

KCCI / 2011 – 07

Empowering Children & Adults to Improve Sanitation and Hygiene Practices through Behavioural Change: *A Case Study of Good Practices in Guna, Madhya Pradesh*

Jenna Manheimer
Nausheen Rahman
Swetha Sivaram

In collaboration with
Vibhavari *and the* Zilla Panchayat
Guna, Madhya Pradesh

Disclaimer

The views expressed in this paper are of the authors and do not represent the opinions, policies, or position of UNICEF, Vibhavari, Knowledge Links, or the Guna Zilla Panchayat.



Acknowledgments

We would like to take this opportunity to sincerely thank all those who made this case study possible: Ms. Amrita Singh for her logistical support and the KCCI internship programme's support staff for all kinds of help; our hosts and those we collaborated with in the field, namely, Vibhavari, the Guna Zilla Panchayat (specifically Mr. Phool Singh Agarwal and Mr. Razzaq Khan), Knowledge Links, and the Guna UNICEF staff (especially Mrs. Priyanka Jain, Mr. Nagendra Singh, and Dr. Tania Goldner of the UNICEF Bhopal Office) for their invaluable suggestions; and Dr. Gregor von Medeazza, also from the UNICEF Bhopal Office, to whom we are deeply indebted for his kind guidance and sustained support.



Contents

List of Tables and Figures	3
List of Acronyms	4
Foreword	5
Executive Summary	6
Sanitation and Hygiene: Background	9
The world at a glance.	9
India	10
Organisational Strategy: Implementing Community and School-Led Total Sanitation	14
School-led total sanitation: Empowering children	14
Vibhavari's strategy	15
Community-led total sanitation: Empowering communities	16
Genesis	16
Theoretical framework of CLTS	17
CLTS in India and KL's approach in Guna	19
Implementation: Challenges & Solutions	21
External factors affecting SLTS	21
Central-level governance	21
District-level governance	21
External factors affecting CLTS	22
Central-level governance	22
District-level governance	24
Internal constraints	24
SLTS	24
CLTS	25
Impacts of the Initiatives: Quantitative Analysis	27
Methodology	27
Findings	27
Toilet coverage	27
Toilet usage	28
Knowledge-behaviour gap	29
Reasons for toilet construction and utilisation	30
Reasons for not building a toilet	30
Hygiene indicators	30
Qualitative Assessment	32
Methodology	32

Findings	32
Vibhavari’s impact on children	32
Children as agents of change	33
Additional observations	34
Resource Requirements	36
Sustainability	37
Best Practices	39
Vibhavari & SLTS	39
Knowledge links & CLTS	41
Potential for Further Application	44
Coordinating SLTS & CLTS	44
Teachers as igniters	45
Downplaying subsidy – An autonomous community	45
Women’s empowerment	45
Instituting human rights in society	46
Multiple applications of CLTS.	46
Recommendations and Next Steps	48
Vibhavari	48
Knowledge links	49

List of Figures

Figures

Figure 1: Percentage of Households with Access to Toilet Facilities	12
Figure 2: Map of the Guna District	14
Figure 3: Toilet Coverage	28
Figure 4: Latrine Usage	28
Figure 5: Knowledge & Behaviour	29
Figure 6: Reasons for Not Building/Using a Latrine	30
Figure 7: Hand Washing and Drinking Water Hygiene	31
Figure 8: Most Recalled Jagmag Sena Activities	33
Figure 9: Sanitation of 'Active' Children	34

Boxes

Box 1: Sequence of Steps in CLTS	18
Box 2: Adapted from Kar, 2010	19
Box 3: Varsha Rawat – An unsupported agent of change	37



List of Acronyms

BCC	Behaviour Change Communication
CLTS	Community-led Total Sanitation
DLHS	District Level Household Survey
DWSS	Department of Water Supply and Sewage
HDR	Human Development Report
IEC	Information, Education and Communication
IPC	Inter-personal Communication
KL	Knowledge Links
MP	Madhya Pradesh
MDGs	Millennium Development Goals
OD	Open Defecation
ODF	Open Defecation Free
PRA	Participatory Rural Appraisal
SLTS	School-led Total Sanitation
SRMR	Swatch Raho Mast Raho
TSC	Total Sanitation Campaign
UN	United Nations
UNICEF	The United Nations Children's Fund
UNDP	United Nations Development Programme
WHO	World Health Organisation



Foreword

The Knowledge Community on Children in India (KCCI) is a partnership between the Government of India and UNICEF, the aim of which is to fill knowledge gaps and promote information sharing on policies and programmes related to children in India. In 2011, under the aegis of this initiative, 40 graduate students from India and across the world undertook fieldwork and documented initiatives focused on child rights and development. Their vibrant perspectives, commitment and hard work are reflected in these studies, published by UNICEF.

The nine initiatives were documented in 2011. The teams looked at a range of initiatives at different levels of intervention – from community radio in tribal areas of Shivpuri in Madhya Pradesh to a complaints handling mechanism of the National Commission for the Protection of Child Rights at the national level. The lens applied to these studies is to identify the essential elements that go into making a model intervention successful and sustainable.

UNICEF recognises the potential and power of young people as drivers of change and future leaders across the globe. The KCCI Summer Internship Programme aims to support the development of a cadre of young research and development professionals with an interest, commitment and skills in promoting and protecting children's rights. UNICEF will continue this collaboration with young researchers, the Government of India and academia, so as to bring fresh perspectives and energy to development research and showcase examples of how it *is* possible to ensure that the rights of *every* child in India are fulfilled.



Karin Hulshof
Representative
UNICEF India

Executive Summary

Clean water and safe sanitation are essential components for a healthy and productive human life. Although advocated as a human right by many, it remains a privilege inaccessible to almost half of the world's population. Despite its commitment and expanded effort, India lags in attaining part of the 7th Millennium Development Goal (MDG) – halving by 2015 the number of people without access to sanitation. In rural Madhya Pradesh (MP), the setting of this case study, only 10% of the population accesses a latrine, indicating a coverage rate that is lower than the average for India as a whole, and even less than rural Sub Saharan Africa.¹

Launched in 1999, India's Total Sanitation Campaign (TSC) seeks to address this major obstacle to disease prevention by increasing both the demand for and availability of sanitation throughout India. Even after a toilet is made available, ensuring its usage and fostering safe hygiene practices are challenges that require intensive effort directed at shaping the mindsets and altering the behaviour of entire communities.

Implementation of the TSC has varied widely at the local level, and cultural preferences varying from region to region have posed unique challenges. In MP, as in several other Indian states, low literacy, caste divides and disempowered women are particular hindrances to improving sanitation.



This study explores the factors affecting behavioural change in the

Guna district of MP regarding open defecation (OD), describes the experiences of two non-governmental organisations (NGOs), Vibhavari and Knowledge Links (KL), and assesses the effectiveness of various strategies adopted. Vibhavari works primarily within schools to promote improvements in sanitation and hygiene, advocated for and led by school children. Their appreciation of the critical role of hygiene and safe sanitation is fostered through interactive

¹ International Institute for Population Sciences, *District Level Household and Facility Survey, 2007-08; India: Madhya Pradesh*. IIPS, Mumbai, 2010, (DLHS 2008), p. 47.

educational games and activities. KL, on the other hand, targets the community at large with a broader approach known as community-led total sanitation (CLTS), which attempts to elicit emotions such as shock, disgust and shame amongst villagers who reflect upon an unhealthy lifestyle, prompting their resolve to change unhygienic habits. Good practices employed by both organisations are identified in this report, along with their potential for replication.

To assess sanitation and hygiene within the intervention villages of each organisation, oral surveys were conducted in 142 households across seven villages to identify latrine coverage and usage, hygienic practices, principle motivational factors leading to improvements in sanitation, and knowledge as a predictor of behaviour. Qualitative observations in 13 villages were also made through field visits and interviews conducted with 15 children, who appeared particularly motivated to change behaviour within their communities, 15 parents of these children, three heads-of-household and three community health care workers.

Findings demonstrate higher toilet usage in intervention villages (27% in treatment villages versus 20% in control), while 45% (14/31) of households surveyed in CLTS intervention villages were constructing latrines at the time of survey. The findings on usage support the notion that households receiving government subsidy are less likely to use their toilets (50% in treatment villages; 33% in control) than households constructing a latrine on their own (100% usage).

On the other hand, the most common reason cited for not having a latrine was lack of money. However, the two organisations included in this study strictly oppose subsidy and are committed to encouraging a self-directed, autonomous change in behaviour, and promoting toilet construction independent of subsidy.

The reasons for not using an existing toilet varied widely. A common phenomenon found was a gap between knowledge acquired and behaviour practiced. Numerous respondents were able to explain disease transmission in detail, and why toilet usage and burying excreta are important, yet admitted they still defecated in the open without burying their excreta.

Hand washing with soap and safe water storage, two key aspects of hygiene promotion, were also higher in treatment than control villages. Among children empowered through Vibhavari's school-led total sanitation (SLTS) programme, handwashing was prevalent, and its dissemination into children's households apparent. Among the best practices of Vibhavari's strategy, as identified through child interviews, were a hand washing demonstration and role-playing. For children who acted as agents of change within their households regarding sanitation or hygiene, the importance of familial support was evident.

Most effectual in KL's work was a 'demonstration walk' through the community's defecation area, which explores the contamination of water by excreta, and the infection carried by flies

from unburied faeces. Emphasis on the need to respect women's privacy and dignity was also crucial in instigating sanitary behavioural change.

Despite successes, there is room for improvement in both organisations in terms of sustained technical support, consistent follow up and improved monitoring and evaluation of progress achieved. A stronger effort to highlight OD as a critical 'survival' issue is especially needed within Vibhavari's school-based approach. Greater inclusion of women and children in the community-led effort by KL, as well as enhanced emphasis on understanding and imbibing improved hygiene practices across ages and genders are key to community mobilisation. Importantly, the two organisations in Guna might benefit immensely from collaboration, melding their unique strengths to create more sustainable behavioural change that extends deeper and further into the communities.

Sanitation and Hygiene: Background

The world at a glance

The availability of clean drinking water and the provision of basic sanitation are globally recognised as central to public health and human development. Beginning in the mid-1800s, the inextricable link between life-threatening diarrhoeal diseases, contaminated drinking water and unhygienic human waste disposal gained wide acceptance.² Over a century and a half later, providing access to two basic necessities – clean water and sanitation – remains a challenge, despite their being vigorously advocated as human rights and acknowledged as critical to combating high infant and child mortality and morbidity. Currently, an estimated 2.6 billion residing in developing countries lack even the most basic form of sanitation, a toilet.³

“The General Assembly... Urges all Member States, the United Nations systems and all other relevant stakeholders to encourage behavioural change together with policies for increasing access to sanitation among the poor, complemented by a call to end open defecation as an extremely harmful practice for public health, and encourages Member States to further strengthen investments in sanitation and hygiene education.”

– General Assembly Resolution (A/Res/65/153)

Yearly, there are five billion cases of diarrhoea in children alone, of which 1.8 million prove fatal in children below five years.⁴ Some 88% of all diarrhoeal cases are attributed to contaminated water or lack of adequate sanitation and hygiene.⁵ Diarrhoea leads to dehydration, especially in infants and young children, interfering with the absorption of nutrients, and often leading to malnutrition, with lasting effects on growth processes.

Significant evidence continually emerges to indicate the close correlation between sanitation and health. A ground breaking meta-analysis of 144 studies in 1991 by Esrey *et al.* determined that sanitation interventions alone account for the greatest reduction in diarrhoea morbidity, i.e. 36%.⁶ Water quality and sanitation combined produced a 30% diarrhoea reduction, and

² Johnson, S., *The Ghost Map*. Penguin Group, USA, 2007.

³ WHO/UNICEF, ‘Meeting the MDG Drinking Water and Sanitation Target: The Urban and Rural Challenge of the Decade.’ WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, Geneva, 2006.

⁴ United Nations Development Programme, ‘Beyond Scarcity: Power, Poverty and the Global Water Crisis.’ *Human Development Report 1996*, Oxford University Press, New York, 2006.

⁵ Lenton, R., Wright, A.M., & Lewis, K., ‘Health, dignity and development: what will it take?’ *UN Millennium Project: Task Force on Water and Sanitation*, Earthscan, London, 2005, p. 20-21.

⁶ Esrey S.A. *et al.*, ‘Effects of improved water supply and sanitation on ascariasis, diarrhoea, dracunculiasis, hookworm infection, schistosomiasis, and trachoma.’ *Bulletin of the World Health Organisation*, 1991: 69 (5), p. 609-621.

hygiene 30%, yet water quality on its own yielded a mere 15% reduction. A similar meta-analysis of over 200 studies determined that sanitation interventions, such as latrine provision, led to a 37% (95% CI: 0.43, 0.93) reduction in child diarrhoea morbidity, while hygiene interventions alone resulted in an estimated 31% (95% CI: 0.61, 0.77) relative reduction.⁷

In an extensive 1997 survey across Kenya, Uganda and Tanzania, owning a private latrine was associated with a 0.43 odds ratio reduction in diarrhoea morbidity ($p = 0.006$), while households lacking any facility were 2.40 times (95% CI: 1.76–3.29) more likely to suffer from diarrhoea.⁸ In this study, households lacking piped water but accessing a pit latrine had 20% diarrhoea prevalence, versus 66% for those without any form of sanitation.

Aside from severe health impacts, diarrhoeal disease has economic repercussions, as well. The World Health Organisation (WHO) estimates that achieving the 7th MDG on water and sanitation would result in a US\$ 72 billion economic gain worldwide, resulting from time-savings, working days gained and disease avoided.⁹ Furthermore, as acknowledged by the United Nations (UN) Secretary General in 2011, improving sanitation will not only bring us closer to accomplishing the 7th MDG, it will also significantly improve and enable the attainment of all other MDGs, thus accelerating human development as a whole.¹⁰ Due to the significance of sanitation and access to clean drinking water, these were declared human rights that every country is obliged to achieve.¹¹

India

The civilizations inhabiting the Indus Valley of ancient India had the oldest known sanitation system in the world, dating as far back as 5,000 years, with a complex drainage and disposal network.¹² By contrast, in present day India, around 800 million lack access to any form of sanitation, with 69% of the population defecating in the open.¹³

⁷Waddington, H., Snilstveit, B., White, H., & Fewtrell, L., *Water, Sanitation and Hygiene Interventions to Combat Childhood Diarrhoea in Developing Countries*. International Initiative for Impact Evaluation, August 2009.

⁸Tumwine, J.K. *et al.*, 'Diarrhoea and effects of different water sources, sanitation and hygiene behaviour in East Africa.' *Tropical Medicine and International Health*, September 2002: 7 (9), pp. 750-756.

⁹WHO, 'Evaluation of the costs and benefits of water and sanitation improvements at the global level.' 2004, available at <www.who.org>, accessed 22 July 2011.

¹⁰ UN Secretary General's Advisory Board on Water and Sanitation, UNICEF & Water Supply and Sanitation Collaborative Council, 'Sanitation and the Millennium Development Goals,' *Sanitation For All: Five Year Drive to 2015*. Available at <<http://www.sanitationdrive2015.org>>, accessed 15 July 2011.

¹¹ UN General Assembly, 'Human Right to Water and Sanitation.' UN Doc. A/Res/64/292, 28 July 2010.

¹²Alok, K., *Squatting with Dignity: Lessons from India*. Sage Publications, New Delhi, 2010, p. 18.

¹³UNICEF, *The State of the World's Children*. UNICEF, New York, February 2011, p. 97; Data from UNICEF/WHO JMP 2008.

In pursuit of the water component of the 7th MDG, India has expanded access to 88% of the population (as of 2008, up from 70% in 1990) through piped water, tube or dug wells.¹⁴ While this puts India partially on track for achieving this goal, the nation continues to lag severely in sanitation.



Over nearly two decades, access to improved sanitation, including toilets, pit and compost latrines, has soared from an estimated 14% of the population in 1990 to 31% in 2008,¹⁵ according to data from the UNICEF/WHO Joint Monitoring Program, which accounts for toilet usage, rather than access alone.¹⁶ The disparity between urban and rural dwellers is particularly pronounced, with 54% and 21%, accessing sanitary coverage in 2008, respectively. In MP, rural areas have even lower levels of toilet coverage than average at 10% (as of 2008).¹⁷ This case study is set in the Guna district of MP, where merely 16% of the total population has access to toilets, while rural access is abysmally low at 4%.¹⁸

The graph below (Figure 1) presents comparative coverage rates using data from the Government of India's (GoI) District Level Household Survey. These estimates refer to coverage and do not account for usage.

¹⁴*ibid.*

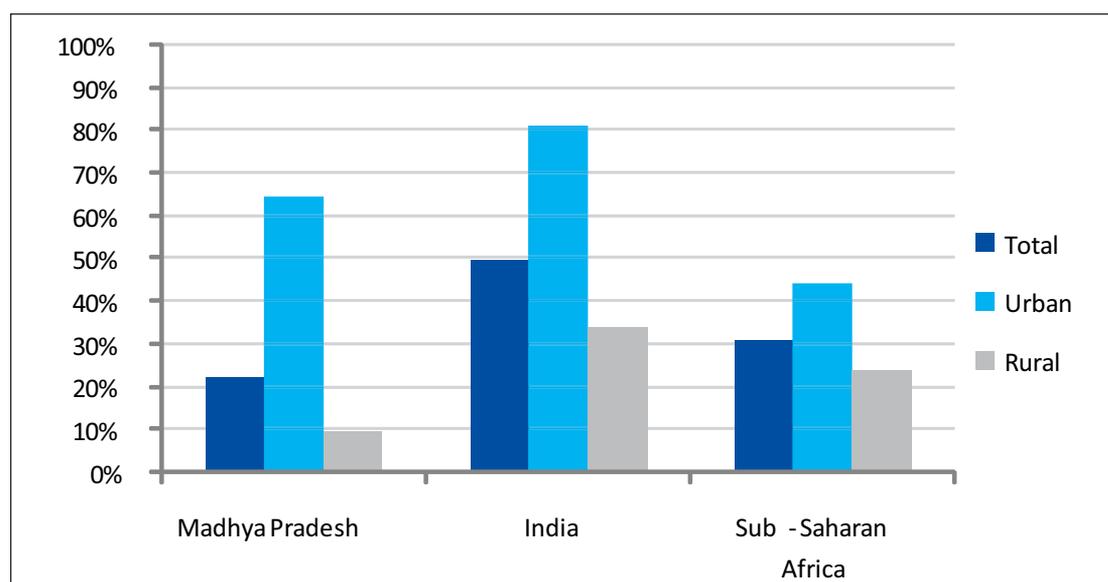
¹⁵*ibid.*

¹⁶WHO/UNICEF, 'Meeting the MDG Drinking Water and Sanitation Target: The Urban and Rural Challenge of the Decade.' JMP, Geneva 2006, p. 23.

¹⁷ International Institute for Population Sciences, *District Level Household and Facility Survey, 2007-08; India: Madhya Pradesh*. IIPS, Mumbai, 2010, (DLHS 2008), p. 47.

¹⁸*ibid*, p. 239.

Figure 1: Percentage of Households with Access to Toilet Facilities



Source: MP & India – DLHS 2008; Sub-Saharan Africa – UNICEF/WHO 2008

Inadequate and slower progress in sanitation compared with drinking water appears to be a common feature in developing countries; however, India presents some unique constraints and diversity of lifestyles that make adapting behavioural changes especially challenging. Within the country, and in MP in particular, the overriding obstacles to achieving total sanitation are the difficulties in changing the behaviour of entire communities, generating the demand to build toilets and commitment to maintain them, creating the desire as well as internalising the motivation to use latrines already accessible, and establishing a permanent change in individual, family and community hygiene practices.

In 1999, the GoI launched the TSC to address the pervasive lack of sanitation nationwide. The TSC seeks to deliver the right to sanitation by employing both a *protective* and *empowering* approach: (1) protective in providing subsidies for toilet construction to prevent OD, thereby protecting from diseases and other detrimental health effects of unsanitary living conditions; and (2) empowering by way of the Information, Education, and Communication (IEC) strategy,¹⁹ which aims to arm people with the appropriate knowledge to enable positive change and decision making regarding sanitation.

In implementing the above, one of the biggest challenges has been eliciting the necessary behavioural change to motivate and sustain the adoption of sanitary practices.²⁰ This constraint

¹⁹Ministry of Drinking Water and Sanitation, 'Techniques of IEC.' 2010, available at: <<http://ddws.gov.in/>>, accessed 29 July 2011; Shukla, J.P. & Kumar, N., 'Doing CLTS in a Countrywide Program in India: Private Good v. Public Good.' *Community Led Total Sanitation*, 2008, p. 3, available at: <<http://www.communityledtotalsanitation.org/>>, accessed 8 June 2011.

²⁰Sanan, D., 'CLTS: The Sanitation Story of the Millennium.' 2005, available at: <<http://www.wsscc.org/>>, accessed 8 June 2011, p. 11; see also, *supra*, note 19, 'Techniques of IEC': p. 7.

is attributed in part to the largely protective approach followed by the district-level governance, which has focused on achieving improved sanitation through subsidising toilet construction alone, thereby neglecting the need for empowerment.

Failure to live up to the TSC's "community-led", "people-centred", and "demand-driven approach" has been problematic.²¹ According to the Ministry of Drinking Water and Sanitation, a protection-centred methodology has proved unsuccessful "largely due to lack of demand, lack of participation in programme implementation and lack of awareness ... regarding health and hygiene."²² This is apparent through toilet usage: despite the construction of 9.45 million toilets in India between 1986 and 2003, less than half of these were actually used.²³

The excessive gap between availability and usage clearly suggests that generating demand for toilets by shaping people's attitude is crucial to sustainably eliminating OD. Equally clear is the critical importance of disseminating awareness that improving household hygiene practices will lead to reduced disease transmission.

In recent years, a people-centred approach focusing on the public's participation has been increasingly viewed as a key component to human empowerment and development.²⁴ One of the most effective mechanisms for achieving behavioural change in communities is the participatory process that encourages collective reflection upon the current sanitary situation of a community, and mobilises action on its own behalf.

It is precisely the participation of the people, and especially the active engagement of women and children, that the two Guna initiatives of SLTS and CLTS attempt to harness in order to empower entire communities to improve living conditions for the betterment of their collective well being and health.

"...active participation ... is also an *end* in itself"

-HDR 1993.



²¹Ministry of Drinking Water and Sanitation, 'Central Rural Sanitation Programme Total Sanitation Campaign.' 2011, available at: < <http://ddws.gov.in/>>, accessed 29 July 2011, p. 5.

²² DDWS, 'TSC - IEC in Rural Sanitation, India.' available at: <<http://ddws.gov.in/>>, accessed 29 July 2011.

²³Ganguly, S.C., 'India's national sanitation and hygiene programme. From experience to policy: West Bengal and Maharashtra models provide keys to success.' *Beyond Construction: Use by All*, Water Aid, London, 2008.

²⁴UNDP, 'People's Participation', *Human Development Report 1993*. Oxford University Press, New York, 1993; Annan, Kofi, 'We the Peoples', *Report of the UNSG*. UN Doc. A/54/2000, 27 March 2000; Annan, K., 'In larger freedom: towards development, security, and human rights for all', *Report of the UNSG*. UN Doc. A/59/2005, 21 March 2005); Sen, A., *Development as Freedom*. Oxford University Press, Oxford, 1999, p. 18.

Organisational Strategy: Implementing Community and School-Led Total Sanitation

School-led total sanitation (SLTS) and community-led total sanitation (CLTS) are two innovative approaches to improving sanitation and hygiene that are being implemented throughout the developing world. Although neither method is directly referred to in the GoI's TSC Guidelines, both fall within the ambit of the generic "people-centred" approach buttressed by the IEC strategy advocated in the TSC. While the two organisations promoting improved sanitation in the Guna district (see Figure 2 for map) share the same overall goals as the TSC, they have chosen to achieve them through different modalities: Vibhavari through SLTS, and KL through CLTS.

Figure 2: Map of Guna District



School-led total sanitation: Empowering children

Operating within the TSC's School Sanitation and Hygiene Education (SSHE) framework, SLTS is an educational programme at the school level that strives to ignite positive behavioural change and foster leadership in children of various ages, resulting in an open defecation-free (ODF) environment. In India, SLTS has been undertaken in multiple states, and met with particular success in Haryana, Himachal Pradesh, Meghalaya and Maharashtra.²⁵

²⁵Shukla, J.P., 'Triggering in schools.' Knowledge Links, 2010, available at: <www.communityledtotalsanitation.org>, accessed 7 June 2011.

While benefiting from the water and sanitary amenities provided to schools as part of TSC's hardware support, SLTS additionally seeks to educate children to use the facilities responsibly, and to develop hygienic practices, such as hand washing and safe water storage.²⁶ The use of educational games, challenging puzzles, and other participatory activities engages school children, generates awareness and enthusiasm, and has the potential to influence the community, as children call for improved sanitation and hygiene at home and in their surrounding environment. Interactive methods also allow for the natural formation of leadership amongst school children, enabling them to take on an expanded role as agents of change within the larger community.

One specific tactic of SLTS involves a triggering session tailored for each age group, in which children explore the consequences of their actions, as well as of the sanitary practices of the community. This process empowers children by instilling confidence that they can implement and lead the desired change. The underlying assumption is that the awareness generated among children with leadership potential ('natural leaders') will create individuals who propagate change by demanding improvements and placing pressure on their peers, families and other members of the community to cease OD. In addition to promoting healthy behaviours in the community and thereby minimising exposure to disease, entrenching positive behaviours in children will likely last into adulthood, contributing to the approach's sustainability.

While the focus of SLTS, as of SSHE, is on encouraging children to adopt healthy beliefs and attitudes, there is recognition that the decision to change household or community practices, especially OD, lies ultimately with adults. Therefore, the concept of child empowerment is intertwined with, and must be accompanied by changes in the awareness level and behavioural choices of adults.

Vibhavari's strategy

Working in Guna district for just over one year, Vibhavari has developed a unique strategy to SSHE, independent of the TSC. Known as Swatch Raho Mast Raho (SRMR; Hindi for 'Stay Healthy Stay Happy/Carefree'), this programme incorporates SLTS methodology by interacting with, engaging and empowering children through participatory education on improving personal hygiene, domestic hygiene, water safety and sanitation. In collaboration with schoolteachers and *Aaganwadi* (local health care workers), Vibhavari's SRMR programme is implemented in three phases:

- ♦ **Phase 1** – Vibhavari facilitators select visibly active and motivated child volunteers to join a group called the *Jagmag Sena* ('Sparkling Army'). These kids are engaged with interactive

²⁶DWSS & UNICEF, 'Guidelines on School-Led Total Sanitation.' Steering Committee for National Sanitation Action, 2006.

activities, such as role playing, hand washing demonstrations, puzzles, board games, quizzes, journalism and poetry, all designed to communicate understanding on the importance and necessity of good sanitary and hygienic practices.

- ♦ **Phase 2** – Motivated Jagmag Sena students are expected to diffuse learnt behaviours throughout their school and among their households, convincing others to adopt healthier practices.
- ♦ **Phase 3** – After one year of participation, the Jagmag Sena are required to assist in the facilitation of a participatory rural appraisal (PRA). This entails convening a session attended by adults, targeted at triggering interest and spreading awareness, especially to those community members not already in contact with Jagmag Sena. Along with Vibhavari staff, the children jointly discuss the negative health effects of poor sanitation that can be avoided by using a latrine, hand washing at key times, and safe storage of drinking water, while expressing their individual and collective desire to live in a clean environment. The village's defecation area is also mapped.

To monitor performance and gauge impact, a quiz is distributed monthly, and school children with a full score become sanitation 'heroes'. Vibhavari also employs Jagmag Sena members at the end of one year to conduct a household survey throughout the village, obtaining information on latrine access, latrine usage and hand washing.



Community-led total sanitation: Empowering communities

Genesis

Often thought of as revolutionary and unique,²⁷ CLTS was created in Bangladesh by Kamal Kar, a renowned development specialist, who embraced the idea of a participatory approach to undertaking the challenging task of altering people's mindsets, and leading entire communities

²⁷ Chambers, R., 'Going to Scale with Community-Led Total Sanitation: Reflections on Issues, Experiences, and Ways Forward', *IDS Practice Paper 1*. Institute of Development Studies, Brighton, March 2009, p. 9.

to cease OD.²⁸ The underlying assumption of CLTS is that once people realise they are indirectly taking in each other's excreta, it provokes and shocks them to a point where they begin to desire change. This compelling process of self-analysis elicits disgust, shame, awareness and problem solving, while turning OD into an unacceptable practice.²⁹

After being fully informed and experiencing disgust with food contaminated by flies and dirty hands, drinking water tainted by unsanitary storage and handling, and by defecation near surface water sources, people tend to take action to improve their situation, and, subsequently, through shaming and peer pressure, the community eventually becomes ODF. Especially in communities where OD is commonly practised and not stigmatised, it is only the collective realisation of a need for behavioural change that can mobilise the community and jolt it into remedial action. Similar to SLTS, the CLTS approach posits that 'natural leaders' will facilitate the adoption of sanitary practices, creating an ODF environment and in turn, significantly cutting the risk of diarrhoeal and related diseases.

Theoretical framework of CLTS

The four basic steps to CLTS are shown below in Box 1. These provide broad guidelines for facilitators. During the crucial step of triggering, the facilitator carefully decides which participatory process to undertake and what stakeholders to target within the community.

The participatory methods employed during CLTS vary widely, allowing for flexibility depending on the setting in which the initiative is undertaken.³⁰ Trained facilitators spur reflection on faecal-oral disease transmission through triggering, an interactive discussion session propelled by engaging activities designed to elicit shame, and triggering previously unmet feelings of shock and disgust. Once participants comprehend and accept lack of sanitation as a problem and resolve to remedy it, the facilitator encourages them to develop strategies and solutions uniquely appropriate for their community. Core to the health outcome desired is not only the construction, but more importantly the demand for and prolonged usage of latrines by all community members, hence the "total" element to the initiative.

²⁸*ibid.*, p. 14; Kar, K., & Chambers, R., *Handbook on Community Led Total Sanitation*. Plan International & Institute of Development Studies, Brighton, 2008; Kar, K. & Pasteur, K., 'Subsidy or Self-Respect? Community-led total sanitation: An update on recent developments', *IDS Working Paper 57*. Institute of Development Studies, Brighton, 2005, p. 1; Mehta, L. & Movik, S., *Shit Matters: The Potential of Community Led Total Sanitation*. Practical Action, London, 2011.

²⁹Jha, N., 'Access of the Poor to Water Supply and Sanitation in India: Salient Concepts, Issues and Cases.' *International Policy Center for Inclusive Growth*, May 2010. Adapted from: Kar, K. 'Subsidy or Self-Respect? Participatory Total Community Sanitation in Bangladesh', *IDS Working Paper 184*. Institute of Development Studies, Brighton, 2003.

³⁰Kar, K., 'Facilitating Hands On Training, Workshops for CLTS: A Trainer's Training Guide'. Water and Supply Sanitation Collaborative Council, Geneva, 2010, p. 9-10; *supra*, note 28; Kar & Chambers, 2008, pp. 27-35.

Box 1: Sequence of Steps in CLTS

“a process of social awakening”	1. Pre-triggering Introduction & building a rapport with community
	2. Triggering Participatory method to ignite realization and change
	3. Post Triggering Community formulates plan of action for achieving ODF status
	4. Scaling Up Spreading the message of CLTS beyond the targeted community

Source: Kar, 2008, p. 9

For success on a community level, CLTS asserts the importance that facilitators are of both genders, speak the local language fluently, and are open and approachable.³¹ Since they promote the capacity building of members who emerge as natural leaders, it is imperative that the facilitators draw equitably on both genders and on all socio-economic strata within the community. Encouraging even the traditionally weaker and more vulnerable members of the community to feel they can speak out and work confidently with facilitators helps to ensure complete community ownership, in turn leading to potential empowerment of groups otherwise less engaged in development work and decision-making.

In particular, CLTS emphasizes the participation and involvement of women and children in the sanitation promotion process.³² Women may value private sanitation amenities more than men, but not be in a position to demand them.³³ Therefore, inclusive capacity building that reaches out to various stakeholders within a community is a crucial element of success, noted in many large-scale studies of water and sanitation improvement.³⁴ Some of these studies go even further to suggest that CLTS facilitators must also include members from both sexes and diverse socio-economic classes.³⁵

Led by the above precepts, CLTS has proven successful in engaging and empowering communities with limited resources in numerous countries. As seen in Bangladesh, Ghana,

³¹*ibid.*

³² Mehta, L. & Movik, S., ‘The Dynamics and Sustainability of Community-Led Total Sanitation: Mapping Pathways and Challenges’, *STEPS Working Paper 37*. STEPS Centre, Brighton, 2010, p. 6

³³ UN Water, ‘Sanitation Brings Dignity, Equality, and Safety’, *Sustainable Sanitation: The Five Year Drive to 2015*, available at: <<http://www.sanitationdrive2015.org>>, accessed 15 July 2011;

³⁴ Lenton, R., Wright, A.M., & Lewis, K., ‘Health, dignity and development: what will it take?’ *UN Millenium Project: Task Force on Water and Sanitation*. United Nations, London, 2005.

³⁵ Postma, L., Wijk, C. van, & Otte, C., ‘Participatory quantification in the water and sanitation sector.’ August 2003, PLA Notes, no 47. available at: <pubs.iied.org/>, accessed 14 July 2011, p. 13-18.

Nepal and Pakistan, people have been motivated to solve their own problems collectively, with limited dependence on external support.

CLTS in India and KL's approach in Guna

In India, CLTS has been implemented in various states and met with mixed success. Over the past decade, Haryana, Himachal Pradesh and Maharashtra have been most responsive to CLTS, with dramatic increases in both latrine coverage and usage.³⁶ After having worked in Haryana and HP, the Delhi-based independent consultancy KL began implementing CLTS in the Guna district in May 2011, where the programme's effects are slowly being seen.

In line with the principles of CLTS, facilitators from KL engage villagers in flexible participatory sessions, at times triggering different gender or age groups separately, so as to increase potential capacity building. The interactive methods most often used during triggering include transect walks, mapping defecation areas and shit calculations.

Box 2: Adapted from Kar, 2010

Participatory Approaches For Triggering used by Knowledge Links

- ◆ **Transect Walk**

Villagers lead facilitators to defecation area

- ◆ **Shit Enters Drinking Water**

Facilitators demonstrate how flies transmit faeces using a strand of hair

- ◆ **Mapping Defecation Areas**

Individuals map out defecation areas in village

- ◆ **Shit Calculation**

Community calculates how much shit is left in the open in their village per day

- ◆ **Technical Advice**

Facilitators provide technical advice on building a basic pit latrine



³⁶supra, note 12.

At the end of triggering, and at the request of villagers, KL sketches a diagram on how to build a latrine, and the costs involved. By the end of the session, facilitators have identified natural leaders, and encourage the community to commit to a plan of action should they resolve to eliminate OD. Whenever possible, this is followed up with a trained mason to technically assist with latrine construction.

In addition to community-level triggering, KL conducts CLTS facilitator trainings, inviting men and women from schools, government posts, villages and other NGOs to attend a five-day session, preparing them for addressing the issue of sanitation at the community level. It does this with the coordination and partnership of the Guna Zilla Panchayat, which provides logistical support, and government officials involved with implementing the TSC attend the training as guest speakers. Throughout, there is a strong sense of empowerment among participants being trained as CLTS facilitators, who practise and discuss the success of triggering sessions. Furthermore, villagers who attended practise-triggering sessions are invited to share their own perceptions.

Often times, the impact of triggering is evocatively apparent, with emotive demonstrations leaving villagers driven and ready to tackle their problems. Sometimes villagers recite poetry in support of the sanitation theme, exhibiting strong inspiration to change behaviour, while encouraging others to do the same. Should government officials be present, this can also convince them of CLTS' power to eliminate OD.

Implementation: Challenges & Solutions

External factors affecting SLTS

Central-level governance

While an independent project that is not government run and funded primarily by UNICEF, Vibhavari's SLTS programme, Swach Raho Mast Raho (SRMR), falls within the ambit of the TSC's SSHE programme, affecting its execution.³⁷ The TSC mentions the important role children can play in influencing behaviour change under the IEC strategy. Further, its guidelines allocate a portion of the campaign's budget to provide hardware for schools so children may practise the behavioural changes learned.

There is also provision for software, namely, teachers trained in using good sanitation and hygiene practices and therefore able to effect the necessary behaviour change amongst students, though this is to a lesser extent. It is also relevant to note that ample funding from the government is provided for sanitation hardware in schools throughout India, not only through the SSHE but also through the *Sarva Shiksha Abhiyan (SSA)*, GoI's nation-wide programme for universal primary education.



District-level governance

The district administration is responsible for dispensing government funds. In 2004, a State Plan for SSHE was put in place in MP, yet anecdotal data and observation during field visits undertaken for the present study suggest that several schools now accessing the necessary hardware, i.e. toilets and water storage/handling equipment, lack the vital software component of trained teachers: it is clear that some teachers are not sufficiently trained in proper sanitation and hygiene practices to be able to reinforce what children learn from Vibhavari's activities and training, despite the fact that the TSC and IEC guidelines emphasize the important role school teachers are to play.

³⁷ The form of SLTS being undertaken by Vibhavari follows the same framework for pervasion into the community, but starting with the child, whose influence then impacts the family, and slowly infiltrates into the community.

External factors affecting CLTS

Central-level governance

Shifts in government policy have invariably affected the implementation of CLTS. Limited past success of supply-driven, incentive-based approaches to improving sanitation and hygiene practices called for the TSC's 2004 guidelines to be supplanted by a "community-led" and "people-centred" methodology.³⁸ The revised guidelines state that a "'demand driven approach' is to be adopted, with increased emphasis on awareness and demand for sanitary facilities, and for a cleaner environment".³⁹ Accordingly, support for a participatory and community empowering approach is buttressed by the revised policy, which aims to "enhance people's capacity".⁴⁰

In this vein, the TSC adopts the IEC strategy so as to "create awareness and to bring about hygiene behavioural changes"⁴¹ through behaviour change communication (BCC) and inter-personal communication (IPC) strategies.⁴² Although these seek to "involve all residents"⁴³ of the community, they focus more on *individual* residents, for instance, through a door to door approach, rather than tackling the whole community at once. On the other hand, the community-led strategy implemented by KL with UNICEF support in Guna requires participation of an *entire* community to succeed, and consequently does not strictly fall in line with the IEC approach of the TSC.⁴⁴ Even so, it does share a common goal with the TSC.⁴⁵

While encouraging a participatory and demand-driven approach, the TSC also advocates for incentives for toilet construction to the "poorest of the poor",⁴⁶ namely, those living in Below Poverty Line (BPL) households. This conflicts somewhat with CLTS, which requires an incentive-free environment so as to generate demand for toilets through a permanent, intrinsic change in behaviour.⁴⁷ Although significant research demonstrates that without behavioural

³⁸ DDWS, 'TSC – Information, Education, and Information: *IEC in Rural Sanitation, India*.' 2011, available at: <<http://ddws.gov.in/>>, accessed 29 July 2011.

³⁹ Ministry of Drinking Water and Sanitation, 'Central Rural Sanitation Programme Total Sanitation Campaign.' GoI, 2011, available at: < <http://ddws.gov.in/>>, accessed 29 July 2011, p. 5; Ministry of Drinking Water and Sanitation, 'Central Rural Sanitation Programme Total Sanitation Campaign,' GoI, 2007, available at: <<http://ddws.gov.in/>>, accessed 29 July 2011, p. 5.

⁴⁰ *ibid.*, p. 4.

⁴¹ *supra*, note 38.

⁴² *supra*, note 19: Shukla & Kumar, 2008, p. 4.

⁴³ DDWS, 'IEC Guidelines: Total Sanitation Campaign 2010.' GoI, 2010, p. 6, available at: <<http://ddws.gov.in/>>, accessed 28 July 2011.

⁴⁴ *supra*, note 19: Shukla & Kumar, 2008.

⁴⁵ It is important to note, however, that KL does not receive any government funding.

⁴⁶ *supra*, note 39: TSC Guidelines, 2011, p. 5 & TSC Guidelines, 2007, p. 5.

⁴⁷ *supra*, note 28: Kar & Pasteur, 2005, p. 1; *supra*, note 28: Kar & Chambers 2008, p. 7; *supra*, note 19: Shukla & Kumar, 2008, p. 6; *supra*, note 29: Kar, 2003, p. 4; Kar, K. & Bongartz, P., 'Updates on some recent developments in community-led total sanitation', *Supplement to DS Working Paper 257*. Institute of Development Studies, Brighton, 2006, p. 4; Kar, K. & Bongartz, P., 'Beyond Subsidies – Triggering A Revolution in Rural Sanitation', *IDS In Focus Policy Briefing 10*. Institute of Development Studies, Sussex, July, 2009.

change, policies implementing sanitation programmes will not be successful, and that monetary or material incentives alone do not result in sufficient motivation to utilize functional latrines,⁴⁸ within the context of poverty, some argue that there is an equally pressing argument for fiscal incentives to be provided to those who are economically vulnerable.⁴⁹ This warrants the GoI's protective approach in creating fiscal incentives to encourage toilet construction, but this approach is prioritised over both individual and community empowerment through the IEC. Indeed, the allocation of resources towards the IEC remains low as compared to the remaining resources dispersed for providing BPL households with incentives.⁵⁰ Furthermore, the amount to be given to BPL households as an incentive has now increased from 1200 Indian rupees to 3200 Indian rupees since 2007.⁵¹

Seeking to correct the potential imbalance, the TSC guidelines explicitly require district, block and village administrations to limit the handout of cash incentives to BPL households to situations where the following two conditions are satisfied: (1) such an incentive is *necessary* to attain participation of the *full community* in the TSC; and (2) the BPL household has finished constructing its toilet *independently*, and is visibly *using* it.⁵² This ensures that the incentives are demand, rather than supply-driven, and result in both the toilet's completion and its actual usage.⁵³

Despite the above safeguards, certain challenges to the community-led participatory approach of CLTS arise when incentives are used at all. The main drawback is that the system creates arbitrary economic divides between those below (BPL) and those above poverty line (APL),⁵⁴ rendering APL households less likely to build toilets, since they believe dispensing their own resources is unfair while others are reimbursed. This in turn prevents communities from working together towards a common end, which is problematic when the CLTS approach requires all members to collectively decide to stop OD. Another drawback is on account of how local governmental institutions interpret and apply GoI's policy in ways that undermine what the TSC and CLTS seek to achieve.

⁴⁸Greaves, F. & Webster, L., 'Sanitation and the Millennium Development Goals', *Footsteps*. Tearfund, London, December, 2007; Gupta, V. & Pal, M., 'Community Sanitation Campaign: A Study in Haryana', *Economic and Political Weekly*. 16 Aug 2008.

⁴⁹*supra*, note 22: Sanan, 2005, p. 31.

⁵⁰*supra*, note 44: TSC Guidelines, 2011, pp. 16-17;

⁵¹*ibid.*, p. 9.

⁵²*ibid.*, p. 8; *supra*, note 39: TSC Guidelines, 2007, p. 8.

⁵³"Either the gram panchayat or the PHED determines the latrine design, purchases the materials, transports them to the village, and arranges the construction" (Robinson, A. & Raman, R., 'Enabling Environment Assessment for Scaling Up Sanitation Programs: Madhya Pradesh, India', *Global Scaling Up Sanitation Project*. World Sanitation Programme (WSP), 2008, available at: <http://www.wsp.org/wsp/sites/wsp.org/files/publications/EEMP_TSSM.pdf>, accessed 20 June 2011, p. 27).

⁵⁴Sundaram, K., 'On Identification of Households Below Poverty Line in Census 2002: Some Comments on the Proposed Methodology', *Economic and Political Weekly*. Vol. 38, No. 9, 2003. During our fieldwork, we also witnessed the divide that the APL/BPL distinction created.

District-level governance

The TSC authorises the Panchayati Raj Institutions (PRIs), i.e., the district, block and village levels of governance, to determine how TSC funds will be spent, leaving the responsibility for monitoring implementation of the TSC with state administrators.⁵⁵ In distributing the incentives, several shortcomings were noticed, ranging from lack of transparency to abuse of selection criteria for awarding incentives. For example, in some villages, subsidy has been distributed to BPL households in the form of either money or materials *before* they had constructed and shown use of a toilet, thus contrary to TSC guidelines, while other villages have not received any subsidy. Similar inconsistencies favouring an individual household or section of the community were also noted within individual villages. Naturally, these shortcomings have a divisive effect on the community and undermine its sense of unity, while negating the demand driven approach to toilet construction advocated through the TSC and CLTS. As a result, there is less motivation to participate in or contribute to creating and sustaining an OD free environment.

In Guna, KL is attempting to overcome the above obstacles by triggering relatively small villages that have not yet received any subsidies, and are therefore less likely to be fragmented. Moreover, with the support of UNICEF, KL is making a strong effort to coordinate and create partnerships with local governmental authorities, advocating the successes from its community empowerment approach, so that the Government prioritises the demand-driven aspect of TSC.



Internal constraints

SLTS

As Vibhavari works through its SRMR programme with children, social and cultural barriers (related to socio-economic status, ethnicity, gender, etcetera) do not pose any great limitation. Children inherently are less affected by adult prejudices and are more open to imbibe new knowledge and behaviours. However, the deep-rooted tradition of respecting elders in India, especially pervasive in the rural population, does pose a challenge in that it affects the extent to which children *can* or *do* influence behavioural change within the home, and in the larger community.

⁵⁵*supra*, note 39: TSC Guidelines, 2007, p. 14; TSC Guidelines, 2011, p. 13.

There are also strategic limitations on how effectively Vibhavari relays its message at the community level. Observed during this study:

- ◆ Children seemed insufficiently inspired or trained to take on a leadership role in addressing the community on sanitary and hygienic practices, observed during both village surveys and participatory rural appraisals (PRAs). In part, their limited confidence and capacity could be attributed to the hiatus caused by a long summer vacation, at the end of which they needed to be refreshed on prior lessons, as well as what had previously inspired them. Assuring ignited interest is not diluted, but rather a sustained change in behaviour is crucial.
- ◆ In the community phase (Phase 3) of Vibhavari's approach, facilitators and children conducting PRAs were not adequately engaging, empowering or motivating, and in some instances failed to evoke the community response and participation required to spark a desire for change. Village attendance was low, while little was done to increase attendance.
- ◆ Facilitators lagged in motivation. As one Jagmag Sena student in the Hilagna village noted, although he enjoyed participating in the activities undertaken by Vibhavari, he felt the facilitators did not reinforce good sanitation and hygiene practices on a sustained basis.
- ◆ In some schools, insufficient support by teachers for improved sanitation and hygiene was blatant. This might be because teachers are not sufficiently sensitised and trained, or have less time and inclination to promote good practices, and are therefore not reinforcing Vibhavari's work by acting as good role models for children.

CLTS

Unlike for SLTS, social and cultural barriers are a formidable challenge to CLTS' successful implementation, not only in Guna or MP, but also throughout India.⁵⁶ Sanitation and personal hygiene are deeply rooted in cultural norms and social habits unique to each region. Caste, ethnic, religious and gender distinctions affect the individual's and the community's access to sanitation amenities and even have a restrictive effect on sanitary practices. Facilitators who had been triggering villages in Guna for three months observed that such divides create difficulties when attempting to spur change throughout an entire village, as different castes and tribal communities react uniquely to triggering.

The status of women and insufficient female empowerment, particularly prominent in MP and some other Indian states, hinders any initiative to stop OD. Sanitation is naturally less of a

⁵⁶Dyalchand, A., Khale, M., & Vasudevan, S., 'What Communication and Institutional Arrangements Influence Sanitation Related Social Norms in Rural India?' Institute of Development Studies, 2009, p. 1, available at: <<http://www.communityledtotalsanitation.org>>, accessed 22 July 2011; *supra*, note 32: Mehta & Movik, 2010, p. 6; *supra*, note 28: Mehta & Movik, 2011.

priority for men due to biological and social factors, while it is a necessary convenience for women to protect their privacy and dignity.⁵⁷ In states such as Himachal Pradesh, where women are stepping forward as natural leaders, CLTS has met greater success at a much quicker pace. In MP, lower male and female literacy (77% among male and 52% among female as compared to 82% and 65%, respectively for India as per the 2011 Census)⁵⁸ is also a disabling factor. KL has observed that this lack of literacy can prevent a community, or at least a section of it, from being easily triggered.

Among the strategic limitations observed during the course of this study, irregular post-triggering follow up is conspicuous. The level of support rendered once the community is triggered is inconsistent; for instance, a mason would visit certain villages to aid those motivated to construct a toilet, while in other villages no such



technical support was provided. Understandably, those in the community attempting to build a toilet but lacking technical knowledge were more likely to abandon their efforts. Regularity and quality of follow up are indispensable to keep the triggering effect on the community ignited.

⁵⁷ *supra*, note 32: Mehta & Movik, 2010, p. 14; *supra*, note 19: Shukla & Kumar, p. 22.

⁵⁸ Population Census India, 'Guna: Census 2011,' available at: < <http://www.census2011.co.in/census/district/325-guna.html>>, accessed 30 July 2011.

Impacts of the Initiatives: Quantitative Analysis

Methodology

A total of 144 Individual household surveys were conducted orally in six villages, including three villages where Vibhavari implemented SLTS (n = 85), two villages with CLTS intervention by KL (n = 31), and one non-intervention control village (n = 25).

Questions were aimed at: (1) determining individual household choices to adopt sanitary behaviours, especially focusing on motivation for latrine construction and usage; (2) hygienic practices, such as hand washing and water storage; (3) knowledge as a predictor of behaviour; and (4) the role of children in this process.



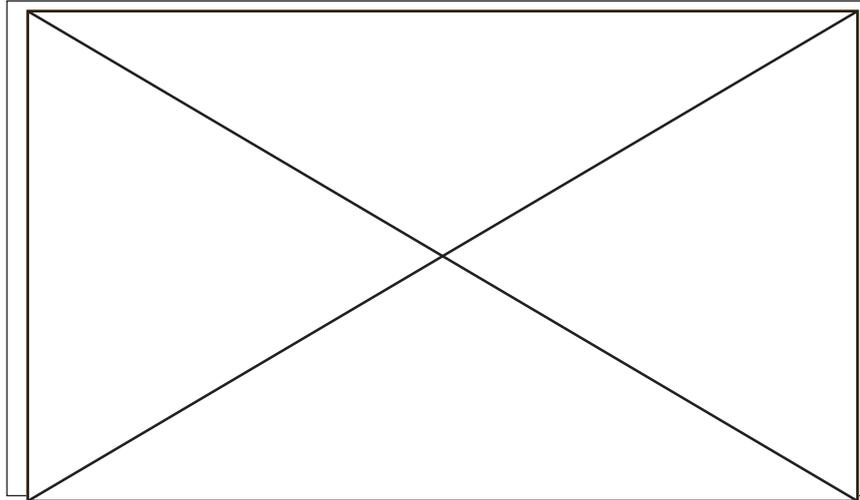
Findings

Toilet coverage

The presence of a toilet in each household was recorded and grouped into three categories: (1) completed toilet; (2) toilet presently under construction; and, (3) no toilet available. If one latrine was shared by two families, it was counted as 0.5 for each household.

As seen in Figure 3, all villages surveyed had toilet coverage (or projected coverage for CLTS villages) higher than the state average. The CLTS intervention villages had been triggered a couple of months prior to this survey, so latrines were not yet completed, but any deemed under construction were visibly in progress and being built by the household itself.

Figure 3: Toilet Coverage by Treatment Village



Source: Survey Data & UNICEF 2011

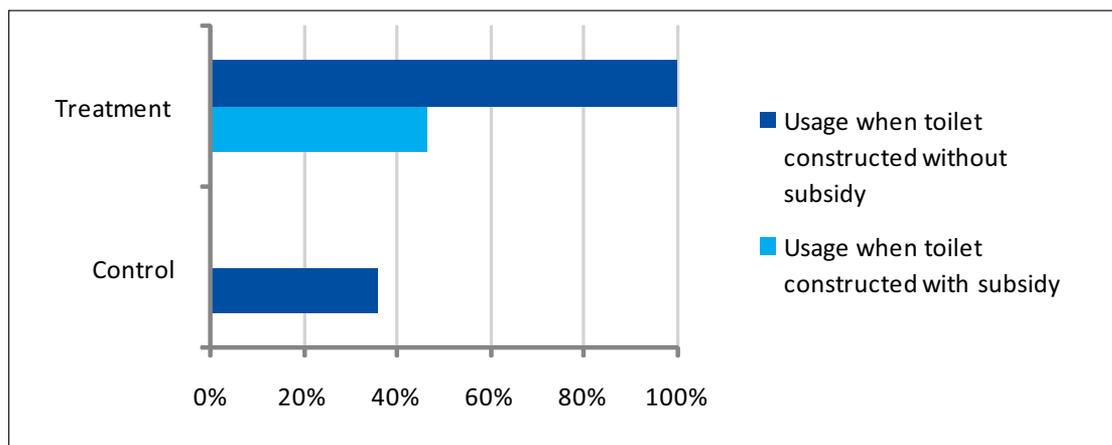
**Only those households visibly in the process of construction*

Unfortunately, the control village surveyed was not representative of either Guna or MP, as 40% of households had a functioning toilet due to the large number of subsidies distributed. However, it is crucial to note that toilet coverage in Figure 3 does *not* reflect usage (see Figure 4). Among households eligible for subsidy (BPL) in SLTS intervention villages who had a toilet, 72% had been constructed due to subsidy, versus 100% of toilets in control villages. In CLTS villages, no subsidy had ever been distributed.

Toilet usage

To measure usage, respondents were asked to confirm that all members of the household actually use the toilet. This was ascertained by visual inspection, and each toilet's condition was noted. A latrine used by only some household members was counted as half used.

Figure 4: Treatment as a Predictor of Latrine Usage



**Total usage is measured out of total households surveyed, excluding those households visibly in the process of constructing a latrine.*

***No households in control village constructed latrine without subsidy.*

Of all households surveyed in Guna, 27% (26.5/100) of those in intervention villages were using a latrine, versus 20% (5/25) in the control. As expected, households who constructed a latrine without government support used it 100% of the time. Among households with toilets that received a subsidy, usage was 50% (7.5/15) in treatment villages, versus 33% (5/15) in the control. However, if subsidies are taken as a predictor of usage among all BPL families (eligible for subsidy) irrespective of treatment, subsidy-receivers were more likely to utilise a toilet than non-recipients (p-value = 0.026). Interestingly, a total of 16 households were actively constructing a latrine at the time of visit, 14 of those from CLTS villages and all without subsidy. Assuming all those constructing latrines will utilise them, total usage among treatment villages will rise to 37% (42.5/116).

Knowledge-behaviour gap

To assess the trend in behaviour as it correlates to knowledge, awareness about sanitation and hygiene was gauged on a scale of one to three: three when the respondent could fully explain the importance of toilet usage, including disease transmission, or the dangers of OD; two when OD was known to be unclean, but no reason was given; and one when there was no awareness at all. Those in the process of constructing a latrine were counted as users for the purpose of this assessment, since it was assumed they are in the process of changing behaviour as a result of the awareness acquired.

Figure 5: Measuring the Knowledge-Behaviour Gap

Awareness	% Latrine Users	% Open Defecators	Of Open Defecators	
			% Bury Excreta	% Do Not Bury
1	8	92	1	99
2	14	86	21	79
3	22	78	33	67

Key: Awareness 1=No knowledge, 2 = Some knowledge, but no reason, 3 = Full explanation

Overall, there is still a wide gap between knowledge and behaviour, as seen in Figure 5. Even among those at Level 3 of awareness who could offer a full explanation of disease transmission, toilet usage and the burying of excreta were low, at 22% and 33% respectively.

31% of respondents from SLTS villages were able to explain disease transmission in detail, 52% from CLTS, and only 16% from the control village. Out of twenty-nine respondents from CLTS intervention villages with toilets constructed or under construction without government help, eight claimed to have acquired knowledge on why using a toilet is important solely from the triggering session, having no prior knowledge on why OD is unhealthy.

Reasons for toilet construction and utilisation:

- ◆ Among 37 families with toilets constructed or under construction without government help, the leading reasons offered for ceasing OD were convenience (8) and women’s privacy/dignity (5).
- ◆ Other reasons cited for toilet construction were: a desire for cleanliness (5), motivation through a child (2), religious requirement for purity (2), disgust with cattle eating human excreta (2), marriage (2), and shame associated with OD (1).

Reasons for not building or using a toilet

The most common reason for not having a toilet was lack of money, with 81% of BPL households and 63% of APL households stating this as their main disabler. Of 76 respondents without a toilet, 19% (14) stated that they were waiting for government subsidy.

Out of 49 households with functioning latrines, 18 were not using them. These families stated several reasons for not doing so, including:

- ◆ OD posed no health risk, as they defecated sufficiently far from home.
- ◆ Having a latrine in or near the home is dirty.
- ◆ Eight claimed the toilets were not finished or were improperly built (though upon inspection, seven of the toilets were in fact usable).
- ◆ OD is a life-long habit.
- ◆ The walk to the OD area is an enjoyable daily excursion.

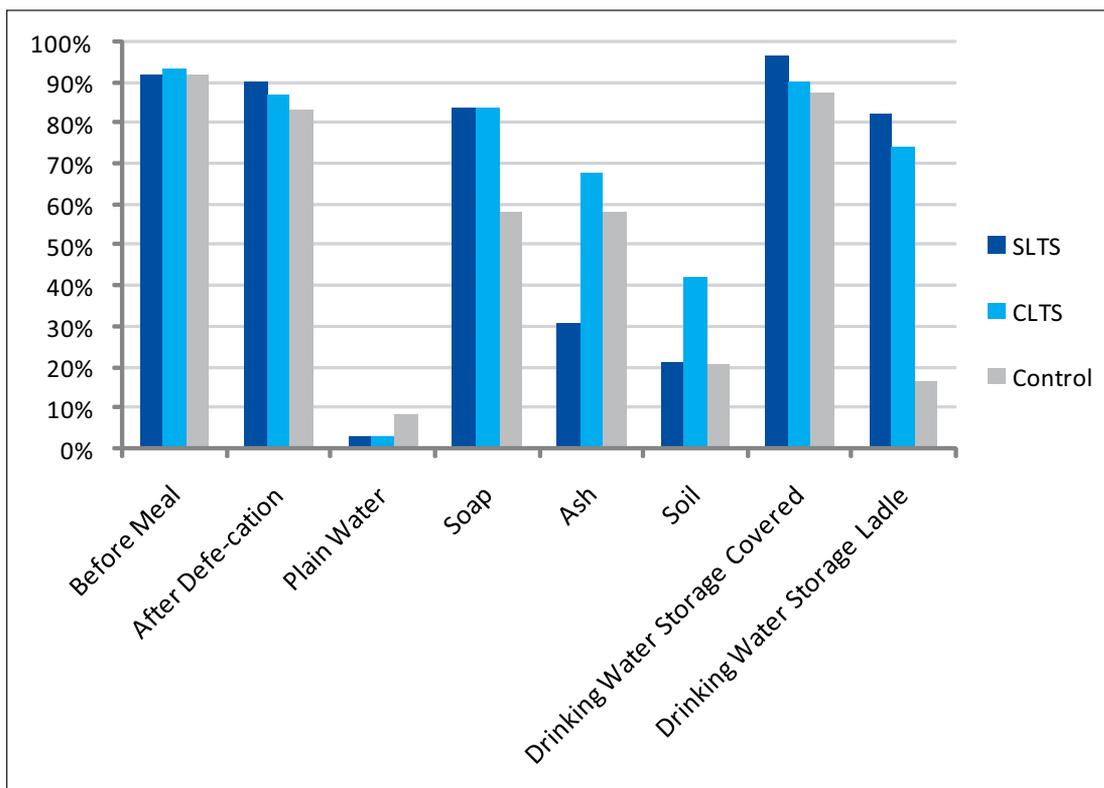
Figure 6: Reasons for not building or using a toilet

	No Money (%)	Safe Distance/ No Risk (%)	Habit/ Comfort/ Culture (%)	No Space (%)
Treatment (n = 74)	68	15	21	32
Control (n = 20)	35	18	12	18

Hygiene indicators

With regard to hand washing (Figure 7), between 83% and 94% of respondents from both treatment and control villages wash their hands at crucial times before meals and after defecation, though 84% use soap in the treatment villages, as compared to only 58% in the control group.

Figure 7: Hygiene – Hand washing and Water Handling



The use of a ladle for handling water was also significantly less in the control village (17%), compared to between 74% and 82% in intervention villages. Regardless of intervention, between 85% and 96% of people surveyed cut their nails regularly, and between 94% and 100% bathed daily.

Qualitative Assessment

Methodology

Qualitative assessment was based on observations, informal group dialogues with school children, and detailed interviews conducted in seven villages with 15 children, of whom 11 were Jagmag Sena in Vibhavari's initiative, and four were present at CLTS triggering sessions. An equal number (15) of interviews with the parents of these children were also conducted. Notably, two of the interviewed children had attended a UNICEF funded conference on Child Rights, 'Baal Adhikar', in 2008.

Children were selected for interview if they were either visibly extroverted or reportedly active in promoting sanitation and hygiene. As such, they were better positioned than other children to depict to what extent children are capable of advocating sanitation as agents of change.



Interviews were aimed at assessing children's individual behavioural change, their contribution towards improving sanitation and hygiene practices, especially in eliminating OD, at home and in the community, and to gauge the best practices by the organisations that impacted and motivated them. Questions captured their favourite activities and what demonstrations were most influential, as well as the extent of familial and peer support. Children's responses were cross checked through interviews with their parents, and, when possible, toilet access and usage were verified through home inspection and observation.

Findings

Vibhavari's impact on children

Out of 11 Jagmag Sena interviewed, 5 independently recalled a demonstration where a volunteer rinses his hands over a cup and is asked if he/she would drink the murky water in that glass. The same number also recalled role-playing in a skit where children act as ghosts who perished from disease due to OD. Literary activities such as writing newspaper articles and poetry were the third most popular activities recalled (see Figure 8).

Figure 8: Vibhavari’s Interactive and Participatory Activities with Most Impact*

Favourite Activities	# of Responses
Hand Washing ~ Clear to Grey Water	V
Role play (Pappuka Pitara)	V
Writing Poetry	III
Writing for Newspaper	II
Spot the Difference	I
Sanitation Hero Quiz	I
Dance	I
Disease Wheel	I

**Most often recalled by 11 Jagmag Sena during interviews*

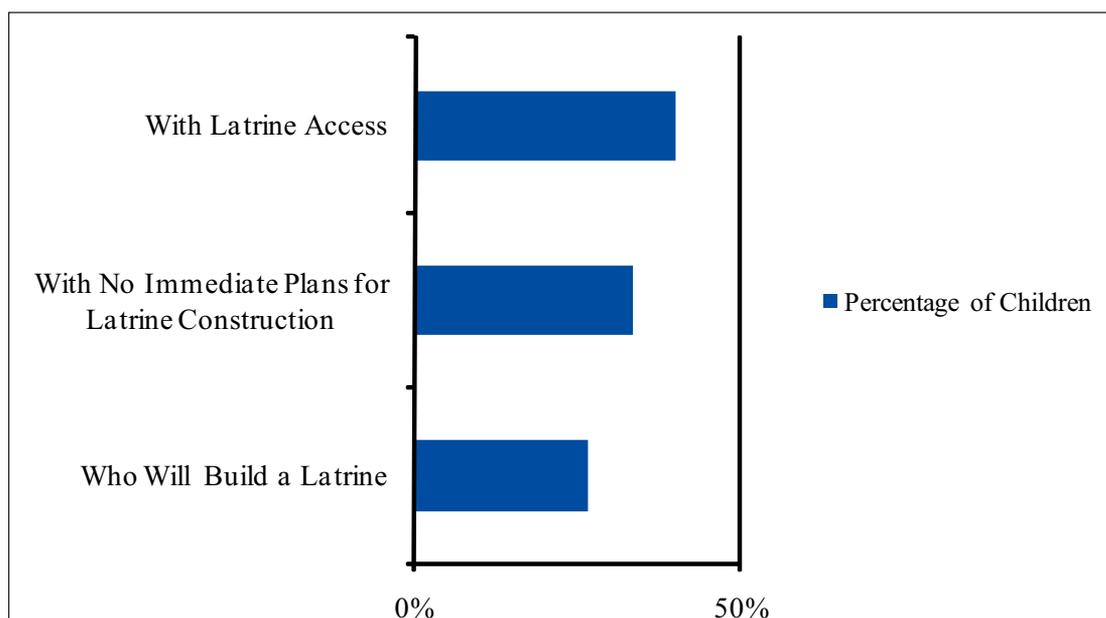
Children as agents of change

Among the 15 children interviewed, six have access to a toilet. Of these six, three were agents of change instrumental in the construction of a toilet within their household. Notably, four children voluntarily expressed wanting a latrine, but were waiting either for parental approval or the monsoon to end, while five did not express any desire for a latrine in their homes. As demonstrated in Figure 9, even children chosen as Jagmag Sena, presumably due to some tendency toward leadership, still might not access proper sanitation amenities. However, it is important to note that desire for a toilet was gauged based on spontaneous responses offered by children, and not prompted by interviewers. All children interviewed who have a latrine use it. In terms of social support from family and peers, 9/15 of children interviewed felt supported by their family in activities promoting sanitation, and 5 of these children have toilets at home. Among the 6 with weak familial support, 5 do not have toilet access.

In terms of hygiene, all Jagmag Sena interviewed practise hand washing and 9/11 successfully influenced their parents to adopt hygienic practices, specifically to use soap. Of the four children who were not members of the Jagmag Sena, only half practise hand washing.⁵⁹

⁵⁹ This is self-reported data collaborated with observations.

Figure 9: State of Sanitation of ‘Active’ Children



Additional observations

From interviews with adults, it was clear that women’s privacy/dignity/modesty were major factors motivating toilet construction, corroborating findings from survey data. Of those who constructed, or were constructing latrines, two parents of the Jagmag Sena and two male heads of household stated that their primary reason for having a toilet was to provide women with greater privacy. In Chowki village post-CLTS triggering, ‘natural leader’, Chandan Singh, built a toilet for two reasons: convenience and concern over his daughters going outside to defecate. The toilet’s utility was strongly reinforced by his wife, who rhapsodised about the increased privacy and lack of mosquito bites from the newly constructed toilet. In Hilagna village, Shanthi Bai, the mother of Jagmag Sena member, Balraj Lodha, stated that in 2010, a communal latrine for the village was built to protect the ‘modesty’ of the new bride.

- ◆ In all Vibhavari villages visited, school teachers seemed accepting of the NGO’s presence and recognised the importance of sanitation, though none expressed specific ways in which they reinforce behaviours regarding sanitation.
- ◆ The three locally employed women interviewed were aanganwadi (crèche health care workers). All stated that men and women in the community alike listen to their recommendations regarding sanitation and hygiene. They felt confident and empowered as a result of their position and also after having attended CLTS training a few years ago.
- ◆ In the SLTS village Bilonia, students were observed during their midday meal, at which time most washed their hands with water only; the use of soap was not observed.

- ◆ In the control village, Berkhedi, toilets constructed with UNICEF funds were found locked and in complete disarray, clearly in disuse. The headmaster claimed they were broken.



- ◆ Near Saujana village, male students were found urinating outside locked latrine doors. A school teacher justified this by stating that the headmaster was currently away. Yet when later asked for permission to use the toilet, she quickly procured the key.
- ◆ In Negma village, separate toilets for girls and boys were constructed with UNICEF funds, and, though utilised, they were in a filthy state.

Resource Requirements

Few resources are necessary to carry out the practices discussed in this study. The underlying concept of both SLTS and CLTS is that implementation is not hindered by a lack of financing, but rather it thrives when the appropriate software is available.

For a school-led approach, the hardware has to be in place as a prerequisite. The one overriding and critical resource for SLTS is the availability of easily accessible latrines that function and are well maintained; otherwise, teachings regarding sanitation are wasted and automatically contradicted by realistic constraints. Clearly, a community must also have a school, hand washing facilities and access to soap and water.

Interactive activities, such as sanitation kits, games and basic hand washing materials are especially important. These help to make learning fun and cleanliness feasible. Timing of an activity can also be influential. For instance, when hand washing precedes the midday meal, the practice becomes more acceptable to children eager to have a meal, and gets embedded more readily in permanent behaviour.

For CLTS to succeed, the software is even more important. Enthusiastic facilitators, who emphasise participatory methods, are conversant with the local language, and directly engage the crowd and address community concerns without lecturing provide sustenance for triggering, propelling the change in mindset necessary to eliminate OD. The careful selection, recruitment and training of facilitators are vital to the impact and sustainability of CLTS.⁶⁰ The identification of ‘natural leaders’ within a community is also critical, leading to the capacity building of invested stakeholders who will steer and sustain the desired behavioural outcome.

For CLTS, the support of local governance is vital: where the bureaucracy has been receptive to the CLTS approach of minimising the role of subsidy and involving the entire community, attaining behavioural change has been easier.

For post-CLTS triggering follow up, the availability of locally trained masons is indispensable to the construction and use of toilets.

⁶⁰*supra*, note 27: p.22.

Sustainability

As noted in this study (and in relevant literature), a host of factors affect the sustainability of sanitation programmes and the maintenance of an ODF environment. Concurrence and resolve amongst all members of a community are necessary to achieve the desired outcome and to permanently sustain it. Equal participation and involvement by men, women and children assures compliance at the school, household and community levels, while children carry the good practice into adulthood, making for lasting behavioural change. Democratic participation that is inclusive and does not favour or discriminate for or against any one group has been found to contribute to the sustainability of community water and sanitation programmes, whereas divisiveness in a community undermines its collective performance.⁶¹

Familial support is also critical for children to change their own behaviour, and that of the family. Where age is traditionally prized and children are not viewed as sources of wisdom to guide elders, parental support and involvement are needed to complement and sustain the active role of children within the community (see Box 3).

Box 3: Varsha Rawat – An unsupported agent of change

After attending CLTS triggering, Varsha and Sunita Rawat of Chowki were among a group of children who dug pits and constructed latrines within a few days using available materials. However, in a subsequent visit, the toilets somehow ‘collapsed’. The sisters explained that their parents did not support their endeavours, and were demoralized.



To ensure people do not revert to their former behaviours once the intervention has occurred, it is important that people fully understand the faecal-oral route of disease transmission, and as a

⁶¹ *supra*, note 35.

result they unfailingly demand latrine usage and better hygiene practices within their communities.⁶²

To achieve the desired health outcomes, as both the SLTS and CLTS programmes in Guna demonstrate, giving high priority and allotting adequate resources to hygiene education and promotion is central to shaping behaviour.⁶³ The ‘software’ aspect – instilling the desire to wash hands, protect drinking water, cease OD etcetera – not only supports the use and maintenance of hardware but also generates demand for it, whether in schools, homes or in the community. As noted earlier, hardware alone accomplishes little. Conversely, improvements in hygiene cannot occur without access to fully functioning hardware.

Both a valuable resource and key to sustainability, school teachers play an important role in SLTS (as in SSHE), as they have the ability to motivate and monitor students throughout the day, on a consistent basis. An enthusiastic instructor who promotes hygienic practices, acts as a positive role model, and encourages children to advocate change, is of paramount importance. Proper identification, recruitment, and utilisation of human resources are essential to sustained behavioural change. Capable, sensitised and motivated facilitators are not only able to effectively trigger, but also to follow up with schoolchildren and the community, monitor OD, and re-trigger when appropriate. The importance of identifying ‘natural leaders’ among women and hiring female facilitators is especially beneficial, and critical to the capacity building of local stakeholders. Women’s empowerment and participation, as studies elsewhere have also shown, increases community investment and leads to improvements in health and basic sanitation. ‘Natural leaders’ of both genders and of all ages, through their own example and role in sustaining community enthusiasm, are vital to promoting lasting behavioural change.

⁶² Kalimuthu, R., ‘Sustainable Community Owned Total Sanitation’, *Beyond Construction: Use by All*. Water Aid, London, 2008, p. 170.

⁶³ Shordt, K. and Cairncross, S., ‘Sustainability of hygiene behaviour and the effectiveness of change interventions’, *IRC Water and Sanitation Centre*. IRC, March 2004, available at: <www.wsp.org>, accessed 30 June 2011.

Best Practices

The purpose of this study was to determine the best practices for eliminating OD from Guna, MP, and assess their potential for application elsewhere in India or in other countries. During field observations, several practices stood out as the most successful and replicable. These are included below as implemented by Vibhavari (SLTS) and KL (CLTS).

Vibhavari & SLTS

The success of Vibhavari and SLTS lies mostly in educating, sensitising, empowering and transforming children's behaviour. Importantly, observing children during field visits showed that those who were members of the Jagmag Sena (Sparkling Army) were visibly cleaner, especially in the villages of Bilonia, Dungasrahada and Pagara, where every child enthusiastically explained, without being prompted, the six techniques they had learnt to hand wash with soap. They were also able to explain in detail the importance of hand washing in disease prevention. The establishment of this practice amongst children and the diffusion of this technique into the household (82% of interviewees) demonstrate that Vibhavari met two of its principal objectives: personal and domestic hygiene.

Hygienic behaviour has clearly changed amongst school children who participate as Jagmag Sena members, and their adoption of positive practices, combined with their knowledge and vigour, paves the path for change at the community level. The reason for the successful establishment of good hand washing practices throughout Vibhavari villages is the engaging, interactive and informative activities facilitators undertake with school children, which appear to leave a lasting impression.

As reported in interviews, the most popular demonstration tool was a graphic one that creates cloudy 'grey' water unfit for drinking when a volunteer rinses his/her hands. The facilitator chooses a child with 'clean' hands, who washes them over a cup with water alone, which usually produces murky brown water, and the child is then asked if he/she would drink this water. The disgust amongst all children is immediately apparent, and exaggerated when the facilitator reminds students that if soap had been used, even more dirt would come off. This visual demonstration propels reflection about eating with dirty hands, and why hand washing before meals is important.

Role-playing was also popular, and children particularly mentioned the skit involving ghosts who died due to a faecal-borne disease. A humorous video of puppets describes the negative health impacts of OD and the importance of burying excreta, which kids then re-enact. That the

majority of children questioned were able to explain precisely why these actions would reduce health risks, showing that Vibhavari's communication tools are well targeted around key messages, liked by children and effective.

The significance of universalising hand washing cannot be overstated, since complete interruption of faecal-oral transmission cannot be sustained without this hygienic practice. This is especially relevant in rural MP, where 48% of the population utilizes groundwater,⁶⁴ which is less prone to contamination by OD, but still susceptible to contamination by hands and flies post-withdrawal. The high incidence of diarrhoea, despite availability of water presumably clean at the source, indicates the need for improved personal and domestic hygiene practices, “[a]s presence of a toilet alone does not interfere with all faecal-oral transmission routes”.⁶⁵ In this context, Vibhavari's visible impact on handwashing is especially impressive, beneficial and laudable.

The key lesson is that Vibhavari's sensitisation tools positively engage children, and can foster improved hygiene in children's personal behaviour, as well as in their domestic or school environment. The larger impact of hand washing and the relative ease of disseminating and imbibing this simple, least cost practice makes it central to any SL or CL total sanitation initiative, not just in MP



or India, but globally. Even in developed countries, this practice is being vigorously disseminated, not only among school children, but also in the workplace, where hand washing after toilet use and before touching food is gaining wide support as an effective way to prevent the spread of infection.

On the other hand, knowledge alone does not guarantee improved compliance, as seen from the SLTS (and CLTS) programme in Guna. As interviews showed, despite children's sound theoretical knowledge, the majority admitted that they do not have access to a latrine and do not even bury their waste, despite awareness that not doing so is hazardous.

⁶⁴International Institute for Population Sciences and Macro International, 2008. *National Family Health Survey-3, India, 2005-06: Madhya Pradesh*. Mumbai: IIPS.

⁶⁵*supra*, note 48.

Another positive lesson worth noting is the broader gain of SLTS from establishing a rights-vested childhood, where children exercise and express their rights, and are likely to continue positive behaviours in adulthood. As the Vibhavari experience reveals, the Jagmag Sena's demand for hygiene in their communities is an expression of a desire to attain the right to sanitation, clean water and a clean environment, generating self-respect and dignity amongst its young members. By asserting this verbally or through writing, they are, in turn developing their voices, building confidence and becoming empowered.

Practices learned through SLTS inspire engaged social actors, and students involved feel a distinct sense of importance due to their unique participation during discussions about the health and wellbeing of their community. Discovering that individual behavioural changes can have such significant impact, children feel responsibility and pride in their role, further encouraging them to act as agents of change.

The fact that during interviews parents also expressed pride in their child's status as an agent of change in the community, and recognised the prestige of this position, is a valuable lesson in the merit of shared roles for human development across the age and gender divide. Govinda Jovar's parents in Morkhedi village were even motivated to construct a toilet in their house after his participation in UNICEF-sponsored activities promoting child rights, sanitation and hygiene. And in Haripur village, the increase in a child's prestige due to participation in the Jagmag Sena and attendance at a 'Baal Adhikar' conference in the city motivated Yadav's family to complete a toilet in fifteen days that purportedly had been under construction for ten years!

Knowledge links& CLTS

The experience of KL with implementing CLTS provides a mix of strategic lessons. Triggering a community is central to their awareness and ownership of the proposed lifestyle change. During this process, several practices employed by KL in Guna have met with success. One demonstration observed to have left a lasting impression on participants entails comparing a single strand of human hair to a fly's leg. This strand is dipped in faeces and then placed in a cup of water, after which people are asked if they would drink it. When facilitators point out that flies have not one, but six legs, the effect is further reinforced. During the triggering sessions observed, this practice was pivotal, clearly eliciting the most drastic reaction from the crowd. Prior to this demonstration, the prevailing mood was a mix of amusement, boredom or indifference, while afterwards there was either a stunned silence or discussion on the community's perceptions, needs and problems regarding sanitation and health. Importantly, a month after triggering and without being prompted, a number of survey respondents, when questioned about knowledge and awareness leading to their behavioural change, were able to recall this demonstration. Villagers explained that this graphic visualisation of excreta contaminating what they ingest propelled them to stop leaving their faeces exposed to flies.

Although the role and impact of triggering in CLTS are undoubtedly powerful, the triggering process does not always elicit a drastic reaction, and its practice is smeared with challenges. Triggering tools have to be dramatic in order to jolt the community. As KL's work in Guna is revealing, not every tool elicits the abhorrence or shock necessary to spur a willingness to change. As KL's work across India demonstrates, to get the optimum reaction and desired response, the triggering approach must be tailored to the prevailing local social environment, specific interests and principle concerns of each village and community. In Guna, as KL found out after some initial sessions, many communities, even when convinced, do not react with vigour to triggering, but rather feel there is little need to alter a long-established way of life. In such contexts, persistent yet discreet follow up is required to identify ice-breakers, movers and shakers, i.e., the 'natural leaders' within a community.

Among reasons that propel demand for toilets in the villages, a leading factor emerging from the present study of the KL programme is convenience for all members of the household, but especially for its females. The decision to have a toilet was clearly independent of economic incentive, as several villagers interviewed had constructed latrines decades before the emergence of subsidy. Protecting women's privacy and dignity was a dominant factor in building and using toilets: out of 37 households who either constructed a toilet without subsidy, or were in the



process of doing so, 5 offered reasons relating to females as their primary motivational factor. For instance, in the village of Haripur, a toilet's construction was motivated by a child who felt ashamed of having to defecate openly, and the family's desire to protect its women; in Chowki and Khuja villages, because the family felt it was not proper for women to go outside to defecate; and in Hilagna, out of a desire to protect a new bride's modesty, and not letting women go "here and there". Based on this most commonly cited reason – upholding women's dignity – KL has tailored its approach in the few months since coming to Guna to emphasise respect for women's privacy and dignity as a major rallying point for motivating communities to accept the need to build and use a toilet.

The importance of convenience of latrine access cannot be overstated. There is ample evidence from community interventions on water and sanitation in Guna and elsewhere that the

intervention is more likely to be adapted if it is convenient (accessible) and easy to use.⁶⁶ Among the present study's respondents, out of 37 households with independently constructed latrines, eight offered convenience as a primary motivational factor. A Morkhedi village resident, for instance, noted that he started building a pit latrine after attending CLTS triggering, primarily from being convinced he would save significant time by having a toilet in his household, rather than going out to defecate. In addition to concern for women, and convenience, the overall cleanliness of the community was another motivating factor.

Even though popularly cited as motivation, convenience is not always a sufficient reason for utilising a latrine. In villages where a number of sturdy toilets constructed through subsidy remain unused, it is clear that OD is not necessarily viewed as inconvenient. For example, in the non-intervention control village of Berkhedi, 56% of households had a well-constructed private pit latrine, yet only 20% of families were defecating in it. In fact, most villagers in Berkhedi perceived no convenience from using a toilet, some even expressing a preference to “go into the jungle” for OD. KL's focus on provoking the use of existing facilities is thus necessary, and such successful intervention is of potential value to others seeking to improve usage levels.

Providing economic incentives is not favoured by KL, as prior experience demonstrates that this does not necessarily lead to the desired behavioural outcome, especially with regard to sanitation and toilet usage.⁶⁷ That incentives can have the opposite effect of deterring action and change is equally clear, as seen in Guna, where 19% of survey respondents without a toilet admitted that although wanting one, they were waiting for a subsidy, and would not take action when such a handout existed. This is direct evidence of a subsidy approach acting as a disincentive to achieving sanitation. As an astute woman from Hilagna put it, “subsidy makes the rich people poor and the poor rich”. According to her, the subsidy approach is futile because the BPL and APL distinction is arbitrarily and politically created and, economically speaking, there is in truth a very fine line between the two.

“...subsidy makes the rich poor and the poor rich.”

—*Woman in Hilagna*

Overall, in terms of lessons, it is important to note that KL has been working in Guna only since May 2011, and its programme therefore requires more time to achieve its fullest capacity. As it gains further experience in MP, and its facilitators have a chance to exercise various approaches, some previously successful in other states and countries, it is bound to reach more goalposts in Guna.

⁶⁶ De Wilde, CK., ‘An integrated method for evaluating community-based safe water programmes and an application in rural Mexico’ *Health Policy and Planning*. 7 August 2008; 23, pp. 452–464.

⁶⁷ Haryana is the prime example of a state with a high income but low sanitation before CLTS triggering. Vikas Gupta illustrated the dearth of latrines when he stated “52 per cent of households had televisions, 76 per cent had radios but only 29 per cent have latrines or toilets in their houses” (*supra*, note 49: Gupta & Pal, 2008).

Potential For Further Application

Neither initiative by Vibhavari or KL is novel or unique; similar versions of each have been applied in other Indian states, and in countries around the world. Based on the success of such approaches elsewhere, as well as taking lessons from the experience of the twin programmes in Guna, it is possible to address their limitations, enhancing the potential for their scale-up and replication.

Coordinating SLTS & CLTS

SLTS approaches have been widely applied and have met with success in many developing countries and regions. Often, however, they are most successful *when applied in collaboration with CLTS*.⁶⁸ Where schools have been triggered alongside the community, as in Himachal Pradesh, Orissa and Uttarkhand in India, as well as in Bangladesh, Indonesia and Kenya, attaining both an ODF school and ODF village is more likely than attempting to achieve either of them separately.⁶⁹ Community participation and support is essential to the SLTS process because children ultimately are dependent upon adults for the necessary hardware to change their behaviour and to start utilising toilets. It also ensures that children's empowerment through participation is not undermined but reinforced: if community members desire and intend to change sanitation practices, they are more likely to listen to their children, rather than be dismissive of them.

Combining children with adults during triggering also promises greater cumulative benefit. In addition to likely monetary savings from shared technology and resources by CLTS and SLTS, children are strongly impacted by the same triggering techniques as adults⁷⁰ (for instance, the shock effect of the 'grey water' demonstration by Vibhavari, and the fly-contamination demonstration by KL). More importantly, children often alter their behaviours more rapidly than adults, which can, in turn trigger the pace of change in the community.

Based on the above, it is possible to surmise that the success of any sanitation programme aiming to utilise children as agents of change must incorporate both school-led and community-

⁶⁸Verma, A., 'Children /School Led Total Sanitation: Experience from India and Cambodia.' Undated, available at: <<http://www.communityledtotalsanitation.org/>>, accessed 8 June 2011 (Verma); Setiawan, E. & Rahman, Z., 'School Led Total Sanitation and Children's Involvement in CLTS.' Undated, available at: <<http://www.communityledtotalsanitation.org/>>, accessed 8 June 2011; Adhikari, S. & Shrestha, N., 'SLTS: A successful model to promote school and community sanitation and hygiene in Nepal.' *Beyond Construction: Use for All*, Water Aid, London, 2008, p. 124.

⁶⁹*ibid.*

⁷⁰ Mehta, A., 'Igniting Little Minds for Total Sanitation.' Undated, available at: <<http://www.communityledtotalsanitation.org/>>, accessed 8 June 2011.

led sanitation, as the former cannot prevail unless elders of the community also understand why OD and other related behavioural changes are important for the community's health and wellbeing. Accordingly, both Vibhavari and KL should consider working in partnership, especially by coordinating the third phase of Vibhavari's programme with the community's triggering and post-triggering follow-up ensured by KL, which has far more experience in engaging and sustaining community interest in total sanitation.

Teachers as igniters

In the SLTS process, teachers are central to igniting and sustaining changed behaviour. It is their participation and encouragement to practice good sanitation and hygiene that can make or mar SLTS.

Teachers' contribution to an OD-free community and school is seen repeatedly in several case studies of successful projects undertaken by researchers (such as by Anupama Verma's assessment of projects across India and Cambodia).⁷¹ As Setiawan and Rahman also note, "[t]he success of SLTS largely depends on the knowledge and understanding of the teacher and school management... regarding triggering and most importantly, facilitation skills".⁷² This consistent finding highlights the significance of an animated, informed and committed teacher, regardless of the social, cultural and geographic context of implementation.

Downplaying subsidy – an autonomous community

CLTS' success in other Indian states is due in part to local administration downplaying the role and availability of subsidy, as in Haryana, and the giving up of subsidy entirely in Himachal Pradesh.⁷³ Where incentives were combined with equal or greater emphasis on the demand-driven, behavioural change-based, participatory approach (as seen in Himachal Pradesh and Maharashtra in India, and in Bangladesh), CLTS accomplished greater improvements. In all cases, a cash sum was provided as a reward to entire villages only after they were declared ODF,⁷⁴ thus motivating communities to change behaviour in solidarity.

Women's empowerment

The CLTS experience suggests that empowered women are better able to lead the change process. In India, CLTS has fared better in states that have higher literacy and education levels than MP, and where women play a more active role and are generally more empowered. In SLTS likewise,

⁷¹*supra*, note 66: Verma.

⁷²*supra*, note 66: Setiawan & Rahman, p. 74.

⁷³*supra*, note 19: Shukla & Kumar, 2008; *supra*, note 20: Sanan, 2005; *supra*, note 23.

⁷⁴ *ibid.*

women's involvement as teachers, mothers, and local level workers within the administrative or elected bodies at the village level enables them to lead and support the school and community sanitation drive, and more importantly, to serve consistently as role models. Concern for women's dignity and its impact on generating demand for toilets is another rationale for placing women at the centre of sanitation promotion, and the desired change.



Instituting human rights in society

The overriding benefit of SLTS and CLTS is that they create demand for certain rights that people might otherwise be unaware they have. As noted earlier, clean water and sanitation cannot emerge as a right so long as they are merely perceived as services supplied by the government or luxuries exclusively for the rich. Clean water and toilets must be viewed as a basic human right and demanded as such. Merely supplying sanitation amenities without demand for them as a common right is unproductive, and their use will remain unsustainable.

By using CLTS and SLTS to generate acceptance of children's and the community's right to health and a sanitary environment, the two approaches can have a multiplier effect. Creating community and school awareness that a right exists for children's wellbeing will not only change children's behaviour, but also adult behaviour. (This has been successfully illustrated globally with respect to other children's rights, such as education, and protection against child labour and child abuse.)

Furthermore, if participatory approaches, such as SLTS and CLTS incite children to analyse their own situation and realise they have certain entitlements, they will develop the desire to fight for such rights, which will empower them. In the broader context, it is fair to suggest that using community-led and school-led participatory approaches to ignite change encourages people of all ages to be aware of, demand and respect human rights.

Multiple applications of CLTS

CLTS methods have been creatively applied outside of the context and terrain for which they were originally created, and have proved successful. For instance, instead of being used only in rural areas, CLTS was implemented in Kalyani, a slum settlement north of Calcutta in West Bengal, India, and in Kilifi in Kenya.⁷⁵ CLTS has also been applied to accomplish objectives

⁷⁵*supra*, note 27: p. 16.

other than obtaining an ODF community. In Alibag in the Raigarh District of Maharashtra, CLTS techniques were used to attain a waste-free city. Similarly, in Cairo, Egypt, such methods were used to clear a part of the city from waste and rubbish.⁷⁶

Because CLTS brings communities together and identifies ‘natural leaders’ within, it serves as a reliable basis for collective action that may be desirable or necessary in other spheres of life. In Bangladesh, CLTS brought a community together to transform fields previously used for defecation into agricultural fields. This had positive repercussions for the village as a whole, as members no longer suffered from food shortages and were also able to profit from the crop sold.⁷⁷

⁷⁶*ibid.*

⁷⁷ BBC, ‘How community-led total sanitation led to better farming’, available at: <<http://www.communityledtotalsanitation.org/>>, accessed on 20 July 2011.

Recommendations and Next Steps

Vibhavari

The biggest limitations in Vibhavari's programme are that it has failed to sufficiently address OD, and that it does not have significant impact at the community level. Considering the impressive success of SRMR in instilling proper hand washing practices amongst school children, and the diffusion of this healthy behaviour through children into their households, addressing the problem of OD more pointedly and with much greater focus on the engagement of children and the community could significantly strengthen the programme's achievement and impact. Although children have much less authority to significantly alter OD or toilet usage practices within their families, placing more emphasis on ceasing OD beginning at the school level offers promising potential for great impact, especially as children grow into teenagers and young adults. Once able to grasp that OD is harmful and shameful, older children of grades 7-12 in particular will likely command greater say in influencing their elders than younger children, and could help to eliminate OD.

Vibhavari's limitation in penetrating at the community level through Phase III of SRMR is another area which could benefit from its association with KL, especially due to the latter's experience with community engagement. So far, Vibhavari's facilitators have been hosting participatory rural appraisals (PRA) with limited success, as the sessions observed were not participatory, had low



attendance, and were led by facilitators who were either untrained in or unable to use CLTS methodology. Since most facilitators from Vibhavari have already attended a CLTS training session, they should be encouraged to use their training for interactive community engagement. It is equally imperative that demonstrations during the PRA be carried out appropriately and in a logical sequence. For instance, mapping of villagers' defecation areas should occur only after faecal-oral transmission is precisely understood.

Another area where Vibhavari is currently weak is in terms of monitoring and evaluating its work, for which there is no framework in place. The village survey conducted by children

could be a powerful measuring tool if it were carried out properly. Children must be trained prior to surveying on: (1) how to ask questions without prompting desired responses; (2) how to verify answers given through observation; and (3) how to detect when responses lack candour.

Knowledge links

For KL, the main limitation is not providing regular follow up post-triggering, which is imperative for maintaining the momentum of change and re-triggering or re-igniting the community's interest should it wane. The facilitators have to be especially attuned to the shifts in the community mood in order to keep it energised.

As part of the necessary follow up, a major challenge observed in this field study affecting the impact of triggering is the inconsistent technical support rendered once a desire to build toilets is sparked. Locally available masons, specifically trained in latrine construction and familiar with local environmental conditions affecting choice of construction materials, are indispensable for effective and lasting CLTS outcomes. Despite a diagram and brief explanation rendered at the conclusion of triggering, many individuals still lack sufficient know-how of how to independently construct and maintain a proper latrine, and consequently, the crucial change in mindset triggered is hindered from translating into the desired behaviour.

Lack of technical support was observed on numerous occasions, perhaps attributable to the prevailing sentiment among facilitators that a community will seek solutions to its technical problems independently once sufficiently motivated. This stance is clearly not tenable. The facilitators' training accordingly needs reorientation to help them appreciate and ensure the critical component of hardware assistance and guidance post-triggering.



The ecological environment also greatly affects the sustainability of sanitation efforts, and therefore community triggering and other practices must be tailored accordingly. Rather than a generic prototype, toilets must be specifically suited to the climate and terrain in which they are built, as well as to the societal preferences of each community. Some families, for instance, are not satisfied with a simple latrine and would rather continue with OD until a more modern toilet becomes feasible. Numerous villagers also mentioned waiting for the monsoon to end

before building a toilet, while others were deterred by the belief that the rains would demolish the structure each year.

Facilitators must specifically address such concerns and misconceptions over the durability of toilets, especially those related to the monsoon. That it is possible to build sturdy latrines capable of withstanding harsh weather requires emphasis during triggering and follow up.

The timing of triggering is also important. Toilet construction should take place well before or after the lengthy monsoon, so that wary villagers, who annually experience the eroding impact of heavy rains, will not be deterred by potential loss and lose the will to change.

One more important recommendation for KL to improve sanitation is to increase engagement with women and position them in leadership roles. Women have proven crucial for changing household and community lifestyles in sanitation promotion projects, and have a greater personal stake than men in improved access to toilets. Therefore, KL must make a greater effort to host separate breakout sessions for women, especially when there is any indication that female villagers are too shy to participate alongside men.

Additionally, the use of women facilitators is currently lacking but visibly necessary, as females in more traditional communities are more likely to respond to a female facilitator, rather than a male. Separate triggering sessions for children might also be productive, especially in villages where children have never been exposed to SLTS.

Background Note on Internship Programme

Knowledge Community on Children in India (KCCI) initiative aims to enhance knowledge management and sharing on policies and programmes related to children in India. Conceived as part of KCCI, the objectives of the 2011 Summer Internship Programme were to give young graduate students from across the world the opportunity to gain field-level experience of and exposure to the challenges and issues facing development work in India today.

UNICEF India hosted 40 young interns from Australia, Canada, Colombia, Germany, Greece, India, Korea, United Kingdom and United States of America to participate in the 2011 Summer Internship Programme. Interns were grouped into teams of four or five and placed in 10 different research institutions across 8 states (Andhra Pradesh, Gujarat, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, New Delhi and Orissa) studying field-level interventions for children from 25 May to 3 August 2011.

Under the supervision of partner research institutions, the interns conducted a combination of desk research and fieldwork, the end result of which were 11 documentations around best practices and lessons learnt aimed at promoting the rights of children and their development. The case studies cover key sectors linked to children and development in India, and address important policy issues for children in the country few being primary education, reproductive child health, empowerment of adolescent girls and water and sanitation.

Another unique feature of this programme was the composition of the research teams comprising interns with mutlidisciplinary academic skills and multicultural backgrounds. Teams were encouraged to pool their skills and knowledge prior to the fieldwork period and devise a work-plan that allowed each team member an equal role in developing the case study. Group work and cooperation were key elements in the production of outputs, and all of this is evident in the interesting and mutlifaceted narratives presented by these case studies on development in India.

The 2011 KCCI Summer Internship Programme culminated in a final workshop, at which all teams of interns presented their case studies for a discussion on broader issues relating to improvements in service delivery for every child in the country. This series of documentations aims to disseminate this research to a wider audience and to provide valuable contributions to KCCI's overall knowledge base.