until the transfer was official.

The PHED is an engineering department that specializes in the provision of technical services. Despite awareness that the TSC program should be focused on achieving sustained behavior change and collective sanitation outcomes, the PHED approach has focused on the large-scale supply of sanitation facilities. The main objective of the PHED is to hit physical progress targets: a number of BPL latrines constructed, and a number of institutional latrines constructed.

Regulation

Despite the existence of a Model Public Health Act 1987 (revised) prepared by the Government of India, and the clear responsibility of the state for public health services, Madhya Pradesh has not adopted a Public Health Act. As a result, the legislative framework for the regulation of public health services in the state remains inadequate.

Strategic Planning

The PHED has no strategic plan for rural sanitation. At the state level, there is no prioritization by geographic area, no targeting of specific groups or populations, no strategies for complex problems (water-scarce areas, rocky soils, very poor population), and no phased approach to sanitation development. Each district has prepared a simple TSC project proposal whose targets, along with the TSC guidelines, form the basis of the entire TSC program. However, the state government has made no attempt to aggregate these district plans, or to develop a state roadmap for universal sanitation.

Following improvements in the number of NGP awards received by Madhya Pradesh this year, the divisional governments are reported to be setting overly ambitious targets: some divisions are reported to have instructed their districts to aim for 20 NGPs per block over the next year. There are 313 blocks in Madhya Pradesh, so this rate equates to a state target of 6,000 NGP awards, which would mean providing universal sanitation and environmental sanitation facilities to 24 percent of all gram panchayats in only 12 months. There is a substantial risk that this sort of uninformed target-setting will reduce
the quality of the process, and encourage local governments to adopt more coercive and
short-term approaches.

Sanitation Policy: Support for Total Sanitation

There is no policy differentiation at the state level. In 2005, a workshop was held to
identify key sanitation issues and develop interventions to tackle these issues. After
several subsequent consultations, a joint UNICEF-PHED sanitation strategy document
emerged in early 2006, but the strategy lacked any clear objectives or action plan, and it
has never been formerly approved or implemented by the state government.

The PHED has interpreted the TSC guidelines as the framework for a conventional,
supply-driven sanitation program. The NGP awards are recognized to promote collective
sanitation outcomes, but senior PHED officials have quashed any move toward the
promotion of collective outcomes by the TSC program, arguing that the TSC guidelines
support the development of individual BPL household latrines without any need for
collective sanitation outcomes. Further weight has been added to this argument by PHED
claims that the NGP awards create incentives for coercion and shortcutting by local
governments, leading to unsustainable outcomes.

In Madhya Pradesh, the PHED interpretation of the TSC guidelines is that only two
models of latrine (basic low cost units) are possible:

- Model 1: direct pit latrine costing Rs 1,500 (including Rs 300 household contribution)
- Model 2: offset pit latrine costing Rs 2,000 (including Rs 800 household contribution)

Therefore, PHED has developed a standard latrine design (priced using the government
schedule of rates) that meets these criteria (Figure 4). The standard design comprises a
brick-lined pit covered by a concrete slab and low-flush ceramic pan, surrounded by a
plastered brick wall (usually only 1.0–1.5 meters high, in order to minimize the cost).
Interestingly, the 2004 TSC guidelines (which provided only Rs 625 for a latrine subsidy)
stated that the basic low-cost unit did not include the superstructure, whereas the 2006
“modifications in TSC guidelines” state that Rs 650 (US$16.25) of the BPL cash
incentive is for construction of the latrine superstructure. The PHED complains that Rs
650 is not sufficient to construct an adequate superstructure, hence the inclusion of a
dwarf wall in the standard design.

![Figure 4: Typical PHED-Supplied Pit Latrine, with Dwarf Wall](image)
Subsidy Policy: Household Incentives

PHED’s policy is to pay the entire amount allocated to BPL cash incentives (Rs 1,200 times the number of BPL households) to the gram panchayat at the beginning of the process. The gram panchayat is then mandated to pay each BPL household Rs 600 on completion of the excavation for the latrine pit; the remaining Rs 600 is to be paid on completion (and use) of the household latrine in accordance with the PHED requirements. The PHED stipulates that the BPL cash incentive cannot be paid unless and until the household constructs a latrine matching its standard design: that is, with a brick-lined pit, a concrete slab, a ceramic pan, and a brick-built (1 meter high) superstructure.

UNICEF has developed Madhya Pradesh–specific manuals detailing a range of low-cost technology options, but the current PHED policy does not allow for any design other than its standard latrine.

The TSC guidelines state that “the construction of household toilets should be undertaken by the BPL household itself, and on completion and use of the toilet by the BPL household, the cash incentive can be given to the BPL household in recognition of its achievement.” In practice, either the gram panchayat or the PHED determines the latrine design, purchases the materials, transports them to the village, and arranges the construction. The sole task allocated to the BPL household is the excavation of the latrine pit, which is normally taken as payment-in-kind of the household contribution of Rs 300. Although UNICEF reports some differences in its project areas, in most of Madhya Pradesh the BPL household does not receive a single cent of the TSC cash incentive—the entire amount is utilized by the gram panchayat (or by the PHED) in the construction of a standard latrine.

As a result, the process has no demand-responsive elements—the household has no say in the design or layout of the latrine, no control over the materials used, and no option but to accept the effectively free latrine provided by the government. The only exceptions are where the BPL households refuse to dig the latrine pit, which then prevents the local government officials from starting the process.

There are four major problems with this approach:

- Only one latrine design is available to all BPL households.
- No effort is made to trigger behavior change.
- No effort is made to ensure collective sanitation outcomes (only BPL households are targeted).
- Suggestions have been made that local government officials are profiting from their control of the cash incentive funds (by overestimating costs, by using inferior materials, and by falsifying records of the number of BPL household latrines constructed).11

While the PHED argues that its current approach is in keeping with the TSC guidelines, it is clear that at least three of the TSC guidelines are being breached by the current PHED policies in Madhya Pradesh: construction of household toilets are not being undertaken by the BPL household itself; the cash incentive is not being given to the BPL household; and the individual households are not able to choose from a menu of options for their household latrines. Given this supply-driven approach, it is no surprise that even the GoI...
assessments of latrine usage find that, on average, only 56 percent of BPL households in Madhya Pradesh are using their latrines (see Table 10).

**Sanitation Policy: Technical Problems**

The PHED standard latrine design also creates sustainability problems. In order to keep costs down, the standard design uses one relatively shallow latrine pit (only 1.1 meters deep in Rupapor village, Hoshangabad district). This means that the pit will fill relatively quickly, but no allowance has been made for the addition of a second pit or for the safe emptying of the single latrine pit. Where direct pit latrines have been constructed, the household will have to demolish the superstructure in order to lift the latrine slab, and then choose between shifting the slab onto a new pit or emptying the existing pit. In both cases, a new superstructure will have to be built. None of the households or local leaders interviewed during the assessment were aware of this problem, nor had they received any instructions on what to do when latrine pits fill.

The current design risks include the possibility of the abandonment of the latrine (which will block when the latrine pits becomes full); people trying to empty full latrine pits that contain fresh, pathogenic excreta; or the loss of valuable assets (superstructure and/or pit lining) when the first latrine pit becomes full.

**Sanitation Policy: Dry Latrines**

UNICEF reports that about 40 percent of the 2006–07 NGP applications in Madhya Pradesh were disqualified because the communities had installed dry latrines or nonstandard septic tank designs that were not deemed sanitary by the verification teams. Given the large areas of Madhya Pradesh that remain water-scarce, dry latrines remain popular in many communities.

The UNICEF-WHO Joint Monitoring Programme for water supply and sanitation (JMP) considers dry pit latrines to be improved sanitation facilities, which means dry latrines count as sustainable access to basic sanitation (the indicator for the sanitation MDG). The current TSC policy—that dry latrines should be converted to pour-flush latrines—not only constrains the development of sanitation in water-scarce areas, but also runs contrary to international standards.

**Policy: Impact of Latrine Ownership on Poverty Rating**

The GoI (and state governments) use an asset and service-based scoring system to assess whether individual rural households qualify as BPL households. BPL status carries significant benefits, including rations, subsidies, and other handouts; thus this assessment is extremely important to rural households.

Each state is allowed to set their own BPL cut-off score, below which households are deemed to be poor (and thus qualify for BPL benefits). In Madhya Pradesh, the cut-off score is 14 points. Latrine ownership is one of thirteen criteria assessed by the BPL survey, with a maximum of 4 points allocated to households that own a “private bathroom.” The 4 points allocated to private latrine ownership are sufficient to push many households above the BPL threshold, creating a major disincentive to sanitation improvement among BPL households. The BPL scoring system also ascribes 4 points for
full-time enrollment of children in school, which creates a disincentive for children to go to school, thus limiting the benefits of TSC investments in school sanitation and hygiene.

**Political Support: Budget Allocations and Media Coverage**

Water supply remains the dominant political issue in the sector, with the PHED under intense pressure to improve water supplies in water-scarce areas. Nevertheless, the rapid acceleration in sanitation progress since September 2005, as evidenced by rising latrine coverage and increased NGP awards, indicates stronger support and interest in the TSC program, as well as the use of more effective approaches and implementation.

Another indicator of increased priority was the recent government order giving district collectors (DCs) responsibility for chairing the District Water and Sanitation Committee (DWSC). The DWSC was previously chaired by the president of the Zila Parishad (district council), in the hope that the political accountability of this elected representative would ensure that the DWSC represented the wishes and needs of local people. In practice, few Zila Parishad presidents were sufficiently interested in sanitation to provide any impetus or direction to the TSC. As the most powerful figure in the district, the DC is much better placed to generate interest and activity among government officials, elected local representatives, and development-oriented rural communities. However, while providing some short-term impetus to the TSC, this change is not a long-term solution because it relies on the ability and commitment of an administrator with little accountability to the electorate.

**Support for Total Sanitation Approach**

The WSP India team has been promoting the community-led total sanitation (CLTS) approach as the most cost-effective methodology for eliminating open defecation and achieving total sanitation in rural areas. The CLTS approach uses the universal feelings of shame and disgust associated with human excreta to trigger behavior change. Unlike conventional participatory methods—which tend to be more sympathetic to local cultures and beliefs, using positive messages, encouragement, and support to stimulate development—the CLTS approach makes people aware of the unpleasant costs and realities of open defecation, and then asks how they are going to solve these problems. The CLTS approach requires that the community lead the process, designing and building simple latrines with a minimum of external assistance and no financial support.

Few stakeholders in Madhya Pradesh were familiar with the CLTS approach, which probably reflects the relatively limited involvement that the WSP has had in Madhya Pradesh prior to the TSSM project. UNICEF has been training people in a variant of the total sanitation approach, and encouraging local governments to aim for collective sanitation outcomes, but it appears that only one district (Rewa) has adopted these approaches wholeheartedly.

At the state level, there remains significant resistance to any suggestion that the cash incentives for BPL households should be paid after the achievement of collective outcomes. The standard counterargument is that the people of Madhya Pradesh are so poor that they are not able to build anything without up-front financial assistance. While
the PHED remains in control of the TSC program, support for individual household subsidies is likely to remain a major constraint to the adoption of the CLTS methodology.

**Institutional Arrangements**

There appears to be high-level consensus that the Rural Development Department (RDD) is a more appropriate home for the TSC program than the PHED. The limited technical requirements of the TSC and the central involvement of local government institutions suggest that a shift to RDD will result in more large-scale and effective implementation. Some stakeholders expressed concern that the RDD is already overstretched in managing a number of huge rural development programs, posing the risk that the TSC could disappear beneath a pile of other RDD priorities. However, both the WSP and UNICEF have been campaigning for the shift to RDD for some time, and appear convinced that the different mindset and institutional arrangements of the RDD will be a better fit with the requirements of the TSC program.

**Program Management**

State-level management of the TSC is inadequate. The TSC project director is a senior figure within the PHED, but is also responsible for the important Swajaldrha program, and for all human resource activities within the PHED. UNICEF provided three full-time consultants to assist with the project director’s administrative duties, but the consultants are now shifting to new roles and contracts, leaving no full-time staff allocated to state sanitation duties.

UNICEF has also assisted the districts to recruit TSC coordinators. Despite considerable initial demand for these one-year contracts, some of the district posts are still empty, and those in the post have shown highly variable performances, and some coordinators have already resigned, having found that the duties were more onerous than expected.

The TSC program earmarks up to 5 percent of the district budget for administrative charges, including staff salaries, support services, and monitoring and evaluation activities. Yet few of the districts have utilized even a fraction of this administration budget.

**Coordination**

The State Water and Sanitation Mission is the main coordination body for the sanitation subsector, but the busy members of this high-level mission meet rarely (the last meeting was in March 2006), with an agenda that is usually dominated by water supply issues.

Another problem is that the other key sector stakeholders—for example, the state health and education departments—are not clear on their sanitation roles and responsibilities. For instance, the TSC program provides finance for the construction of school sanitation facilities, but considers these facilities the responsibility of the school and its education department once they are completed. In contrast, although the education department is happy that other projects and programs are building school toilets, it does not appear to recognize any responsibility for managing and financing the sustainable operation and
maintenance of these school facilities. These gray areas need to be carefully examined in order to develop clear guidelines on the overlapping roles and responsibilities of public sector stakeholders in the provision of sustainable sanitation services.

A related issue was raised by stakeholders from the education and health departments: it was noted that there is a growing emphasis on the involvement of school teachers, *anganwadi* workers, and health workers in sanitation and hygiene promotion, capacity-building activities, facility operation and maintenance, and outcome monitoring. There are few performance incentives for, and limited monitoring of, these additional sanitation-related activities, thus many overloaded and underpaid government functionaries give little priority or attention to these additional duties (and are unimpressed when asked to give up part of their holidays to attend non–education training events).

The TSSM project in Madhya Pradesh builds on the WSP’s wider experience in helping to develop and improve the national TSC and NGP programs. However, the government sanitation programs in Madhya Pradesh are so much larger than the investments planned by the TSSM project that the partnership is necessarily an unequal one.

The combined expenditures of the TSC and NGP programs in Madhya Pradesh should reach about US$34.0 million per year as the programs scale up, whereas the WSP TSSM project will invest only an estimated US$0.3 million per year (1 percent of the TSC program investment) in Madhya Pradesh over the next three years. Given the huge differential that exists between the TSSM and TSC funding, it is important that any assessment of improvement attempts to separate out the beneficial outcomes and impacts that result from the TSSM project from those that would have occurred anyway under the preexisting TSC and NGP programs.

**Implementation Partnerships**

District governments are free to choose their preferred mode of project implementation. In Madhya Pradesh, the dominant mode of implementation is through outreach by government functionaries. NGOs are involved in some districts, but senior PHED officials commented that implementation through NGOs has not been successful. At the community level, the TSC projects work closely with *gram panchayat sarpanchs* and secretaries.

The limited involvement of nongovernment personnel in social intermediation activities reinforces the supply-driven nature of the TSC projects in Madhya Pradesh. When TSC teams visit the community, the mode of communication is top-down—powerful local officials giving instructions (and subsidies) to rural householders—with little effort to listen to the needs and priorities of the intended beneficiaries.

Decision makers at the state and district levels assert that there is little alternative, as there are very few NGOs (or private organizations) with suitable skills and experience. It is also implied that previous government-NGO partnerships have been marred because of NGOs financial irregularities or difficulties meeting their responsibilities. In turn, NGO stakeholders suggest that the PHED is excluding them from the TSC program and from
other subsector activities, to avoid any risk of the NGOs discovering or exposing corrupt or fraudulent practices.

One indicator illustrating this poor relationship is the lack of active NGOs that are invited to meetings of the State Water and Sanitation Mission. Although these meetings are not regular (the last one was held in March 2006), the WaterAid regional manager noted that she had been pressing for WaterAid’s inclusion in the State Water and Sanitation Mission for more than a year, without any success. WaterAid also stated that 7 of the 190 NGP award winners (4 percent) were facilitated by WaterAid’s local partner NGOs; while UNICEF stated that local NGOs were important TSC partners in the four districts receiving direct UNICEF assistance (Dhar, Guna, Jhabua, and Shivpuri), which appears to refute the PHED statement that NGO implementation has not been successful in Madhya Pradesh.

Financial Partnerships

The huge GoI and state budget allocations to the TSC and NGP limit the scope (and the need) for any other financial partnerships. At the central and state levels, UNICEF, the WSP, and WaterAid are active in the rural sanitation subsector. Most of the external agency and nongovernment support focuses on advocacy, policy research, knowledge management, and monitoring and evaluation. But UNICEF’s state program office is also investing in more direct implementation activities: capacity building, construction of technology parks, development of technical and communication manuals, management information system development, and construction of school and anganwadi facilities.

Unfortunately, little of the vast array of UNICEF-developed guidelines and materials was evident outside of the four districts that UNICEF assists directly. Although happy to allow UNICEF to keep working and investing in the sector, the PHED appear to feel little ownership or commitment to the UNICEF activities in Madhya Pradesh.

Private Sector Partnerships

The government-dominated TSC program has established few formal partnerships with the private sector in Madhya Pradesh. The limited attempts to establish production centers and sanitary marts have been largely unsuccessful. In addition, the supply-driven nature of the district TSC projects in Madhya Pradesh means that almost all of the project financial transactions are bulk purchases by government officials (PHED or gram panchayat) from local retailers and service providers.

There is a large population of above poverty line (APL) households that do not own sanitation facilities (3.5 million APL households, according to the TSC online monitoring data). These households are unlikely to receive any project assistance, thus there remains significant scope for private sector involvement in the provision of sanitation goods and services.

The UNICEF and Communication and Capacity Development Unit (CCDU)–financed capacity building program has already trained about 100 master masons (that is, about 2 per district), whose role will be to provide “cascade training” throughout their districts in
order to increase the availability of well-trained latrine masons within the project areas. However, the cascade training has not started, so there is not yet any evidence of a larger menu of technical options, of any higher-quality services, or of any cheaper prices for sanitation services.

**Public Sector Partnerships**

One of the central implementation constraints is the limited influence that the PHED has over lower-tier local governments. The PHED has a thin presence at block and gram panchayat levels—a handful of engineers to cover the entire block—and often has poor relationships with elected representatives because of political antagonism over local water supply problems.

Where there is good collaboration at district and block level, it is often because of good personal relationships between officials, rather than any institutional incentives for partnership and cooperation. Most major government programs are centrally designed and administered, thus implementing teams’ response to line departments rather than to local governments. Decentralized programs such as the TSC, which have transferred the full implementation budget and management responsibility directly to the district government, are starting to generate better district-level partnerships, but there remain few incentives for cross-sectoral partnerships at state level.

**Program Methodology**

The TSC guidelines do not lay out any detailed methodology, but instead provide a general policy and financing framework for the district projects. As a result, the methodologies used for critical components of the program (for example, how to stimulate household demand, promote sanitation improvement, and ensure sustainable behavior change) must be determined by individual states and their district projects. The intention behind the broad TSC guidelines is to focus attention on achieving sanitation outcomes rather than just counting outputs (which may or may not lead to positive outcomes, depending on how appropriate, useful, and sustainable the outputs turn out to be).

The TSSM project has three components that require detailed methodologies:

- total sanitation
- sanitation marketing
- enabling environment improvements

**Methodology: Total Sanitation**

The program methodologies in Madhya Pradesh have not yet evolved to match the TSC objectives. Supply-driven approaches are used in most districts, with little emphasis on the collective sanitation outcomes central to the total sanitation approach. There are a few exceptions, notably reports of “public mobilization” in Rewa District, and of successful hybrid (total sanitation plus sanitation marketing) approaches in Indore District.
The rapid growth in NGP awards might suggest that some districts are beginning to develop effective approaches, but it seems likely that many of the recent award winners were exceptional communities led by charismatic leaders—the cream of the 23,000 gram panchayats in Madhya Pradesh—and that local administrators were able to invest considerable amounts of time into the triggering and support of the total sanitation process in this relatively small group (the 557 NGP applicants comprise less than 3 percent of the state gram panchayats).

The WSP is planning a series of CLTS orientation workshops to introduce the CLTS methodology to key state and district stakeholders. The utility of this process may depend on parallel efforts to convince decision makers of the need to move away from supply-driven, subsidy-based approaches toward more demand-responsive, incentive-based approaches.

**Methodology: Sanitation Marketing**

Sanitation marketing remains one of the main weaknesses of the TSC program. Most of those involved in the TSC program are either government or NGO staff, who tend to have little experience or understanding of private sector supply issues, social marketing techniques, or how best to facilitate sustainable improvements in local supply chains.

At the time of the enabling environment assessment, a sanitation marketing assessment was underway. This assessment, and its related action plan, will provide the basis for the design of the sanitation marketing project component and of the detailed methodology needed to implement this component.

No sanitation demand or supply assessments have been completed in Madhya Pradesh, thus there is little accurate consumer-based data on technology preferences or willingness (and ability) to pay for goods and services, or on the market-based availability, pricing, and quality of these sanitation goods and services.

**Methodology: Enabling Environment**

It seems likely that additional high-level efforts will be required to raise awareness and reach consensus on the low cost-effectiveness and consistency of the existing range of methodologies. Key stakeholders are aware that latrine usage rates among BPL households in Madhya Pradesh are as low as 50 percent, but these data have not been linked to the wasted TSC investments that this low usage represents, or to the health, social, economic, and environmental losses caused by the ineffective interventions. At present, most high-level government officials like to excuse any TSC shortcomings by highlighting Madhya Pradesh’s unusually low development status—high poverty rates make facilities unaffordable, low literacy rates reduce the effectiveness of campaigns, tribal and scheduled caste populations refuse to cooperate with programs, and so on. Therefore, a concerted advocacy campaign is required in Madhya Pradesh in order to raise awareness of the importance of tackling inadequate sanitation, and to promote evidence-based approaches for sanitation development in challenging contexts.
There has been no formative research on the key hygiene behaviors and disease control priorities in Madhya Pradesh, thus no efforts have been made to link an understanding of local variations in hygiene behavior with clear and effective IEC approaches. UNICEF is currently supporting the development of a behavior change communication strategy through the MUDRA institute in Gujarat, and requested (during the assessment) that the WSP become involved in the development and testing of this strategy.

**Implementation Capacity**

Few countries can claim to have a rural sanitation program that matches the scale and scope of the TSC. As a result of the massive investments associated with the TSC and NGP programs, there are few capacity constraints.

**WSP Capacity**

The WSP India team has expanded substantially over the last few years. The Delhi-based team has extensive experience of rural sanitation development in India, and is exceptionally responsive to state and local government demands. The recent appointment of full-time state coordinators in the two TSSM project states has further enhanced the level of support provided.

**State-Level Capacity**

In 2003, Madhya Pradesh became the first state in India to have TSC projects approved in every district. As a result, TSC activities have been operating at scale across the state for several years. Unfortunately, the relatively slow state progress since then suggests that this achievement was a reflection of the PHED’s expertise in preparing project proposals, rather than an indicator of the state’s commitment and enthusiasm for total sanitation.

State-level implementation capacity remains inadequate. There is no full-time TSC program coordinator to assist the project director, and no state budget for professional support to the TSC. Some temporary support staff (UNICEF consultants) were assigned to work with the project director on the TSC program, but even with this assistance the PHED has not done much to improve the enabling environment—there have been few attempts to raise political awareness, to formulate strategic plans, to tailor and update state guidelines, to develop state promotional campaigns, or to organize much-needed project evaluations.

UNICEF has supported the state Communication & Capacity Development Unit (CCDU) in preparing human resource development plans for the TSC program. Three state resource centers have been identified (SIRD, WALMI, and the Administration Academy), and a number of training courses have been run. However, several stakeholders noted that these capacity-building efforts were driven largely by UNICEF (with little ownership or involvement from the government), and that little of the enlarged capacity and skills are visible (or being utilized) on the ground.
District Capacity

The shortage of suitable support organizations for TSC implementation in Madhya Pradesh limits the effectiveness of sanitation promotion efforts, and suggests that the way forward is by training a cadre of sanitation specialists in each district. The WSP is already planning and implementing this process through its CLTS orientation workshops, but considerable efforts will be needed over the next two years to establish sufficient capacity and nontechnical skills to scale up the TSC across the entire state.

No financial data were available to support the claim that most districts have utilized less than 10 percent of their IEC budget, but there is a shortage of specialist capacity, little strategic planning, and few efforts to organize professional promotional campaigns. Current promotional efforts rely largely on intensive interpersonal communication activities by government functionaries. These efforts are of highly variable quality, as they depend on the experience, understanding, and commitment of the officials involved; such efforts will be difficult to sustain as the TSC program scales up toward its 2012 goals.

As in other states, the frequent transfer of district administrators is a major constraint. Eleven of the 48 district collectors (23 percent) in Madhya Pradesh were transferred during the short period of the assessment fieldwork, preventing any continuity of direction, policy, or planning, and requiring constant capacity building to orient and train new personnel.

Hygiene Promotion Capacity

There remains a particular shortage of professionals with skills and experience in hygiene improvement. The main focus of the TSC has been on the development of improved sanitation facilities, but the gradually widening criteria of the NGP awards are starting to reinforce the importance of matching sanitation gains with hygiene improvements.

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.

Despite the availability of a substantial TSC budget (up to US$100,000 per district) for “alternate delivery mechanisms,” and a similar amount allocated for revolving funds that increase the availability and affordability of sanitation goods and services, few district projects have undertaken activities to research or improve local sanitation supply chains.

Most district TSC projects promote only one latrine model for BPL households. State and district officials report that the TSC “subsidy” amount is too low to allow any other options to be offered to BPL households, but there is no evidence that PHED or local government officials have allowed cheaper materials, or local latrine designs, to be used.
Low-Flush Latrine Pans

Several districts have been supplying low-flush “rural latrine pans” through their TSC programs. This product has a lower volume, steeply sloping pan that is intended to reduce the amount of water required to flush the latrine. There is little evidence of any household demand or preference for these rural pans, and the WSP has questioned whether the low-flush pan results in any significant reduction in water consumption. Local retailers report that several district governments have placed bulk orders for these rural pans, but that there is no private demand—most retailers do not stock rural pans.

Cement Latrine Pans

There were several reports of failed attempts to manufacture and promote cement latrine pans. In most cases, the cement latrine pans were manufactured by PHED-financed production centers and sold for about 30 percent less than a cheap ceramic pan. Despite the lower price, the cement pans proved unpopular with users because of its rougher cement surface, which is more difficult to keep clean. In Sagar District, cement latrine pans have been banned following low sales and problems with the operation of the sanitary marts. There were also several reports that the PHED had not paid the amounts agreed to NGOs for setting up production centers and sanitary marts, ostensibly because of low sales, resulting in the collapse of the production centers.

Wholesale Supply

Sanitary ware wholesalers operate in most large towns in Madhya Pradesh, sourcing their goods from nearby Gujarat, and selling on to local retailers. A wholesaler in Sagar City noted a steady rise in demand for sanitary wares over the last 5 to 10 years, and estimated that 250 manufacturers are now producing ceramic pans in Gujarat (up from only four manufacturers 20 years ago). In general, market supply of sanitation goods and services appears to be working well. Products are reasonably priced (Rs 110–450 for ceramic latrine pans), and are readily available in most areas.

Supply-Driven Shortages

In some districts, a sudden surge in demand for bricks to build latrines (driven by the supply-driven nature of the TSC projects) resulted in short-term shortages of materials. In Hoshangabad District, the shortage became serious enough that local administrators ordered brick makers to supply gram panchayats with the bricks needed for TSC latrine construction before serving any of their private customers.

Technical Manual

UNICEF produced a technical manual detailing the advantages, disadvantages, and suitability of different sanitation technologies under the different contexts found in Madhya Pradesh. The technical manual covers the topic in great detail, but it requires a reasonable technical understanding, and thus appears aimed at engineers and masons rather than at nonspecialists. Perhaps because of its technicality, the manual was not being used in the two districts visited for the assessment. UNICEF has already financed the construction of sanitation technology parks in 18 of the 48 districts, and is planning to
complete similar parks in every district, in the hope that this more practical and hands-on approach will prove more effective in raising technical awareness.

**Special Needs**

UNICEF noted that 22 of the 48 districts in Madhya Pradesh suffer from serious fluorosis problems. As a result, Madhya Pradesh has a higher than average population of disabled people, and there is a need to design, promote, and assist the supply of sanitation goods and services suitable for disabled people and those with special needs.

**Financing**

Approximately 25 percent of the total TSC budget is earmarked for investment in the three main areas of the TSSM:

- total sanitation (up to 15 percent on IEC and start-up activities)
- sanitation marketing (up to 5 percent on alternate delivery mechanisms)
- enabling environment (up to 5 percent on raising awareness, capacity building, and administration)

In Madhya Pradesh, this means that about US$8 million per year (more than US$150,000 per district per year) is available for creating sanitation demand, increasing the supply of appropriate sanitation goods and services, and improving the enabling environment. At present, most districts have been underutilizing the software elements of their TSC budgets. Therefore, taking into account the additional TSSM project funds (approximately US$300,000 per year) and the five-year duration of the TSC, there is clearly no shortage of funds for implementation.

The remaining 75 percent of the TSC budget is earmarked for cash incentives to BPL households and for facility construction (community sanitary complexes, institutional toilets, and solid and liquid waste management facilities). This substantial hardware investment should stimulate private sector supply and strengthen supply chains.

**Delays in TSC Payments**

Most district officials are unfamiliar with GoI process and audit requirements, as not many government programs devolve finance down to the district level. This unfamiliarity has caused multiple delays in TSC payments, usually to the result of incomplete or noncompliant fund utilization reports. Four years into the TSC program, 15 districts have not yet received the first installment of TSC funds; 31 districts are awaiting the second installment; and 2 districts are awaiting their third installment.

In Hoshangabad, one of the more active districts, the delayed payment of the next TSC installment is now holding up implementation; in the less-active districts, it is just one of many reasons for the underutilization of funds.
Incentive Framework: Nirmal Gram Puraskar

The proposed budget for the NGP clean village awards in the 11\textsuperscript{th} Five-Year Plan (2008–12) is Rs 6,000 crore (US$1.48 billion), some Rs 3 billion (US$74 million) higher than the Rs 5,700 crore budget proposed for the TSC program.

One hundred and ninety gram panchayats from Madhya Pradesh received NGP awards in May 2007, up from only 1 NGP award in 2006. Although this represents less than 1 percent of the nearly 23,000 gram panchayats in Madhya Pradesh, it remains a substantial increase in just one year. Some 65 percent of the NGP awards came from 5 high-performing districts (Jabalpur, Indore, Seoni, Hoshangabad, and Rewa), with the remaining 66 awards shared between 19 districts.

The NGP awards have generated significant interest and attention among local politicians, administrators, Panchayati Raj Institution officials, and communities. Madhya Pradesh is generally regarded as one of the least developed states in India; thus Madhya Pradesh government officials have taken considerable pride in the fact that their performance in the NGP awards surpassed that of several other more-developed states. However, it remains unclear whether this huge investment is generating the expected long-term benefits.

As in Himachal Pradesh, there have been criticisms of the NGP system. The initial NGP verification process rejected several good candidates, leading to GoMP complaints and a re-verification process that resulted in another 30 gram panchayats being awarded the NGP. Several stakeholders noted that problems with the verification process—most notably concerning variations in people’s understanding of how to assess the verification criteria—demotivated some TSC teams and generated negative publicity. However, the confusion and disappointment surrounding the NGP verification process stems, at least in part, from the failure of the GoMP to undertake any screening of its NGP applicants. Most other states now screen NGP applicants before submitting their applications to the GoI.

Incentive Framework: Local Rewards and Sanctions

The GoMP initiated a clean village competition in 2006. The state competition is similar in scope to the NGP awards, but is aimed at a smaller administrative unit—the village, or ward—rather than the village government (gram panchayat). In theory, the state competition could pay out Rs 178 lakh (US$445,000) per year, with prizes of Rs 0.5, 1, and 2 lakh going to each district, and state prizes of Rs 2, 3, and 5 lakh.\textsuperscript{17}

From the 43 applications submitted in 2006, 3 district-level prizes were awarded. Five criteria are used to assess the top three villages in each district and at state level:

- 100 percent household toilet coverage (30 percent weighting)
- 100 percent toilet usage plus ODF status (30 percent weighting)
- school and anganwadi sanitation and water supply facilities (10 percent weighting)
- solid and liquid waste management (20 percent weighting)
- functioning of the Village Health Committee (10 percent weighting)
Unfortunately, the GoMP decided to finance its clean village competition using CCDU and TSC program funds rather than a recurrent budget line. Given the difficulty of sustaining the current funding arrangements, this financing decision raises questions about the long-term commitment of the GoMP to this reward scheme.

**Financing: Government Schedule of Rates**

The TSC guidelines suggest that the BPL household should construct the latrine itself, and that a standard Rs 1,200 cash incentive should be paid to the household on completion and use of its latrine. Providing that the latrine is a basic, low-cost unit as described in the TSC guidelines—a direct pit latrine, with pour-flush pan and some form of superstructure—then the details of the latrine are unimportant.

The Madhya Pradesh PHED does not accept this approach, arguing that the only way to ensure a minimum level of service is to adopt a standard design and make sure that all BPL household latrines meet this specification. PHED engineers are also adamant that all financial costings and household incentive payments should be based on the government schedule of rates. This presumption derives from the conventional supply-driven approach used by the PHED, whereby the PHED purchases all materials according to government procedures, using the government schedule of rates as the basis for all project payments.

The difficulty with this approach is that the government schedule of rates is not intended for simple market transactions. The schedule of rates is designed to be used for construction contracts, with rates often 40 percent higher than market rates in order to allow for contractor profit, wastage, inflation, and so on.

Just under a million BPL household latrines have been built in Madhya Pradesh. The findings of this assessment suggest that most of these latrines will have been supplied by the PHED and priced according to the government schedule of rates. Assuming that the schedule of rates is about 30 percent higher than market rates, and that most of these latrines were financed using the previous BPL cash incentive of Rs 600, then about US$4.5 million dollars has been lost through this approach. Another 3.3 million BPL household toilets remain to be constructed (and this figure is likely to rise once the revised TSC district proposals are tallied), thus another US$30 million may be wasted if the government schedule of rates continues to be used in the pricing of TSC latrine provision.

**Financing: Institutional Sanitation**

The revised TSC financing framework states that district proposals should include the “actual amount required for full coverage” of institutional toilets (including school and anganwadi facilities). Several stakeholders complained that the 10 percent TSC financing previously earmarked for school sanitation was inadequate, but it appears that the GoI has responded to these concerns (and signaled the importance of institutional sanitation) with a substantial increase in the funds allocated to institutional sanitation.
One of the problems in Madhya Pradesh is that school sanitation facilities are built according to the rigid PHED standard design, with very little adaptation or improvement for local needs and contexts. As with household latrines, there would be considerable scope for innovation and cost savings if a more flexible approach were to be adopted with a range of facility designs and flexible design criteria that allow for local needs and preferences.

**Financing: Environmental Sanitation**

As the NGP criteria have developed, there has been a growing emphasis on environmental sanitation, particularly solid and liquid waste management. For the first time, the 2006 revisions to the TSC guidelines included a 10 percent component for the financing of solid and liquid waste management facilities.

Most stakeholders in Madhya Pradesh believe that the 10 percent TSC funds earmarked for environmental sanitation are insufficient for the development of effective drain networks and communal solid waste collection systems. However, several of the ODF communities visited during the assessment were managing to use local government development funds, and leverage funds from other sources, for the phased development (over several years) of open drain and solid waste collection systems.

**Cost-Effective Implementation**

In India, the outcome-based goals promoted by the national TSC and NGP programs are increasingly being used to assess effectiveness. In the past, state governments wanted to know how many latrines had been built, and how this affected state sanitation coverage. Increasingly, however, state ministers and secretaries are asking about the number of ODF communities and the number of NGP awards. These indicators represent an important step forward from simple output indicators, but provide only a snapshot of sanitation outcomes rather than the regular measures needed for reliable monitoring and evaluation of effectiveness and sustainability.

In Madhya Pradesh, there have been no detailed evaluations of the effectiveness of the different district TSC methodologies. The NGP awards remain the most useful and widely known measure of effectiveness, but Madhya Pradesh stakeholders have mixed views about the NGP criteria. UNICEF suggests that the NGP criteria are inadequate: they fail to promote hygiene improvements, neglect water quality, ignore the health impact of animal excreta, and encourage short-term (award-winning) approaches rather than sustainable hygiene behavior change. In contrast, the state government suggests that the broad NGP criteria, especially the environmental sanitation requirements, are too difficult to achieve, thus discouraging all but the most active and committed GPs.

**ODF Success Rate**

The TSSM project design in Madhya Pradesh assumes that 450 local governments (gram panchayats) will have achieved ODF status and applied for NGP and state awards. This target represents only 2 percent of the gram panchayats in Madhya Pradesh, and thus is a relatively modest objective.
Little data were available on the current success rate in achieving ODF status in Madhya Pradesh. In Hoshangabad District, the DC co-opted three government TSC teams (one from PHED, one from RDD, and one from the revenue department) in each of the seven subdistricts, and asked each team to work in a single gram panchayat over the year. From the total of 21 gram panchayats targeted last year, 18 gained NGP awards (an 86 percent success rate). Although impressive, this rate represents a small return given the human resources invested—the same teams have been asked to target 6–7 gram panchayats each in the coming year (a total of 136 gram panchayats), which should provide a more realistic guide to the average ODF success rate (in covering one-third of all gram panchayats in the district).

Cost per Sanitation Outcome

Data from the TSC’s DLM survey (see Table 10) suggest that average latrine usage among BPL households is only 56 percent in Madhya Pradesh. While there is some doubt about the reliability of the DLM findings—not least because the communities surveyed in Madhya Pradesh report more than triple the average state sanitation coverage—it is clear that the Madhya Pradesh usage rates are unusually low: out of the 30 states surveyed, only Rajasthan reported a lower BPL latrine usage rate (52 percent), and the rate in Himachal Pradesh (the other Indian state covered by the TSSM project) was reported at 99 percent. The low latrine usage figures appear to confirm the limited effectiveness of the supply-driven approach being used in most districts in Madhya Pradesh.

The TSSM project intends to develop a detailed system to monitor its performance and cost-effectiveness, but little 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. A simple calculation based on current data in the TSC online monitoring system (see Table 5) suggests the following state averages:

- cost per improved household sanitation facility = Rs 1,060 (US$26.64)
- cost per NGP gram panchayat = Rs 74 lakh (US$185,000)
- cost per NGP household = Rs 20,000 (US$500)

The current cost per NGP award (US$185,000) is more than double that found in Himachal Pradesh (US$75,000). However, the relatively high cost probably reflects the early stage of the process, and thus may reduce significantly if the number of NGP awards increases next year. The disaggregated district data will provide a more useful assessment of relative cost-effectiveness, as the combined state totals include expenditures in districts that have achieved very little.

Indirect Government Costs

There are no mechanisms for assessing the cost of government involvement in sanitation interventions. Significant government time and resources are required to implement the TSC effectively, but their routine costs (salaries, training, overhead) are rarely included in cost assessments. Several stakeholders commented that the resource-intensive
campaign mode required by the TSC could not be sustained for longer than a year or two in each area without having a detrimental impact on other activities. These comments reflect the currently unmeasured direct and opportunity costs of diverting valuable government staff and resources from other duties.

**Monitoring and Evaluation**

The GoI carries out independent DLM of the TSC program, which provides a randomized check on the achievements claimed by the districts through the TSC online monitoring database. Fifty independent agencies are tasked to cover 5–7 districts each, with a remit to survey 25 randomly selected households in each of 20 purposively selected villages (8 control and 12 noncontrol villages).

**Table 10: TSC District-Level Monitoring (Individual Household Latrines)**

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<tbody>
<tr>
<td>Himachal Pradesh</td>
<td>75 (1,000 households)</td>
<td>97 (381 households)</td>
<td>59 (7,264 households)</td>
<td>100 (2,075 households)</td>
<td>34 (10,516 households)</td>
<td>99 (875 households)</td>
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<tr>
<td>Madhya Pradesh</td>
<td>55 (4,588 households)</td>
<td>43 (1,783 households)</td>
<td>56 (65,105 households)</td>
<td>53 (24,413 households)</td>
<td>66 (28,864 households)</td>
<td>65 (11,982 households)</td>
</tr>
</tbody>
</table>

All India       64 (households) 77 (households) 51 (households) 78 (households) 52 (households) 81 (households)

Source: [hppt://ddws.nic.in/DLM/](http://ddws.nic.in/DLM/)

Originally intended to be a quarterly exercise, the DLM survey was completed in three quarters of 2005 (Q2, Q3, Q4); in the third quarter of 2006; and in the second quarter of 2007. The CRSP reports that 478 districts across the country (out of the total 602 districts) were surveyed in the last DLM exercise.

The NGP and state award systems provide limited annual monitoring systems, but both systems have weaknesses. The NGP is a one-off process: once the award has been made to a *gram panchayat*, it is no longer eligible, thus no longer features in the process—that is, every community can apply for the NGP, but there is no guarantee that the sanitation outcomes will be sustained once the award has been gained. The state clean village competitions have a different problem: these awards are made only to an elite group—the cleanest villages in each area—and thus are unlikely to reach the much larger and more critical group of average or below-average communities.

There is a need for regular monitoring of sanitation outcomes such as latrine usage, the prevalence of open defecation and handwashing, and the disposal of infant excreta. Some of these outcomes are currently recorded by the TSC monitoring system, but these monitoring systems 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 sampled DLM data and the periodic census data, there are almost no national or provincial data on sanitation coverage or outcomes.

The GoI recently stepped up its TSC monitoring requirements. Data must now be entered for each gram panchayat, which has greatly increased the monitoring and data entry requirements at district and state levels. UNICEF is assisting the PHED to establish a management information system to monitor water and sanitation outcomes, but the limited demand for these data from high-level government figures suggests that their collection and reporting will remain a low priority for the foreseeable future. Several other national stakeholders undertake routine assessments of sanitation coverage and outcomes. Both UNICEF and WaterAid are planning separate, large-scale sanitation surveys across a number of states and districts. More effort is required to coordinate these efforts with those of government, to align the methodologies and indicators used, to increase the transparency of the processes, and to develop consensus on the survey findings.

Impact evaluation remains a major area of weakness. Few national or local institutions have the specialized knowledge and expertise required to design and conduct rigorous impact evaluations. As a result, few reliable impact evaluations are conducted; the findings are rarely shared or disseminated (especially if they demonstrate lower impacts than anticipated); and, hence, program design rarely includes the lessons learned from previous programs and impact evaluations. It is hoped that the TSSM project impact evaluation component will make significant inroads in this area. There is a need for simple and generic evaluation tools, and for consensus on a set of common evaluation methodologies and indicators that can be fed into a national database.

UNICEF recently financed an interesting impact evaluation in Madhya Pradesh, which compared the health status of two NGP award-winning gram panchayats to that of two more-typical local communities. The Regional Medical Research Center for Tribals undertook a mixture of recall surveys, clinical examinations, and parasitological stool examinations among a study population of 1,245 individuals from the four villages. The preliminary findings of the (as yet unpublished) study state that both diarrheal morbidity and overall worm infestations were significantly lower in NGP villages, but noted that hookworm infestations remained prevalent in the NGP villages, and that groundwater samples in all four communities were contaminated with thermotolerant coliforms and Enterococcus faecalis.

Further analysis and investigation of this impact evaluation is important. UNICEF has suggested that these findings indicate that current approaches to sanitation improvement are encouraging open defecation closer to the home (because of peer pressure to stop using traditional defecation sites), and that a failure to dispose safely of infectious animal excreta may be responsible for serious groundwater contamination.

The TSSM project impact evaluation component should provide some valuable baseline and impact data for use in cost-effectiveness assessments and in resolving some of the health issues raised by UNICEF. In the interim, the TSSM project team should encourage state and district coordination teams to examine health outcome data available through
existing health systems. Examples include clinical data aggregated from health subcenters, referral data from the ICDS department, morbidity data from dispensaries and ayurvedic centers, and data collated by the recently formed National Rural Health Mission (NRHM) and Integrated Disease Surveillance Programme (IDSP).
5. Conclusions

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

The TSSM project is unlikely to involve many activities that are completely new to the TSC program, with the possible exception of the sanitation marketing activities. Instead, the focus of the project will be on developing approaches that are more cost-effective, improving efficiencies, identifying strengths and weaknesses, building capacity, raising awareness, and sharing the lessons learned. It is hoped that the wide range of enabling environment indicators proposed here will capture the relatively subtle improvements expected in policy, methodology, cost-effectiveness, and program management.

Policy, Strategy, and Direction

The most successful element of the current sanitation interventions is undoubtedly the NGP awards. These awards have been successful in raising awareness, interest, and political support, and in starting to make local governments question the effectiveness of existing supply-driven methods. However, this progress is in spite of the overwhelmingly supply-driven approach adopted by the PHED, which allows rural households no choice of facility, no involvement in the construction (other than the digging of the latrine pit), and no control over the quality or functionality of the constructed facility.

Local governments are becoming aware that their objective is to achieve collective sanitation outcomes—ODF communities and NGP criteria—but the PHED provides little support in this work, preferring instead to focus on building standard latrines for BPL households by using the cash incentives provided by the TSC program. Faced with little PHED support, and with little advice or assistance in triggering collective behavior change, many local governments are resorting to coercive methods rather than more sustainable demand-driven approaches. Despite awareness of these problems, which are highlighted by low latrine usage and limited NGP awards, the state government has not intervened or taken steps to issue state-specific guidelines that might encourage more effective approaches and more sustainable outcomes. The state sanitation strategy (formulated by UNICEF and the PHED in 2006) has not yet been approved or adopted by the GoMP.

The proposed shift in control of the TSC program from the PHED to the RDD should make it easier to tackle some of these issues. The RDD has better relations with local governments, and thus tends to be more responsive to their needs and priorities; also most stakeholders feel that the RDD is likely to be more open to the use of new approaches than the PHED has been.
In terms of national sanitation policy, there are two areas in which the TSC guidelines could provide better guidance: the use of dry latrines in water-scarce areas (where people are resistant to water-consuming facilities such as pour-flush latrines); and a greater emphasis on the need for collective sanitation outcomes, for example, the limited utility of providing free latrines to BPL households if 50 percent of the community continue with open defecation and unsafe excreta disposal. It is also important that the GoI recognize the disincentive created by the current BPL scoring systems, which unfairly penalize households that own a private latrine, however simple or low-cost the facility may be.

Support for the total sanitation approach remains low, largely because it is seen as mutually exclusive with individual household subsidies. Despite the growing body of evidence from other states that poor households can build improved sanitation facilities without up-front subsidies, most stakeholders continue to claim that Madhya Pradesh is poorer and less developed than other states and, therefore, that no progress can be made without a substantial subsidy program.

**Institutional Arrangements**

Both state- and district-level management of the TSC in Madhya Pradesh are inadequate. The PHED has allocated a couple of senior officers to the TSC program, but these officials have several other important duties; they thus do not see the TSC as their primary role, and receive little other support or finance from the state government for the management of the TSC program. The shift to the RDD will provide an opportunity to improve TSC management.

At the district level, recent UNICEF-led efforts to recruit district TSC coordinators have had mixed results. A few district coordinators are working well; several others have left their posts after less than one year, and several more posts remain unfilled. The failure to establish well-organized sanitation units at the district level reflects a lack of interest by the districts, as there is no shortage of funds—the TSC program allocates 5 percent of the total for program administration, including staffing costs, and monitoring and evaluation costs. The administration budget remains underutilized in almost every district.

Another institutional issue is the failure of combined water supply and sanitation missions (at state and district levels) to show sufficient interest in, or give sufficient priority to, sanitation problems. Water supply continues to dominate sector discussions in Madhya Pradesh, and thus the combined coordination bodies spend the majority of their time and resources planning and discussing water supply issues.

There is a shortage of professional community development and sanitation expertise in Madhya Pradesh. In most areas, government officials from a variety of local departments perform the program outreach, social intermediation, and promotional activities with little training or professional support. At present, it appears that the GoMP is making insufficient use of the expertise that is available through NGOs such as WaterAid, probably because of the adversarial approach taken by many of these NGOs (most of which are extremely critical of TSC program governance).
The large number of APL households without sanitation facilities presents a substantial market opportunity in Madhya Pradesh. Stronger partnerships with the private sector will play an important role in scaling up sanitation improvement and developing more sustainable supply chains.

There remains a need for better cross-sectoral collaboration in Madhya Pradesh. At the time of the assessment, the State Water and Sanitation Mission had not met for 15 months and, when it does finally meet—because of the highly political nature of water supply in the extensive water-scarce areas of Madhya Pradesh—rural sanitation is likely to be well down the agenda.

**Program Methodology**

The recent success, in 2006–07, in achieving 190 NGP awards is probably the result of some exceptional communities and local leaders, and of intensive government efforts in a relatively small group of communities (less than 1 percent of all gram panchayats in Madhya Pradesh). This success will be difficult to replicate as the pressure to scale up grows, when the TSC program tries to tackle less active and progressive communities, and when less-committed government officers are asked to extend their efforts to more and more communities every year.

A central problem is that many GoMP officials are not yet convinced of the need to move away from existing supply-driven approaches. Very few reliable assessments have been made of the effectiveness of different TSC methodologies, thus there is little local evidence available with which to convince policy makers or implementation teams.

There is no state methodology for sanitation marketing. Those currently involved in sanitation promotion activities through the TSC generally have little experience of private sector supply issues, no knowledge of social marketing techniques, and make no effort to develop sustainable supply chains for sanitation goods and services.

PHED efforts to improve the supply of sanitation goods and services have been one-dimensional: they are aimed only at BPL households, and are based entirely on spending the BPL cash incentive. Outside of the communities that are striving for NGP awards, which represent less than 5 percent of the gram panchayats in Madhya Pradesh, no efforts are being made to improve the supply of sanitation goods and services to APL households. There is a very large untapped market—3.5 million unserved APL households according to the TSC project proposals—that should be targeted by the sanitation marketing component.

**Implementation Capacity**

There are few resource constraints under the TSC program. Forty-five district TSC projects were sanctioned by 2003, providing US$165 million for rural sanitation within Madhya Pradesh. Given the large government machinery and the massive budget, the TSC program starts with more implementation capacity than almost any other national sanitation program.
However, the TSC does face capacity constraints from a shortage of professional expertise in three fields: social intermediation, sanitation improvement, and hygiene promotion. Despite the huge sums involved in the TSC program, most promotional efforts are led by government officials with little training or expertise in social marketing or techniques for sustainable behavior change. Government efforts have been successful in the relatively small groups of communities targeted during the initial phases of the TSC program, but it is already apparent that the same staff-intensive approach, which usually depends on multiple visits by local administrators, will not work at the larger scale required to achieve district and state sanitation targets.

Government efforts are focused almost entirely on meeting TSC and NGP program requirements (disbursing incentives, providing monitoring data, completing financial utilization reports) with few attempts to undertake anything that may improve the enabling environment, ensure sustainable outcomes, or increase the cost-effectiveness of future implementation. In addition, the PHED (responsible for the TSC at the time of the assessment) has inadequate capacity to raise political awareness, to formulate strategic plans, to tailor and update state guidelines, to develop state promotional campaigns, or to organize much-needed project evaluations.

In addition, the frequent transfer of officials argues for clearer state-level direction on policy and methodology (not so reliant on DCs for direction), and for district sanitation units that retain capacity and institutional memory when decision makers are transferred.

**Availability of Products and Tools**

Despite the availability of a substantial budget (approximately US$100,000) for “alternate delivery mechanisms,” and a similar amount allocated for revolving funds that increase the availability and affordability of sanitation goods and services, few districts projects have undertaken activities to examine household demand or improve local sanitation supply chains.

Most district TSC projects promote only one latrine model to BPL households (and often no models for APL households), based on the standard PHED latrine design with some slight variations according to local costs. As a result, despite massive expenditures, existing TSC activities have done little to develop or improve sustainable supply chains for sanitation goods and services.

Private supply is generally good in Madhya Pradesh. Wholesale suppliers of sanitary wares are found in most towns and rural centers, while the proximity to the main ceramic manufacturing centers in Gujarat means that ceramic pan prices are relatively low and product availability is good.

**Financing**

The TSC district projects provide ample and predictable finance over a five-year time horizon, thus allowing strategic planning and encouraging large-scale implementation. Additional sanitation finance is available to successful communities through the NGP awards and state clean village competitions.
The NGP incentive framework is working well in Madhya Pradesh, with the number of awards increasing from only 1 in 2006 to 190 in 2007. But 65 percent of these awards came from 5 high-performing districts, while 21 districts received no awards. High-level interest in the NGP awards means that the number of successful applications is likely to rise further next year, but there are concerns that political pressure for quick results may give rise to coercive approaches and unsustainable outcomes.

State and district finance for sanitation are good indicators of local political support. Other states have shown their enthusiasm for the collective sanitation outcomes encouraged by the total sanitation campaign through the finance of multilevel incentive frameworks with different criteria and verification systems to the NGP. The GoMP indicated its relative indifference by formulating a state clean village competition that is financed from TSC and CCDU program funds (rather than from a recurrent budget line). In addition, there was little evidence that district governments were offering additional financial (or other) incentives to gram panchayats that achieved collective sanitation outcomes.

Further indicators of the relatively low priority accorded to the TSC program by the GoMP are the lengthy delays in TSC payments resulting from inadequate preparation of project proposals and financial utilization reports. State-level stakeholders commented that these problems were caused by district officials unfamiliar with complex GoI audit procedures, but GoMP efforts to resolve the problems have been unsuccessful to date.

The use of the government schedule of rates to purchase materials for BPL household latrines is a serious financial issue in Madhya Pradesh. In addition to contravening the TSC guidelines, which state that households should construct their own latrines, this approach overestimates the market cost of materials by some 30–40 percent, resulting in an estimated US$4.5 million overpayment to date, with the potential of wasting an additional US$30 million if the same rates are used for the remainder of the TSC program.

**Cost-Effective Implementation**

The effectiveness of the TSC program is, increasingly, measured by the number of local governments that achieve ODF and NGP status. Insufficient data were available to make any useful assessment of the current ODF success rate in Madhya Pradesh. Figures from other national programs (and from Himachal Pradesh) average about 35 percent, suggesting that, even if the approaches adopted in Madhya Pradesh follow best practice, alternative and complementary approaches will need to be developed to increase the success rate and tackle the remaining 65 percent of communities.

Reaching the MDG target requires increasing the state sanitation coverage by as much as 42 percent (depending on which coverage estimates are used), so the predicted ODF success rate will be sufficient to reach the MDG only if almost every gram panchayat in Madhya Pradesh is targeted over the next five years. However, sanitation coverage also increases in communities that do not eliminate open defecation. The TSC online monitoring suggests a remarkable 20 percent increase in sanitation coverage over the last
couple of years, but these figures must be tempered by the knowledge that at most 50 percent of these latrines are in use. Therefore, considerably faster and more effective progress will be needed in order for non-ODF communities to contribute significantly toward the sanitation MDG.

Data on cost-effectiveness are important for developing consensus on the best approaches for large-scale implementation. The WSP needs to strengthen the case for using the CLTS approach by documenting the relative cost-effectiveness of the various approaches tried in Madhya Pradesh, in particular when programs scale up and begin to target less-active and committed communities and local governments. The cost-effectiveness data can also be used to benchmark district performance.

**Monitoring and Evaluation**

Current monitoring and evaluation systems are fragmented and inadequate. The TSC online monitoring system, which is the main monitoring and reporting portal for the TSC, monitors only physical (number of toilets) and financial (expenditure) progress.

The TSC DLM survey, which examines sanitation coverage and BPL household latrine usage, suggests that, on average, only 56 percent of BPL households in Madhya Pradesh are using their latrines. But even this low usage figure may not be representative of typical outcomes in the state, as sanitation coverage among the survey respondents averaged about 60 percent, which is significantly higher than the average across the state (suggesting that household respondents were from above-average communities).

Current TSC online data, which are the main source of coverage data for most progress reports, are problematic. These data mask latrine usage problems and misreporting problems because of the conflict of interest faced by government staff keen to claim good progress; they mask population growth effects, because the number of latrines provided reflects actual populations whereas the district projects reflect 2001 census populations; and they don’t address unmeasured increases in coverage among APL households, because only coverage in project communities is captured by the TSC activities because of other program efforts, private supply, and so on.
6. Recommendations

In framing the baseline assessment of the enabling environment for rural sanitation in Madhya Pradesh, one of the key difficulties was to distinguish the outcomes that were the direct or indirect result of TSSM interventions from those that would have occurred without assistance or support from the WSP-managed TSSM project. What follows are recommendations that attempt to make this distinction for each of the eight dimensions.

Policy, Strategy, and Direction

The transfer of responsibility for the TSC to the RDD presents an opportunity to develop new policies, strategy, and approaches to sanitation improvement. The less technical nature of the RDD should allow a move away from the technology-based, supply-driven approaches favored by the PHED engineers toward more appropriate, outcome-based policies and approaches.

In particular, there is a need for state-level guidelines that promote collective sanitation outcomes. The current lack of consensus on the effectiveness of supply-driven approaches (versus demand-responsive approaches) recommends that the TSSM project should undertake joint evaluations that provide evidence of the poor sustainability and limited benefit (hence wasted investment) of supply-driven approaches in Madhya Pradesh.

It is also recommended that the state government match its sanitation goals to those of the national government, which wants universal sanitation for India by 2012. Therefore, the TSSM project should assist the state government and districts to develop strategic sanitation action plans that, in aggregate, provide a realistic roadmap toward universal sanitation in the state by 2012.

High-level political support for, and routine monitoring of, these district strategic sanitation action plans will be important for the state-wide scaling up of sanitation improvement. Without political support and direction, the less-committed district administrations are unlikely to allocate the required time, resources, or enthusiasm. The TSSM project needs to use NGP publicity to generate political support, and needs to disseminate hard-hitting advocacy materials detailing the health, social development, economic growth, and environmental losses that result from inadequate sanitation.

The TSSM project should also press the state government to adopt locally appropriate sanitation policies:

- allow dry latrines (encourage them in water-scarce areas, or where people want to use urine-diverting composting latrines)
- formalize the criteria for cash incentives to BPL households (for example, after achieving ODF status)

Institutional Arrangements

The absence of a state sanitation committee or sanitation units at either the state or district level are major constraints. The lack of state-level capacity and resources for
sanitation strategy and policy development and for the regular monitoring and evaluation of district projects has hindered state guidance of the TSC program. The TSSM project will provide some important short-term support and capacity building, but there is a need for a state-financed sanitation unit to manage TSC and NGP activities, and for a high-level sanitation committee to provide direction and drive toward wider state objectives.

A similar problem exists at the district level, where few of the districts have established TSC units. The administration component of the TSC, which is intended to finance staff and administrative costs, remains underutilized. Thus there is no obvious constraint to the establishment of district TSC units.

An alternative partnership model is required to ensure that a cadre of trained sanitation and hygiene specialists is available throughout the state, and to encourage the use of TSC funds to finance private (or community) efforts to achieve sustainable sanitation outcomes.

The community consultant approach, first tried in Bangladesh and currently being piloted in Pakistan, provides a useful model for scaling up progress. Individuals from communities that have achieved ODF status (or the minimum sanitation outcome prescribed) are encouraged to trigger sanitation improvements in nearby communities, with the incentive of a local government award (including a cash reward) to community consultants for each community that achieves pre-agreed sanitation outcomes. A simple contract is signed by the community consultant and the local government, detailing the required sanitation outcome (and verification process) and the cash reward. Given current cost estimates of US$75,000–185,000 per NGP award in Madhya Pradesh, this could be a substantially more cost-effective approach than the current one. Furthermore, it would greatly enlarge the number of possible partnerships.

There is also scope to enhance and expand partnerships between the TSC and other health interventions. Several stakeholders (UNICEF and WaterAid) are implementing national handwashing campaigns, which will provide useful health and hygiene links, resources, and activities that should be coordinated with TSC program activities. In addition, there are several successful longer-term health initiatives in Madhya Pradesh (for example, efforts to increase the number of institutional births) that may provide alternative avenues for sanitation and hygiene promotion.

**Program Methodology**

There is an urgent need for convincing evidence of the relative cost-effectiveness of the various approaches being used or promoted. Once compiled, this evidence should be used in an advocacy campaign on the importance of tackling inadequate sanitation, alongside evidence (from elsewhere) that effective methodologies can achieve significant sanitation improvements even in challenging contexts—such as among poor, illiterate, and disadvantaged groups.

The sanitation marketing methodology should focus primarily on the supply of sanitation goods and services to APL households. Based on the June 2007 TSC monitoring data, APL households comprise 56 percent of the target TSC households. Only 18 percent of
these APL households have been served to date, compared with 29 percent of the target BPL households. The sanitation marketing component of the TSSM needs to formulate and market a range of latrine options that are attractive to APL households.

**Implementation Capacity**

The WSP has already used the TSSM project to fund a full-time WSP state coordinator in Madhya Pradesh. It is recommended that this state coordinator should provide strategic support at the state level (for advocacy, strategic planning, policy development, campaign design, and the management of evaluations), and should also encourage capacity-building efforts to develop improved social intermediation, sanitation improvement, and hygiene promotion skills within the state.

Significant capacity-building efforts are underway (largely through UNICEF and the CCDU), but the institutions responsible for the capacity building have little or no involvement in the TSC activities, and there is little evidence of improved implementation on the ground. Therefore, it is recommended that efforts be made to monitor the effectiveness of these large-scale capacity-building activities, including any changes in process, increased efficiency, or improved outcomes and impacts.

District governments should be encouraged to use the 5 percent administration budget included in the TSC to finance full-time sanitation units to help develop the improved management, skills, and capacity needed for more effective implementation of the TSC.

**Availability of Products and Tools**

The sanitation marketing component needs to focus on practical steps to increase the availability and affordability of sanitation goods and services in Madhya Pradesh. The limited information available on the rural sanitation market is constraining the development of practical sanitation marketing options. More information is required on the number and nature of the different products, retailers, and service providers (for example, masons) available in Madhya Pradesh; and on the latrine options that are considered affordable and desirable by the different market segments (for example, food poor, poor, nonpoor with water supply but no latrine, nonpoor with traditional latrine, remote communities).

It is also recommended that innovative ways to market, and to leverage funds for marketing, goods and services through existing, related retail and wholesale channels (such as cement companies) be explored.

**Financing**

The increasing importance of the NGP program, whose proposed 2008–12 budget is likely to be larger than that of the TSC program, requires that further investigation be undertaken into the sustainability of the sanitation outcomes generated by the NGP, and into the effective use of the financial rewards garnered by NGP winners—that is, do these funds result in additional sanitation improvements, and does this money repay previous sanitation investments by local governments, or is it used for nonsanitation-related activities?
It is also recommended that the GoMP develop some form of screening process to examine NGP applications before passing them on to the GoI. This process—already followed in progressive states such as Maharashtra—reinforces the need for rigorous adherence to the NGP criteria, provides secondary verification of collective outcomes, and limits the expectations of badly prepared applicants.

In light of the sustainability and impact questions raised against the TSC and NGP programs, it is also recommended that the TSSM project consider the development of a more phased incentive framework:

- providing 10 percent of environmental sanitation funds only after achieving ODF status
- providing performance grants to village governments that achieve post-NGP outcomes
- financing recurrent costs in communities that sustain sanitation outcomes

Additional incentives for sanitation improvement can be generated by linking the allocation of other development schemes to the achievement and sustainability of sanitation outcomes. For instance, approval of other community infrastructure schemes could be made dependent on reverification of ODF or NGP status.

Finally, it is recommended that the GoMP issue guidelines to confirm that the government schedule of rates should not be used for the central purchase of latrine goods and services.

**Cost-Effective Implementation**

At present, there is only limited demand for cost-effectiveness data from national or state institutions and program managers. Therefore, the TSSM project needs to make significant efforts to build simple, reliable systems to record and report this information at subdistrict, district, and state levels.

Data on cost-effectiveness are important for developing consensus on the best approaches for large-scale implementation. The WSP needs to strengthen the case for using the CLTS approach by documenting the relative cost-effectiveness of the various approaches tried in Madhya Pradesh, in particular when programs scale up and begin to target less active and committed communities and local governments. The cost-effectiveness data can also be used to benchmark district performance.

**Monitoring and Evaluation**

There remains a need for more regular independent monitoring of sanitation outcomes, and for matching assessments of the extent to which these outcomes translate into positive impacts and benefits. Although the TSSM project impact evaluation component is likely to address many of these issues, it is also recommended that the TSSM develop a simple, generic impact evaluation tool that can be used by state sanitation bodies; and that evaluation data be compiled into state and national databases.
7. Enabling Environment Indicators

The following indicators are proposed in order to establish a clear picture of the current enabling environment for sanitation in India, and recommend possible targets to achieve by the end of the TSSM project (Table 11). Although some of the data included in the indicator framework are currently unavailable, it is hoped that further investigation by the WSP India team will provide sufficient data to complete the baseline indicators. The completed indicator table will provide a valuable baseline against which to measure progress when the endline assessment of enabling environment is undertaken.

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Policy, Strategy, and Direction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collective action policy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household subsidy after latrine use</td>
<td>No</td>
<td>No</td>
<td>Currently no BPL household payment</td>
</tr>
<tr>
<td>Household subsidy after ODF</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Collective incentive after ODF</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>State strategic action plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consultation workshops (no. districts)</td>
<td>0</td>
<td>12</td>
<td>Stakeholder consultation; develop plan; advocacy for approval; awareness campaign; implementation in every district</td>
</tr>
<tr>
<td>Action plan approved</td>
<td>No</td>
<td>Approved</td>
<td></td>
</tr>
<tr>
<td>Plan implemented (no. districts)</td>
<td>0</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>2. Institutional Arrangements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved management &amp; coordination</td>
<td></td>
<td></td>
<td>(Gap = months since last meeting)</td>
</tr>
<tr>
<td>State water and sanitation mission meeting (gap)</td>
<td>15 months</td>
<td>3 months</td>
<td>Last state water and sanitation mission meet in March 2006.</td>
</tr>
<tr>
<td>State sanitation meeting (gap)</td>
<td>None</td>
<td>1 month</td>
<td>Need to form sanitation committee.</td>
</tr>
<tr>
<td>Dist WS Mission meeting (avg. gap)</td>
<td>14 months</td>
<td>6 months</td>
<td>Average across districts.</td>
</tr>
<tr>
<td>3. Program Methodology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale of program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TS implementation (no. districts)</td>
<td>5</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>SM implementation (no. districts)</td>
<td>0</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Applications for awards:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NGP applications from Madhya Pradesh</td>
<td>557</td>
<td>2,300</td>
<td>2.4% gram panchayats in 2007</td>
</tr>
<tr>
<td>State award applications</td>
<td>43</td>
<td>500</td>
<td>Shows commitment to process</td>
</tr>
<tr>
<td>State screening of NGP applications</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>4. Implementation Capacity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time TSC staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State level (total)</td>
<td>0</td>
<td>3</td>
<td>WSP State Coordinator</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------</td>
<td>---------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>District level (total)</td>
<td>0</td>
<td>48</td>
<td></td>
</tr>
</tbody>
</table>

**Knowledge management**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Exposure visits (no. people per year)</td>
<td>20</td>
<td>200</td>
<td>2007 Nagpur visit (estimate).</td>
</tr>
<tr>
<td>Best practice seminars (no. per year)</td>
<td>0</td>
<td>4</td>
<td>UNICEF interns.</td>
</tr>
<tr>
<td>Technology catalogs</td>
<td>0</td>
<td>4</td>
<td>One per division.</td>
</tr>
<tr>
<td>Fieldnote publication</td>
<td>0</td>
<td>1</td>
<td>Wider dissemination of learning</td>
</tr>
</tbody>
</table>

5. Availability of Products and Tools

**Technology options**

<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Promoted by govt (no.)</td>
<td>2</td>
<td>10</td>
<td>Based on informed choice manual</td>
</tr>
<tr>
<td>Found in BPL households (no.)</td>
<td>1</td>
<td>4</td>
<td>Based on rapid appraisal</td>
</tr>
</tbody>
</table>

**User satisfaction:**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>% satisfaction with household latrine</td>
<td>75%</td>
<td></td>
<td>Link with marketing component</td>
</tr>
</tbody>
</table>

**School sanitation**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Primary school coverage</td>
<td>+20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O&amp;M budget (Rs per year per school)</td>
<td>Rs 5,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Rural services (outside towns)**

<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Production centers (non-project)</td>
<td>+20%</td>
<td></td>
<td>Indicators intended to capture any scaling up of supply (outside direct project interventions).</td>
</tr>
<tr>
<td>Private retailers (non-project)</td>
<td>+20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experienced masons (non-project)</td>
<td>+20%</td>
<td></td>
<td></td>
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</tbody>
</table>

6. Financing

**Financial commitments to sanitation**

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gol approval of revised TSC budget</td>
<td>No</td>
<td>Rs 5,700</td>
<td></td>
</tr>
<tr>
<td>Gol approval of revised NGP budget</td>
<td>(Rs 75 lakh)</td>
<td>Rs 6,000 crore</td>
<td></td>
</tr>
<tr>
<td>State finance of awards (per year)</td>
<td>Rs 200 lakh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gram panchayat sanitation investments (per year)</td>
<td>Rs 23 lakh</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Multilayered incentives**

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>National NGP awards (number of gram panchayats)</td>
<td>191</td>
<td>600</td>
<td>190 in 2007</td>
</tr>
<tr>
<td>State awards (amount awarded)</td>
<td>Rs 6 lakh</td>
<td>Rs 200 lakh</td>
<td>TSC funded (3 in 2006–07)</td>
</tr>
<tr>
<td>District awards (amount awarded)</td>
<td>Rs 0</td>
<td>Rs 200 lakh</td>
<td>From District funds</td>
</tr>
</tbody>
</table>

7. Cost-Effective Implementation

**Effectiveness**

<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Triggering complete (no.)</td>
<td>1,600</td>
<td>3,000</td>
<td>CLTS active in 3–4 districts</td>
</tr>
<tr>
<td>ODF communities (no.)</td>
<td>557</td>
<td>1,200</td>
<td></td>
</tr>
</tbody>
</table>

Global Scaling Up Sanitation Project
<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>ODF-success rate (%)</td>
<td>15%</td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td>Cost per NGP application</td>
<td>Rs 25 lakh</td>
<td>Rs 10 lakh</td>
<td></td>
</tr>
<tr>
<td>Cost per NGP community</td>
<td>Rs 74 lakh</td>
<td>Rs 20 lakh</td>
<td></td>
</tr>
<tr>
<td>Cost per new household latrine</td>
<td>Rs 1,066</td>
<td>Rs 600</td>
<td>US15 per new latrine</td>
</tr>
</tbody>
</table>

8. Monitoring and Evaluation

*Health impact evaluations (rapid):*

<table>
<thead>
<tr>
<th>Source</th>
<th>2007</th>
<th>2009</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>WSP finance</td>
<td>1</td>
<td>2</td>
<td>TSSM baseline impact evaluation</td>
</tr>
<tr>
<td>Govt finance</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Other stakeholder finance</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

*Public health approach*

<table>
<thead>
<tr>
<th>Source</th>
<th>2007</th>
<th>2009</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>State review of health data (clinical+)</td>
<td>No</td>
<td>Yes</td>
<td>Health data collection needs improving; introduce community-level monitoring.</td>
</tr>
<tr>
<td>District review of health data (no. of districts)</td>
<td>0/48</td>
<td>24/48</td>
<td></td>
</tr>
<tr>
<td>Community-level monitoring</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
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, and another for actions to be implemented within Madhya Pradesh.

**Table 12: India: National Action Plan**

<table>
<thead>
<tr>
<th>Action</th>
<th>Detailed Outputs</th>
<th>Results</th>
<th>Actor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short-Term Action Plan (1–6 months)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 1. Policy | • Frame proposals for two-stage collective award process (ODF then NGP)  
• Clarify guidelines for individual NGP nominations (e.g., for active NGO and community leaders)  
• Assist state government to present case for dry latrines (in cold climates and water-scarce areas; urine-diversion composting latrines)  
• Assist CRSP to present case for removing latrines from BPL survey (disincentive to sanitation) | • Raised awareness regarding benefits of phased development  
• More detailed NGP guidelines  
• Presentation to the GoI on incidence and sustainability of alternative options  
• Presentation to the GoI on the negative impact of BPL points system on sanitation | WSP with Rajiv Ghandi National Drinking Water Mission (RGNDWM) |
| | | | WSP with GoHP |
| | | | WSP with RGNDWM |
| 2. Regulation | • Develop proposals for regulation of environmental sanitation in rural areas | • Discussion of regulatory standards by the GoI | WSP |
| 3. Sanitation Monitoring & Evaluation | • Formulate proposals for annual sanitation survey (aligned with national and international definitions)  
• Assess options for improving national sanitation monitoring (including collective outcomes, impacts, etc.) | • Framework document listing sanitation indicators and survey questions  
• TOR for development of impact evaluation tool | WSP |
<p>| | | | WSP (underway) |</p>
<table>
<thead>
<tr>
<th>Action</th>
<th>Detailed Outputs</th>
<th>Results</th>
<th>Actor</th>
</tr>
</thead>
</table>
| 4. Knowledge Management | • Develop TORs for a consultancy to prepare a simple, generic impact evaluation tool for use by all sanitation stakeholders | • Raised awareness of new sanitation approaches  
• Share lessons learned and generate consensus on the way forward  
• Raised awareness and political priority for sanitation | WSP (completed in August 2007)  
WSP, RGNDWM, UNICEF & WaterAid  
WSP (ongoing) |
| 5. Sanitation Financing | • Arrange international exposure visits (to Indonesia, Cambodia, etc.)  
• Conduct a joint review of rural sanitation and hygiene in India  
• Hold advocacy events to promote the benefits of sanitation improvement | • Raised awareness of new sanitation approaches  
• Share lessons learned and generate consensus on the way forward  
• Raised awareness and political priority for sanitation | WSP (completed)  
WSP (ongoing) |

**Medium-Term Action Plan (7–12 months)**

<table>
<thead>
<tr>
<th>Medium-Term Action Plan (7–12 months)</th>
<th>Detailed Outputs</th>
<th>Results</th>
<th>Actor</th>
</tr>
</thead>
</table>
| 1. Sanitation Monitoring & Evaluation | • Conduct consultation workshops on the alignment of sanitation questions and categories in household and project surveys  
• Manage the development of a generic impact evaluation tool (link with findings of TSSM impact evaluation) | • Consensus on the minimum requirements and definitions for sanitation surveys  
• More harmonized, reliable, and comparable data from sanitation impact evaluations | WSP with RGNDWM (and other stakeholders)  
WSP (underway) |
| 2. Knowledge Management | • Arrange internal exposure visits (other states to visit Madhya Pradesh)  
• Hold advocacy events to promote the benefits of sanitation | • Promotion of the new approaches used in Madhya Pradesh  
• Raised awareness and priority for rural sanitation | WSP (completed)  
WSP (ongoing) |
<table>
<thead>
<tr>
<th>Action</th>
<th>Detailed Outputs</th>
<th>Results</th>
<th>Actor</th>
</tr>
</thead>
</table>
| 3. Sanitation Financing | • Assess whether additional finance or credit options are required for the poorest households  
• Formulate proposals for financing of operation and maintenance of school sanitation | • Recommendations for reaching the poorest  
• Detail the operation and maintenance costs of school sanitation facilities | WSP  
WSP with RGNDWM |

**Long-Term Action Plan (13–24 months)**

<table>
<thead>
<tr>
<th>Action</th>
<th>Detailed Outputs</th>
<th>Results</th>
<th>Actor</th>
</tr>
</thead>
</table>
| 1. Sanitation Monitoring & Evaluation | • Lobby for the revision of the DLM methodology (in line with the proposals emerging from the consultation process)  
• Assist in field testing of the generic impact evaluation tool (and ensure that the standard impact indicators are included in national monitoring systems) | • Revised DLM survey  
• Approval for monitoring budget  
• Two WSP-financed rapid sanitation impact evaluations  
• Two externally financed rapid sanitation impact evaluations | WSP with RGNDWM  
WSP (underway: TOR already developed) |
| 2. Knowledge Management | • Document lessons learned  
• Promote lessons learned in India in International Year of Sanitation (2008) events | • WSP field note  
• International understanding and recognition of TSSM learning | WSP (underway) |
| 3. Sanitation Financing | • Revise TSSM program policies to allow for recommendations for reaching the poorest  
• Lobby for more sustainable financing of school sanitation | • Clear guidelines for reaching the poorest (and monitoring disaggregated outcomes)  
• Approval of sustainable finance framework | WSP with RGNDWM |
<table>
<thead>
<tr>
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<th>Results</th>
<th>Indicator</th>
</tr>
</thead>
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<td><strong>Short-Term Action Plan (1–6 months)</strong></td>
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</tbody>
</table>
| 1. Outcome-Based Incentive Framework | • Develop plans for pilot incentive funds (at district levels)  
• Develop post-ODF options for Madhya Pradesh (environmental sanitation options in a ladder of incentives)  
• Formulate proposals for regulation of environmental sanitation | • Details of incentive fund shared with potential investors  
• Raised awareness on the need for post-ODF strategies | WSP state coordinator |
| 2. Sanitation Subsector Reforms | • Assist RDD to develop institutional design for TSC management (including sanitation committee)  
• Formulate proposals for a state sanitation unit (including finance)  
• Formulate state sanitation guidelines (water-scarce areas, collective outcomes, minimum level of service)  
• Work to bring more partners into the process (universities, women’s groups, NGOs, health providers and programs, masons)  
• Develop training package for sanitation and hygiene specialists  
• Needs assessment for district capacity building  
• Develop links with health sector interventions | • Institutional arrangements agreed with RDD  
• Establish costs and requirements of a state sanitation unit  
• Tailoring of TSC guidelines to HP context and needs  
• Larger pool of service providers and facilitators  
• Training course on sanitation and hygiene promotion  
• Identify capacity gaps and training needs  
• Synergies with health sector identified | WSP state coordinator  
WSP state coordinator (ongoing) |
<p>| 3. Sanitation Monitoring &amp; Evaluation | • Baseline surveys (sanitation coverage and collective outcomes) | • Detailed information on local sanitation situation | WSP (link with DLM process) |</p>
<table>
<thead>
<tr>
<th>Action</th>
<th>Detailed Outputs</th>
<th>Results</th>
<th>Indicator</th>
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</thead>
</table>
| 4. Knowledge Management         | • District advocacy: latrine usage data; cost-benefit data (political commitment building package)  
                                 | • Develop informed choice catalogs (based on local designs)                     | • Increased political support and priority for sanitation               | WSP (ongoing)                       |
|                                 | • Introduce a latrine competition (award for the best local latrine design)       | • Raised awareness of low-cost sanitation options                       | WSP (contract out)                  |
|                                 |                                                                                  | • Local innovations shared with a larger population                      | WSP                                 |
| 5. Sanitation Financing         | • Develop cost-effectiveness indicators and collection systems                   | • Clear understanding of need for regular collection of reliable cost and impact data | WSP (TSSM impact evaluation)         |
|                                 | • Propose financing mechanisms for school sanitation                              | • Recognition of real costs of school sanitation                          | WSP with RDD & Education            |
|                                 | • Assessment of range of costs for NGO outputs                                   | • Cost data on NGO activities                                             | WSP with RDD                        |
| 6. Strategic Sanitation Planning| • Undertake demand assessments (part of the sanitation marketing component)      | • Raised awareness of demand constraints (and drivers)                   | WSP (contract out)                  |
|                                 | • Provide support and training in strategic planning to districts                | • Increased capacity for strategic planning                               | WSP state coordinator (organize workshops) |
|                                 | • Assist UNICEF/RDD in development of a behavior change communication strategy for Madhya Pradesh | • Plan for behavior change communication strategy in Madhya Pradesh        |                                      |

*Medium-Term Action Plan (7–12 months)*
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</table>
| 1. Outcome-Based Incentive Framework       | • Introduce sanitation incentive fund and outcome criteria for scheme allocation  
• Campaign to promote sanitation incentives and awards  
• Pilot post-ODF strategy in award-winning communities | • 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 GoMP  
WSP with RDD  
WSP with RDD |
| 2. Sanitation Subsector Reforms            | • Assist RDD in recruiting, training, and building state sanitation unit  
• Submit state sanitation guidelines for approval (pilot test in one district)  
• Run training courses for sanitation specialists  
• Ensure nongovernment representation in all sanitation working groups and committees  
• Align messages and activities with health sector interventions | • Establishment of RDD state sanitation unit  
• Feedback on state sanitation guidelines  
• Increased professional sanitation capacity in Madhya Pradesh  
• Recognition of potential contribution of nongovernment stakeholders to sanitation improvement  
• Reinforcing messages from health and TSC activities | WSP with RDD |
| 3. Sanitation Monitoring & Evaluation      | • 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)  
• Pilot the generic impact | • Renewed community interest and commitment for sanitation improvement  
• Raised district and community awareness of disease burden  
• Initial data on benefits of collective sanitation outcomes | WSP state coordinator (with districts)  
WSP (contract out) |
<table>
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<th>Action</th>
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<th>Results</th>
<th>Indicator</th>
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</table>
| 4. Knowledge Management                     | • District performance reviews (every six months: joint reviews and benchmarking by a group of districts)  
• Updates to informed choice catalogs (add competition winners and new designs) | • Performance reports (sharing lessons learned and identifying gaps and weaknesses)  
• Create culture of innovation and flexible learning                        | WSP state coordinator     |
| 5. Sanitation Financing                     | • Collect sanitation cost data  
• Review credit systems and sanitation outcomes for poorest households  
• Lobby district governments to reward “sustained NGP” communities with recurrent budgets for school sanitation  
• Develop performance and cost criteria for NGO/SO activities | • Sufficient data for cost-effectiveness analysis  
• Raised awareness of sustainability and benefits among the poorest  
• Increase options for sustainable financing of school sanitation  
• Norms for NGO/SO activities | WSP state coordinator with RDD |
| 6. Strategic Sanitation Planning            | • Assist in the preparation of district sanitation action plans (for reaching MDG and providing universal sanitation)  
• Plan implementation of behavior change communication strategy  
• Target communities with low latrine usage with second-phase activities | • Detailed understanding of sanitation challenges and opportunities  
• Agreed behavior change communication strategy  
• Improved latrine usage among low usage communities | WSP state coordinator (through workshops) |

**Long-Term Action Plan (13–24 months)**

| 1. Outcome-based Incentive Framework        | • Conduct high profile campaign to publicize clean village awards and benefits | • Raised awareness of awards and higher priority for sanitation | WSP (underway) |

Global Scaling Up Sanitation Project
<table>
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<th>Detailed Outputs</th>
<th>Results</th>
<th>Indicator</th>
</tr>
</thead>
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<tr>
<td></td>
<td>Enlarge financial support for district sanitation incentive funds</td>
<td>Ability to reward growing numbers of ODF communities</td>
<td>WSP state coordinator with RDD (lobby DCs)</td>
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<td></td>
<td>Lobby for ladder of incentives (ODF award used to finance environmental sanitation services and so on)</td>
<td>Increased finance for outcome-based infrastructure grants</td>
<td>WSP (underway)</td>
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<td>Review sustainability of outcomes in award winning communities</td>
<td>Identification of any weaknesses in the incentive framework</td>
<td>WSP (TSSM impact evaluation)</td>
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<td>2. Sanitation Subsector Reforms</td>
<td>Disseminate state sanitation guidelines</td>
<td>Raised awareness of state guidelines</td>
<td>WSP state coordinator with RDD</td>
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<td>Assist the state sanitation unit to identify nonperforming districts</td>
<td>Apply pressure to nonperforming districts</td>
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<td></td>
<td>Use trained sanitation specialists to improve performance in nonperforming districts</td>
<td>Identify reasons for nonperformance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Involve health sector personnel in TSC training activities</td>
<td>Increased capacity in nonperforming areas</td>
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<tr>
<td></td>
<td></td>
<td>Sanitation promotion through other health institutions</td>
<td></td>
</tr>
<tr>
<td>3. Sanitation Monitoring &amp; Evaluation</td>
<td>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)</td>
<td>Performance reports (sharing lessons learned and identifying gaps and weaknesses)</td>
<td>WSP</td>
</tr>
<tr>
<td>4. Knowledge Management</td>
<td>District performance reviews (every six months: joint reviews and benchmarking by a group of districts)</td>
<td>Performance reports (sharing lessons learned and identifying gaps and weaknesses)</td>
<td>WSP state coordinator</td>
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<td>Updates to informed choice catalogues (add competition winners and new designs)</td>
<td>Create culture of innovation and flexible learning</td>
<td>WSP state coordinator</td>
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</tbody>
</table>
| 5. Sanitation Financing | - Review cost-effectiveness data (for both household and school sanitation; include usage data)  
- Disseminate information on typical costs for NGO/support organization activities | - Use cost-effectiveness data as basis for promotion of policies and approaches  
- Better awareness of realistic NGO/support organization costs | WSP  
WSP with RDD |
- Develop matching investment and implementation plans  
- Roll out behavior change communication strategy in all districts | - Roadmap for reaching sanitation MDG and working toward universal sanitation.  
- Personnel trained in behavior change communication strategy in each district | WSP with RDD |
References


Regional Medical Research Center for Tribals. 2007. Quantitative microbial risk based approaches to evaluate Nirmal Gram and non Nirmal Gram villages in Rewa district, Madhya Pradesh. Processed report.


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 collection 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.

Gram panchayat: Gram panchayats are local elected government bodies at the village level in India, and are the foundation of the Panchayat political system.

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 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 at appropriate 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, 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.

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, for example, toilets, soakaways, handwashing facilities, and so on.
Rural: Rural describes that which is not urban, with urban spaces in India defined as towns (places with municipal corporations, municipal area committees, town committees, notified area committees or cantonment boards); also, all places with 5,000 or more inhabitants, a population density not less than 390 persons per square kilometer, or at least three-quarters of the adult male population employed in pursuits other than agriculture.

Sanitation: 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”:22

- 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: 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: A process that 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: 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 affordable 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.
## Appendix B: Madhya Pradesh: Rural Sanitation Coverage (45 districts, 2001)

<table>
<thead>
<tr>
<th>District</th>
<th>Blocks</th>
<th>Villages</th>
<th>Gram panchayat</th>
<th>Total households</th>
<th>Rural households</th>
<th>Percent</th>
<th>Rural households with latrine</th>
<th>Percent</th>
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<td>Population</td>
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<td>234,760</td>
<td>211,177</td>
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<tr>
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<td>183,400</td>
<td>150,511</td>
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<td>24,996</td>
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<td><strong>Total</strong></td>
<td><strong>313</strong></td>
<td><strong>56,069</strong></td>
<td><strong>22,029</strong></td>
<td><strong>10.92</strong></td>
<td><strong>8.12</strong></td>
<td><strong>74</strong></td>
<td><strong>726,218</strong></td>
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Endnotes

1 Indonesia (Water and Sanitation for Low-Income Communities: WSLIC-2 project)
2 The WSP state coordinator was appointed in May 2007.
3 According to the 2001 census of India, Madhya Pradesh has 194 persons per square kilometer (compared with average 324 per square kilometer).
4 These rates are reported in the National Family Health Survey II (mortality rates for the five-year period preceding the 1998–99 survey)
5 NCAER 1999.
6 The gram sabha is a general village-level body consisting of persons registered in the electoral rolls.
7 Nursery schools are known as anganwadis in India.
8 One lakh rupees = one hundred thousand rupees (US$2,500).
9 One crore rupees = ten million rupees (US$250,000).
10 The amounts mentioned are according to the revised incentive provision as of 2007. In the earlier two years, the incentives for each gram panchayat ranged from Rs 2 to 4 lakh.
11 Allegations were made by several stakeholders in Madhya Pradesh.
12 Filling times from other Indian states average 6 months to 2 years (Robinson 2005); WSP India suggests 3–4 years for an average family (source of data unknown).
13 Other criteria include the amount of land, type of housing, number of clothes, number of meals per day, consumer goods, education level, labor status, type of livelihood, children in school, loans, migration status, and household priority.
14 These figures assume that the TSSM invests US$1.0 million (of the US$1.6 million project total) in the Madhya Pradesh project, and US$ 0.6 million in the Himachal Pradesh project.
15 Elected gram panchayat leaders are known as sarpanchs in Madhya Pradesh.
16 This is the equivalent of US$2.75–11.25 per ceramic latrine pan (including ceramic p-trap).
17 This is the equivalent of US$1,250–5,000 in district prizes, and US$5,000–12,500 in state prizes.
18 This figure includes APL household latrines (but excludes unused BPL latrines).
19 Regional Medical Research Center for Tribals 2007
20 Indonesia (Water and Sanitation for Low-Income Communities: WSLIC-2 project).
21 Kar and Pasteur 2005
22 JMP 2006.