Community-Led Total Sanitation

in East Asia and Pacific

Progress, Lessons and Directions

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in East Asia and Pacific

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Review of the status of community-led sanitation implementation in East Asia and Pacific, March 2013

Supported by UNICEF

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Community-Led Total Sanitation in East Asia and Pacific:
Progress, Lessons and Directions

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Preface

The latest 2012 Joint Monitoring Programme (JMP) Progress on Drinking Water and Sanitation report shows that the East Asia and Pacific region has seen extraordinary improvements in water supply and sanitation. In 2010, some 677 million more people had access to improved drinking water than 20 years ago. Today, 823 million more people now use improved sanitation facilities.

Despite the progress, pneumonia and diarrhoea remain the biggest killers of children under five in the region. Most of the preventable child deaths occur in the poorest families. Malnutrition, which remains high, is a contributing factor. It is estimated that around 200 million people still do not have access to improved water while 671 million people in East Asia and the Pacific remain without access to improved sanitation. Stark disparities between urban and rural populations, poorest and richest quintiles prevail. An estimated 100 million people in the region still practice open defecation, with three countries from this region (Indonesia – 63 million, China – 14 million and Cambodia – 8.6 million) among the 12 countries in the world with the largest populations practicing open defecation.

Recognizing the key role that Community-Led Total Sanitation (CLTS) can play in eliminating open defecation and hence improving sanitation and hygiene, this regional review was undertaken as the first phase of a larger effort to better understand: how CLTS implementation is working in the region; why progress differs across and within countries; and what more could be done to support, improve and scale up CLTS as part of wider approaches to achieve sanitation and hygiene objectives within the region.

Open defecation must end. The *Sanitation Drive to 2015* – a call to end open defecation – urges us to tackle this issue by prioritizing support to the poorest and most marginalized populations.

Drawing extensively on the country-level experiences and data, this report provides insights into some of the CLTS success factors, and offers recommendations for better strategic planning to support wider and better quality uptake of CLTS in these countries. The document also provides an up-to-date summary of CLTS status, lessons and experiences from the region, and aims to help in accelerating efforts for reaching open defecation free (ODF) status and universal sanitation and hygiene improvement.

Acknowledgements

The regional review of *Community-Led Total Sanitation in East Asia and the Pacific* was commissioned by UNICEF East Asia and the Pacific, jointly with Plan International, WaterAid Australia and the World Bank's World Bank's Water and Sanitation Program – East Asia and the Pacific (WSP-EAP). Andy Robinson, Water and Sanitation consultant, deserves huge credit for undertaking the review across 14 countries with multiple partners in the region and for preparing this report. The review was undertaken under the overall leadership of Chander Badloe – Regional WASH Adviser, UNICEF East Asia and Pacific Regional Office. The review greatly benefitted from the continuous support from Almud Weitz, Principal Regional Team Leader and Susanna Smets, Senior Regional Water Supply and Sanitation Specialists from the WSP-EAP; James Wicken, Head of Policy and Campaigns from WaterAid; and Hilda Winartasaputra, Regional WASH Specialist from Plan International.

This report has been produced based on experiences and lessons on the implementation of Community-Led Total Sanitation (CLTS) from *Cambodia, China, DPR Korea, Indonesia, Kiribati, Lao PDR, Mongolia, Myanmar, Philippines, Papua New Guinea, Solomon Islands, Timor-Leste, Vanuatu,* and *Viet Nam.*

Special appreciation is noted for the innumerable colleagues at country level for generously providing their time and effort in collecting the country-level data on CLTS implementation and reviewing the draft country profiles with their respective Government and NGO partners (see Annex 1 for details on Country Review Teams).

Data Sources and Notes

Main sanitation dataset: from Progress on Drinking Water and Sanitation: 2012 Update, WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP). Supplemented by data from nationally representative household surveys, such as censuses, where these surveys have taken place since the last JMP update.

Country-specific data: provided by country review teams (including data from national and project monitoring systems, and supplementary information from programme evaluations, research studies, interviews and personal communications by the author with regional and national stakeholders).

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Acronyms

ACF	Action Against Hunger
ADB	Asian Development Bank
ADB CWSH	Asian Development Bank Community Water Services and Health
ADRA	Adventist Development and Relief Agency
AFMET	Alliance of Friends for Medical Care in East Timor
ASDSW	A Single Drop for Safe Water (Philippines)
AusAID	Australian Agency for International Development
BESIK	East Timor Rural Water Supply and Sanitation Program
BPL	Below poverty line
CAPS	Center for Advanced Philippine Studies
CATS	Community Approaches to Total Sanitation
CESVI	Cooperazione e Sviluppo (Italy)
CFED	Cambodian Farmer Economic Development
CHED	Cambodian Health Education Department
CLTS	Community-Led Total Sanitation
CR-SHIP	Cambodia Rural Sanitation and Hygiene Improvement Program
CSR	Corporate Social Responsibility
CVTL	Cruz Vermelha de Timor-Leste
CWS	Church World Service
DANIDA	Danish International Development Agency
DHS	Demographic and Health Survey
DILG	Department of the Interior and Local Government (Philippines)
DNSAS	National Directorate for Water Supply and Sanitation (Timor-Leste)
DNSSB	National Directorate for Basic Sanitation Services (Timor-Leste)
DOH	Department of Health
DRHC	Department of Rural Health Care (Cambodia)
EAP	East Asia and Pacific
ETDA	East Timor Development Agency
EOHO	Environmental and Occupational Health Office (Philippines)
EU-RWSSP	European Union Rural Water Supply and Sanitation Programme
GRET	Research and Technological Exchange Group
GSF	Global Sanitation Fund
GTZ	German Technical Corporation (now GIZ)
HTL	Hafoun Timor Lorosae (Timor-Leste)
HWWS	Hand washing with soap
ICC	International Cooperation Cambodia
iDE	International Development Enterprises
IEC	Information, Education and Communication
IFRC	International Federation of Red Cross
IRC	International Rescue Committee
JMP	WHO-UNICEF Joint Monitoring Program for Water Supply and Sanitation
LGU	Local Government Units
M&E	Monitoring and Evaluation
MDG	Millennium Development Goal
MHAA	Myanmar Health Assistant Association
MoCM	Ministry of City Management (DPR Korea)
MRD	Ministry of Rural Development (Cambodia)
NAS	Nak Akphivath Sahakum (Cambodia)
NGO	Non-governmental organization
NGP	Nirmal Gram Puraskar (India)
NPHCC	National Patriotic Health Campaign Committee (China)
NTF	Naroman Timor Foun (Timor-Leste)
NTP	National Target Program (Viet Nam)
OD	Open defecation
ODF	Open defecation free
PAKSI	Community Action Plan for Sanitation and Hygiene (Timor-Leste)
PAMSIMAS	Penyediaan Air Minum dan Sanitasi Berbasis Masyarakat (Indonesia)
PHAST	Participatory Hygiene and Sanitation Transformation
PDRD	Provincial rural development offices
PNPM	National Program for Community Empowerment (Indonesia)
PPSP	Accelerated Sanitation Development for Human Settlements (Indonesia)
PSI	Population Services International
RWC	RainWater Cambodia
RWSS	Rural Water Supply and Sanitation
RWSSH	Rural Water Supply, Sanitation and Hygiene
SLTS	School-Led Total Sanitation
SNV	Netherlands Development Organisation
SSH4A	Sustainable Sanitation and Hygiene For All
STBM	National Strategy for Community-Based Total Sanitation
TSC	Total Sanitation Campaign (India)
TSSM	Total Sanitation and Sanitation Marketing
TTU	Touching the Untouchables (Papua New Guinea)
UNICEF	United Nations Children's Fund
USAID	US Agency for International Development
VIHEMA	Viet Nam Health & Environment Management Agency
VIP	Ventilated improved pit latrine
VWU	Viet Nam Women's Union
WASH	Water, sanitation and hygiene (sector)
WCA	West and Central Africa
WHO	World Health Organization
WSP	World Bank Water and Sanitation Program
YDD	Yayasan Dian Desa (Indonesia)
YMP	Yayasan Merah Putih (Indonesia)
YPCII	Yayasan Pembangunan Citra Insan Indonesia
ZOD	Zero open defecation

Executive summary

Introduction

Despite rapid economic growth, inadequate sanitation and hygiene remain significant problems in the East Asia and Pacific (EAP) region with many countries off-track to reach their Millennium Development Goal (MDG) sanitation target by 2015. Around 100 million people in the region continue to practice open defecation, with three EAP countries – Indonesia, China and Cambodia – among the 12 countries in the world that have the largest populations practicing open defecation.

Community-Led Total Sanitation (CLTS) is a community-wide behaviour change approach that mobilizes communities to undertake their own appraisal and analysis of sanitation issues and take their own actions to become open defecation free (ODF). CLTS is now being promoted in 50 countries across Asia, Africa and Latin America. Plan International, UNICEF, WaterAid, Water and Sanitation Program (WSP), Institute of Development Studies (IDS) and the CLTS Foundation, as well as many other organizations, have been supporting CLTS in East Asia and the Pacific, with CLTS now being implemented across 12 countries in the region.

Little formal monitoring, reporting or analysis of CLTS progress in the region has been carried out. This regional CLTS review was envisaged by its supporters – UNICEF, WaterAid Australia, Plan International and the Water and Sanitation Program (WSP) – as the first phase of a larger effort to understand better how CLTS implementation is working in the region, why progress differs across and within countries, and what more could be done to support, improve and scale up the use of CLTS approaches to achieve regional sanitation and hygiene objectives.

Methodology

The regional CLTS review was a remote review made possible by the considerable assistance provided by the review teams established in each country. The review teams were primarily comprised of UNICEF, Plan International, WaterAid and WSP water, santitation and hygiene (WASH) specialists in the review countries, with additional assistance from key government staff in several countries. A country CLTS overview was prepared for each of the 14 review countries, and the information in these country overviews formed the main basis for the review. Supplementary information was obtained through questions to the country review teams and interviews with key national and regional informants that filled gaps and helped improve understanding of key issues.

Review limitations

The regional CLTS review commenced in mid-July, allowing only six weeks for the compilation, processing and review of relevant documentation and data before the Third East Asia Minsisterial Conference on Sanitation and Hygience (EASAN-3), held in Bali in September 2012. The different stages of CLTS progress in each country, and the different levels of CLTS investment and priority, meant that the volume and quality of the CLTS information available within the short timeframe of the review varied significantly.

Presentation of review findings

The initial findings of the regional CLTS review were discussed with the regional review partners on arrival in Bali, and were then presented informally at the EASAN-3 side event on CLTS and Scaling Up Rural Sanitation held on 08-09 September 2012. The findings were also formally presented at a parallel session of the main EASAN-3 conference on 11 September 2012.

FINDINGS

The review covered 14 countries in the East Asia and Pacific region.

East Asia	South-East Asia	Pacific
1. China	4. Cambodia	11. Kiribati
2. DPR Korea	5. Indonesia	12. Papua New Guinea
3. Mongolia	6. Lao PDR	13. Solomon Islands
	7. Myanmar	14. Vanuatu
	8. Philippines	
	9. Timor-Leste	
	10. Viet Nam	

The 14 review countries, show open defecation (OD) rates varying from 0-72 per cent:

- less than 10 per cent OD in DPR Korea, China, Vanuatu, Viet Nam and Myanmar.
- 10-30 per cent OD in Philippines, PNG, Kiribati and Mongolia
- 30-50 per cent OD in Solomon Islands, Timor-Leste, Indonesia and Lao PDR
- 72 per cent OD in Cambodia

Of the 14 countries, two of them (DPR Korea and Vanuatu) have yet to implement CLTS. Each of the 12 review countries in which CLTS has been introduced was ranked for the 14 indicators examined in the country CLTS overviews, and the ranking scores were then aggregated. No effort was made to score or weight these indicators to reflect their relative importance, as the intention was simply to gain some idea of relative CLTS performance across the review countries.

The regional CLTS ranking (see figure following) orders the review countries according to the date of CLTS introduction. The review found that the two early adopting countries (Cambodia and Indonesia) and Timor-Leste performed better in almost every area examined:

- more CLTS spread;
- greater CLTS scale;
- higher CLTS effectiveness; and
- better CLTS enabling environments.

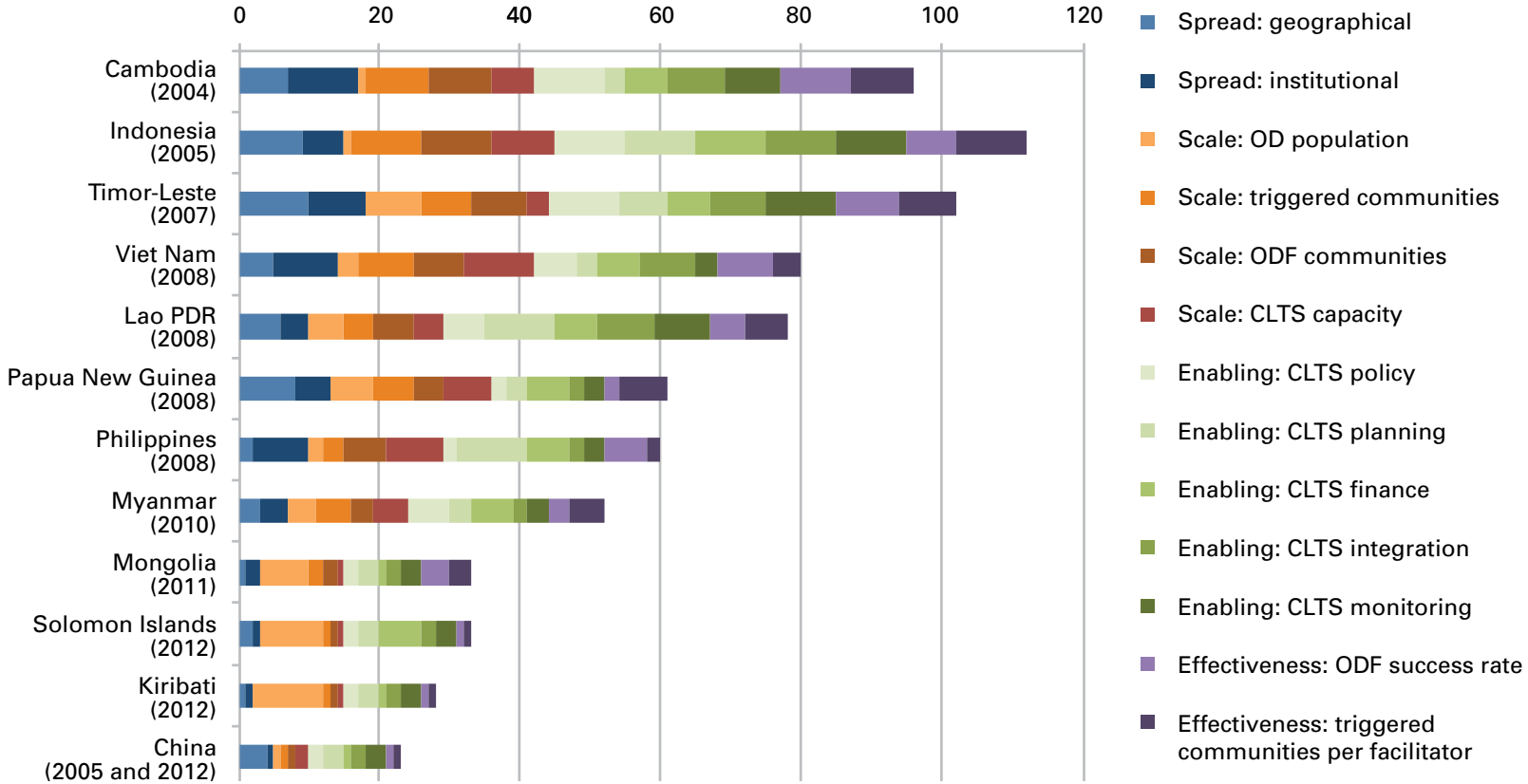
The mid-term adopting countries took the next four places in the regional ranking, led by Viet Nam and Lao PDR, with Myanmar, despite only introducing CLTS in 2010, closing in on the rankings of Papua New Guinea and the Philippines. Unsurprisingly, the late adopting countries where little or no implementation had taken place – Mongolia, Solomon Islands, Kiribati and China – filled the bottom rankings.

Key findings

The review data show that CLTS has scaled well in two early adopting countries, with Cambodia and Indonesia triggering 2,000-7,300 rural communities; and reveal that Myanmar has joined the five mid-term countries in implementing CLTS in 200-850 rural communities since 2008. Little progress has been made outside these eight countries, due to the recent introduction in Mongolia, Solomon Islands and Kiribati, and the on-going re-introduction of CLTS in China.

In all, 3.1 million people across the 14 review countries were reported to live in ODF communities. However, despite this significant achievement,

Overall ranking of the CLTS review countries (by date of CLTS introduction)



progress has been quite slow. Optimistic progress reports presented at the 2009 Regional Workshop on CLTS in the South-East Asia and Pacific, held in Cambodia,[1] suggested that CLTS would have made significant impacts on national sanitation coverage in both Indonesia and Cambodia before 2012.

The review found a surprising consistency in the national ODF success rates reported across the East Asia and Pacific region (see Figure 1.5):

- early adopters and Timor-Leste reported 34-36 per cent ODF success rates;
- mid-term adopters reported 17-22 per cent ODF success rates; and
- two late adopters reported only 5-10 per cent ODF success rates.

[1] About 60 participants from eight countries in the EAP region gathered in November 2009 in Phnom Penh to discuss CLTS progress and issues: http://www.communityledtotalsanitation.org/resource/regional-workshop-clts-south-east-asia-and-pacific-region

A comparison of the number of communities triggered against the number of trained CLTS facilitators confirms the greater implementation efficiency of the two early adopting countries and Timor-Leste (see Figure 1.7): all three report more than eight triggered communities for every facilitator trained, whereas the other countries report an average of around one triggered community per trained facilitator.

The review of CLTS enabling environments highlighted the large amount of work still required to strengthen and improve enabling environments across the region. However, the review also showed the progress made by the two early adopting countries and Timor-Leste, which all now

have sanitation policies supportive to CLTS, and are making progress in improving other key areas of the CLTS enabling environment.

Surprisingly, given that as many as 3.1 million people are now living in ODF communities, the review found that none of the national governments in the 14 review countries have financed large-scale CLTS programmes. While rural sanitation finance remains generally low in the region, where governments have invested in rural sanitation, they have financed the provision of latrine hardware subsidies, often either in similar areas to existing CLTS programmes, or explicitly linked to CLTS activities in order to take advantage of the sanitation demand created.

CONCLUSIONS

1. CLTS works

The review confirms that CLTS is working in East Asia and the Pacific. CLTS has already spread to 12 countries, triggered sanitation improvements in more than 12,000 rural and peri-urban communities, and led to more than 3.1 million people living in 2,300 ODF communities.

2. Basic CLTS data are not readily available

CLTS monitoring remains a significant weakness, at both national and project levels. The review found that, in most countries, even basic CLTS progress data were not readily available. Few countries have mechanisms that require routine reporting or analysis of monitoring data, thus there is little demand for the data.

3. CLTS scale up takes time

The review findings suggest that CLTS spread, scale and effectiveness have taken time to develop, but that CLTS progress appears remarkably consistent despite the very different contexts and challenges found across the review countries.

4. CLTS has had limited impact on national sanitation coverage

The review suggests that the lack of national impact is the result of *ad hoc* implementation and limited government investment in CLTS – few of the review countries have national strategies for CLTS, provide government finance to national CLTS programmes, or have developed formal CLTS capacity development or monitoring systems.

5. CLTS has influenced enabling environments

The review confirms that the early adopting countries have made significant progress in improving CLTS enabling environments since CLTS was introduced. While it is hard to determine what drove these reforms, this review argues that CLTS has had a significant influence on national discussions on sanitation finance, technical standards, sustainability, cost-effectiveness, scaling up, equity and targeting.

6. Sustainability of CLTS outcomes

An analysis of seven recent studies of ODF sustainability in Africa, South Asia and South-East Asia suggested that the sustainability of ODF and other CLTS outcomes was linked to the quality of the CLTS process. While intuitive, the review of these studies confirmed that sustainable outcomes can be achieved by CLTS interventions, and that widespread reversion to OD is not an inevitable result of CLTS.

7. CLTS variations within the region

The review found that Indonesia has responded to its rural sanitation challenge well, making more CLTS progress since 2005 than all of the other review countries combined: 2.3 million people in Indonesia are now living in ODF communities, 72 per cent of the total ODF population in the region. Timor-Leste was another strong CLTS performer. Despite only introducing CLTS in 2007, Timor-Leste was found to have one of the best CLTS programmes in the region, and is the only country reviewed where CLTS is thought to have made a significant impact on national sanitation coverage.

In contrast, few of the Pacific island states introduced CLTS until relatively recently. As in other countries previously, experiences in Papua New Guinea and the Solomon Islands now suggest that cultural differences do not prevent CLTS from working, and that the approach has great potential in remote island communities where market goods and services are expensive and hard to access.

8. Is the role of CLTS being maximized in the EAP region?

The main conclusion of the review is that the potential of CLTS in the East Asia and Pacific region has not been maximized. While the review found that CLTS is working and spreading, progress has been much slower than anticipated even in the early adopting countries.

RECOMMENDATIONS

A. Improve CLTS enabling environments

Scaling up CLTS progress and improving CLTS effectiveness and sustainability will be dependent on the further strengthening of enabling environments for rural sanitation in the review countries. Few governments or development partners in the region have yet to develop strategic sanitation plans that elaborate the role of CLTS in creating large-scale demand for sanitation, or financed national implementation programmes that combine CLTS with other approaches.

B. Strengthen CLTS monitoring systems

The review recommends more detailed monitoring and evaluation of CLTS progress and effectiveness. The main problem seems to be the lack of mechanisms that encourage the regular collection, analysis and reporting of CLTS or other sanitation performance data. Annual strategic reviews, ideally linked to the monitoring of CLTS progress against strategic sanitation targets, and local government benchmarking systems are useful mechanisms for pulling monitoring data and reports up through government and programme systems.

C. CLTS quality

The review recommends more detailed monitoring and assessment of CLTS implementation quality and capacity development. More effort needs to be made to track the number of trained facilitators that become active, and assess the relative effectiveness of active facilitators and support staff. Analysis of the factors that lead to higher ODF success rates and more sustainable outcomes – for instance, why outcomes are better in one programme area than another – should be an essential part of any CLTS intervention.

D. ODF sustainability

The review highlighted a strong regional demand for information on ODF sustainability and, therefore, recommends that further work is undertaken to collate ongoing and recently completed studies on ODF sustainability within the EAP region.

E. Latrine hardware subsidies

The next phase of the regional CLTS review would make a significant contribution to the sub-sector if it was able to clarify and disseminate better the existing evidence base on latrine hardware subsidies (and smart subsidies), and encourage greater and more rigorous efforts to evaluate ongoing and completed latrine subsidy and CLTS programmes, and compare the results.

F. Non-ODF communities

It is recommended that the next phase of the regional CLTS review should examine appropriate post-CLTS strategies and programme options for these triggered but non-ODF communities, and compile more reliable data on the extent and sustainability of the sanitation gains made in these communities.

G. Assistance to new CLTS countries

The review recommends that the agencies supporting the regional CLTS review should take a proactive role in the Pacific to provide CLTS assistance and guidance in order to accelerate progress and effectiveness

gains in these new CLTS countries. In particular, lessons from the rapid and relatively successful development of CLTS in Timor-Leste are likely to be relevant to these small Pacific island states.

H. Next stage of the regional CLTS review

A second phase of the regional CLTS review would enable the more detailed and specific study required to respond to the strong demand for more detailed knowledge about how best to strengthen CLTS enabling environments, improved CLTS effectiveness, tackle sustainability concerns, complement CLTS with other approaches, and accelerate scaling up.

This first phase of the review recommends that in-country visits should be made to the three highest performing countries – Indonesia, Timor-Leste and Cambodia – to understand better the evolution of CLTS approaches and programmes in each country, and the factors that have helped or hindered their scale, effectiveness and sustainability. It is also recommended that visits be made to some of the countries that have either recently or not yet introduced CLTS – perhaps two of the Pacific island states and one of the three East Asian states – in order to examine how best to use the learning from the rest of the region to speed up CLTS development and accelerate progress.

A large number of issues were highlighted for further study through the second phase of the review. The body of the report includes two lists: the first comprises review areas that require more detailed documentation of data and knowledge that is available, but which was not possible to collect or document in the short time available to the first phase of the review; and the second list is of areas that require further investigation and assessment, and may require some primary research.

Introduction

Community-Led Total Sanitation (CLTS) is now being promoted in more than 50 countries in Africa, Asia and Latin America. The rapid spread and scaling up of this innovative approach to triggering sanitation improvement is remarkable, but it has been suggested that CLTS progress in Asia – the birthplace of CLTS – has been slower than recent progress in Africa.

Despite rapid economic growth, inadequate sanitation and hygiene remain significant problems in the East Asia and Pacific (EAP) region with many countries off-track to reach their MDG sanitation target by 2015. Around 100 million people in the region continue to practice open defecation, with three EAP countries – Indonesia, China and Cambodia – among the 12 countries in the world that have the largest populations practicing open defecation.

The use of CLTS approaches is growing in the EAP region, but it has not yet been introduced in some countries, and in other countries resistance to the non-subsidy CLTS principle is thought to have limited its growth and success. Anecdotal reports of sustainability problems, including latrine durability issues and reversion to open defecation, may threaten scaling up and institutionalization of the CLTS approach.

However, little formal monitoring, reporting or analysis of CLTS progress in the region has been carried out. This regional CLTS review was envisaged by its supporters – UNICEF, WaterAid Australia, Plan International and the Water and Sanitation Program (WSP) – as the first phase of a larger effort to understand better how CLTS implementation is working in the region, why progress differs across and within countries, and what more could be done to support, improve and scale up the use of CLTS approaches to achieve regional sanitation and hygiene objectives. The design of any further review or research activities will be informed by the findings of this regional CLTS review.

The review partners recognize that the CLTS approach is only one part of the broader set of interventions and activities required to develop, scale up and sustain sanitation improvements in the region. Supply strengthening, enabling environment improvement, and other forms of sanitation demand creation will be critical to the sector's combined efforts to achieve regional and national sanitation objectives. Nonetheless, CLTS has spread rapidly and become an important approach in the region, thus the review partners felt there was value in better understanding how CLTS is performing, and whether more could be done to maximize its potential and its complementarity with other key approaches to sanitation improvement.

OBJECTIVES

The main purpose of the regional CLTS review is to provide detailed information on the current status of CLTS implementation in 14 countries in the region,[2] and to aggregate and analyse the findings from these country CLTS overviews into a regional review report that summarizes the key successes, issues and challenges.

The country CLTS overviews are designed to highlight the strengths and weaknesses of CLTS implementation in each different national context; assess whether CLTS principles have been included in national policies, strategies and programmes; and establish potential bottlenecks to the scaling up and improvement of CLTS implementation.

[2] Cambodia, China, Indonesia, Kiribati, DPR Korea, Lao PDR, Mongolia, Myanmar, Papua New Guinea, Philippines, Solomon Islands, Timor-Leste, Viet Nam and Vanuatu.

The review partners agreed that their main long-term research objective is to gain a better understanding of the reasons for differential CLTS progress, and differential general progress in scaling up rural sanitation improvement, across the region in order to maximize the potential of CLTS. To understand why things have happened, the review must first try to document what has happened and identify any gaps in the knowledge and evidence base. This review is, therefore, the first phase in a longer term review effort, and has the secondary objective of identifying areas that require further and more detailed review and research.

The timing of the regional CLTS review was designed to utilize the gathering of regional sanitation stakeholders at EASAN-3 in Bali, first at the side event held from 8-9 September 2012 and then at the main conference held from 10-12 September, as an opportunity to present, discuss and verify the review findings.

METHODOLOGY

The regional CLTS review was a remote review that was only made possible by the considerable assistance provided by the review teams established in each country during the inception phase. The review teams were primarily comprised of UNICEF, WaterAid, WSP and Plan WASH specialists in the review countries, with additional assistance from key government staff in several countries. Annex 1 details the composition of the review teams involved in each country.

Country CLTS overviews

A standard template for the country CLTS overviews was agreed by the regional review team following an initial examination of the documents and data provided by the country review teams. The overview template was limited by the information available across the majority of the countries, and by the desire to keep the overviews concise and easy to read.

Each country CLTS overview included the following sections:

1. Summary table (with regional ranking for main indicators)
2. JMP rural sanitation data (including OD population)
3. CLTS history and geographical spread
4. CLTS institutional spread (including major exceptions)
5. CLTS variations and practice
6. CLTS scale (number of ODF communities and size of ODF population)
7. CLTS capacity
8. ODF success rate
9. CLTS impact on national coverage
10. CLTS enabling environment (including comments on policy, strategy, finance, integration with other approaches, and monitoring)
11. CLTS weaknesses and bottlenecks
12. CLTS strengths and opportunities

The country CLTS overviews were based on information taken from the documents provided by the country review teams, which included programme progress reports, evaluations, research studies, monitoring reports, and project publications; with supplementary information obtained through specific questions to the country review teams and to key national and regional informants in order to fill in any gaps and better understand key issues.

Review limitations

The regional CLTS review commenced in mid-July, allowing only six weeks for the compilation, processing and review of relevant documentation and data. In addition, the different stages of CLTS progress in each country, and the different levels of CLTS investment and priority, meant that the volume and quality of the CLTS information available within the short time frame of the review varied significantly.

Despite ODF sustainability being a major topic of interest, little evidence or information were available because few countries in the region have

sufficient CLTS history to generate a representative selection of 'older' ODF communities that could be studied, and few countries or programmes have invested in this sort of research.

Another area of weakness was the reporting of ODF community status. In some cases, monitoring data reported numbers of self-declared ODF communities; in other cases different implementing agencies certified ODF status but each applied different ODF criteria in their project or programme areas, sometimes with local government assistance and sometimes without; and, in a few cases, national ODF verification processes have been developed and are being implemented, but even here the national expansion of the systems is on-going, and it proved difficult to separate out verified ODF communities from declared but non-verified ODF communities.

The country CLTS overviews and regional CLTS review reflect the number of ODF communities reported by the country review teams on the basis that these are the best data available within the short timeframe of this review. In some cases, these data will include self-declared ODF communities that may not be 100 per cent ODF, thus over-estimate progress; and in other cases the reported numbers reflect national monitoring systems that have not been recently updated, or do not capture progress made by some non-government stakeholders, thus under-estimate progress. Additional work (and time) will be required to update, extend and clean the national monitoring data, and to look more deeply into the number and proportion of ODF communities that have been reliably verified and, ideally, re-verified to check the sustainability of the reported sanitation improvements.

Focus on ODF progress

The country CLTS overviews deliberately focused on ODF achievement as the main indicator of CLTS progress. Some stakeholders have questioned this focus, noting that ODF success rates[3] remain relatively low in the EAP region, hence the majority of CLTS 'triggered' communities do not achieve ODF status; and that there remains limited hard evidence that ODF status confers significantly higher benefits than, say, 80 per cent improved sanitation coverage.

There are two main reasons for the focus on ODF progress: the first is practical – few programmes are able to provide reliable data on incremental increases in sanitation coverage following CLTS interventions, as this information requires detailed baseline coverage data, which is rarely collected, aggregated or well documented; furthermore, the assessment of coverage gains from CLTS interventions also raises complex questions of contribution and attribution (particularly when parallel programmes, such as sanitation marketing projects, are promoting sanitation; or when rapid economic growth has resulted in high background rates of sanitation progress).

In contrast, ODF progress is relatively easy to measure, as a baseline is rarely required; and it is usually one of the key indicators monitored by CLTS interventions.

The second reason for focusing on ODF progress is more abstract: one of the key differences between the CLTS approach and conventional sanitation improvement approaches is the aim of achieving an ODF community (or larger population unit). This community-wide or collective sanitation outcome requires that every household and individual stops OD and uses a hygienic sanitation facility – one that separates human excreta from human contact – which means that interventions have to be inclusive, and encourages approaches that reach poor and vulnerable households. It has already been noted that CLTS interventions do not always succeed in this aim, but the ODF concept is one of the defining characteristics of the CLTS approach, and is becoming an important strategic goal for local and national governments with the explicit objective of achieving universal sanitation coverage.

[3] ODF success rate = proportion of triggered communities that are successful in achieving ODF status.

Durability of CLTS latrines

There remains some debate on the durability and benefits of the simple latrines often built as a result of CLTS interventions, reinforced by the suggestion that some of the latrines built may not be hygienic, and the understanding that ODF achievement sometimes relies on shared use of household latrines. The review process collated evidence of latrine durability and sustainability problems, but was unable to talk to the issue of whether the latrines were hygienic or not, or the effect of latrine sharing, due to the lack of documentation or evaluation material available on these topics. Further work will be required to investigate these prominent issues.

CLTS regional ranking

The country CLTS overviews ranked CLTS status and performance using 14 indicators, which were broadly divided into four categories:

- CLTS status (date of introduction, geographical spread, institutional spread)
- CLTS scale (OD population, communities triggered, ODF communities, facilitator capacity developed)
- CLTS enabling environment (policy, plans, finance, integration and monitoring)
- CLTS effectiveness (ODF success rate, communities triggered per facilitator)

Each indicator was ranked for each country, and these rankings were then added up to allow an overall ranking which was intended to provide a simple estimate of overall CLTS status and performance.

The CLTS review indicators were selected based on the information that was readily available for each country, and on a brief analysis by the regional review team of the major factors that influence CLTS status and performance. No effort was made to weight the indicators according to their relative importance, or to develop a theory of change on which the indicator framework could be based.[4]

[4] Initial investigations and consultations with key informants suggested that there were no relevant theories of change that could be easily applied, thus it was decided to keep the indicator and ranking system as simple and transparent as possible.

Several reviewers suggested that some of the indicators would be more relevant if reported relative to population size – notably the number of communities triggered and ODF, and the number of facilitators trained, as these three indicators would be expected to be much higher in larger countries, while lower indicator scores would be more significant at a national scale in smaller countries. In practice, the relative novelty of CLTS in the region meant that few large countries benefitted from the use of absolute indicators, while one of the smallest – Timor-Leste – ranked second overall reflecting the counter-balancing provided by the other 11 indicators. Therefore, the country CLTS overviews retained the absolute summary indicators, but elaborated relative performance in the text sections that followed.

In general, the country CLTS overviews focused on the information available, with the intention that the regional review report would draw attention to key issues that were not well documented at national level, or to elaborations that were not well suited to the concise format of the country CLTS overviews.

Country CLTS overview consultation process

Draft country CLTS overviews were submitted to the country review teams in the week preceding the EASAN-3 side event. The country review teams were tasked with ensuring that key government officials were able to review and comment on the draft overviews, and for compiling review comments from key stakeholders at national level. Ten out of the 14 country review teams provided formal written comments on the draft overviews, with as many as seven sets of review comments provided by some countries.

As the draft overviews were almost entirely based on the documentation and data provided by the country review teams, there were few major revisions required. A full set of draft country CLTS overviews was sent to each country review team prior to the EASAN side event, and it was noted that several EASAN country delegations included elements of the draft overviews in their official presentations to the EASAN-3 conference.

Regional CLTS analysis

The regional review findings were based on a comparative analysis of the country CLTS overviews, supplemented with information obtained from a review of regional and global CLTS documents, and by interviews with key regional stakeholders.

The regional analysis recognized that the data available from the country CLTS overviews and regional review related largely to national and programme processes and outcomes, with little reliable information or evaluation data available on the reasons for the different outcomes found in different countries. Furthermore, even these findings were collected through a rapid review process that may have overlooked some relevant and important information.

Therefore, the regional analysis concentrates on what can be learnt from a comparison of the different outcomes found by the review, with a deliberately superficial analysis provided of the proximate or ultimate causes of these outcomes and differences. It should be understood by the reader that any deeper analysis in a second stage of the review would require a more thorough and specific research process, including visits by the review team to the key countries under review.

Presentation of review findings

The initial findings of the regional CLTS review were discussed with the regional review partners on arrival in Bali, and were then presented informally at the EASAN-3 side event on CLTS and Scaling Up Rural Sanitation held on 8-9 September 2012, which was jointly planned and supported by the Institute of Development Studies (IDS), UNICEF, WaterAid, Plan and WSP, and the findings were also formally presented at a parallel session of the main EASAN-3 conference on 11 September.

Feedback on the country CLTS overviews and the regional review findings was obtained from many of the 60 participants at the side event, and from other EASAN-3 participants who attended the parallel session. Specific efforts were also made to discuss data gaps and national issues that required further elaboration with the country review teams and national delegations. Additional data has been provided by three countries since the EASAN-3, and have been incorporated into the final country CLTS overviews and the regional review report.

The regional review partners (UNICEF, WaterAid Australia, Plan International and WSP) held a wrap-up meeting on 12 September to reflect on the feedback to the regional review findings, and to plan the next steps of the review. It was agreed that the review partners should follow up on the development of knowledge packages on key issues such as national ODF verification processes, and identify one major regional research issue on which the regional review partners could collaborate.

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PART I

REVIEW OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

1. Findings

The review covered 14 countries in the East Asia and Pacific region. Efforts were made to cover as many countries in the region as possible, but the final selection was limited to those countries where sanitation remains a major challenge (which excludes Brunei Darussalam, Japan, Malaysia, Singapore, Republic of Korea, Thailand), and to countries that were able to provide sanitation information to the review.

East Asia	South-East Asia	Pacific
1. China	4. Cambodia	11. Kiribati
2. DPR Korea	5. Indonesia	12. Papua New Guinea
3. Mongolia	6. Lao PDR	13. Solomon Islands
	7. Myanmar	14. Vanuatu
	8. Philippines	
	9. Timor-Leste	
	10. Viet Nam	

The findings are presented starting with a comparative analysis of progress for each parameter examined by the 14 country CLTS overviews, followed by the overall regional findings from these analyses. The next section examines specific regional CLTS issues raised in the review countries and, where relevant, in other regions; including a brief comparative analysis of the EAP regional review findings against those from a similar UNICEF review undertaken in West and Central Africa. The last section presents some initial thoughts on the drivers, bottlenecks and other factors that might explain the differences in progress and experiences reported across the region.

1.1 COUNTRY CONTEXTS

The review highlighted the significantly different contexts and sanitation situations found across the region. Table 1.1 summarises some key development indicators: with population ranging from 100,000 people to 1.3 billion; gross national income (GNI) per capita from US$ 760 to US$ 4,260; the proportion below the international poverty line (US$ 1.25 per day) from 13-37 per cent; and under-five mortality rates from 14-66 deaths per 1,000 live births.

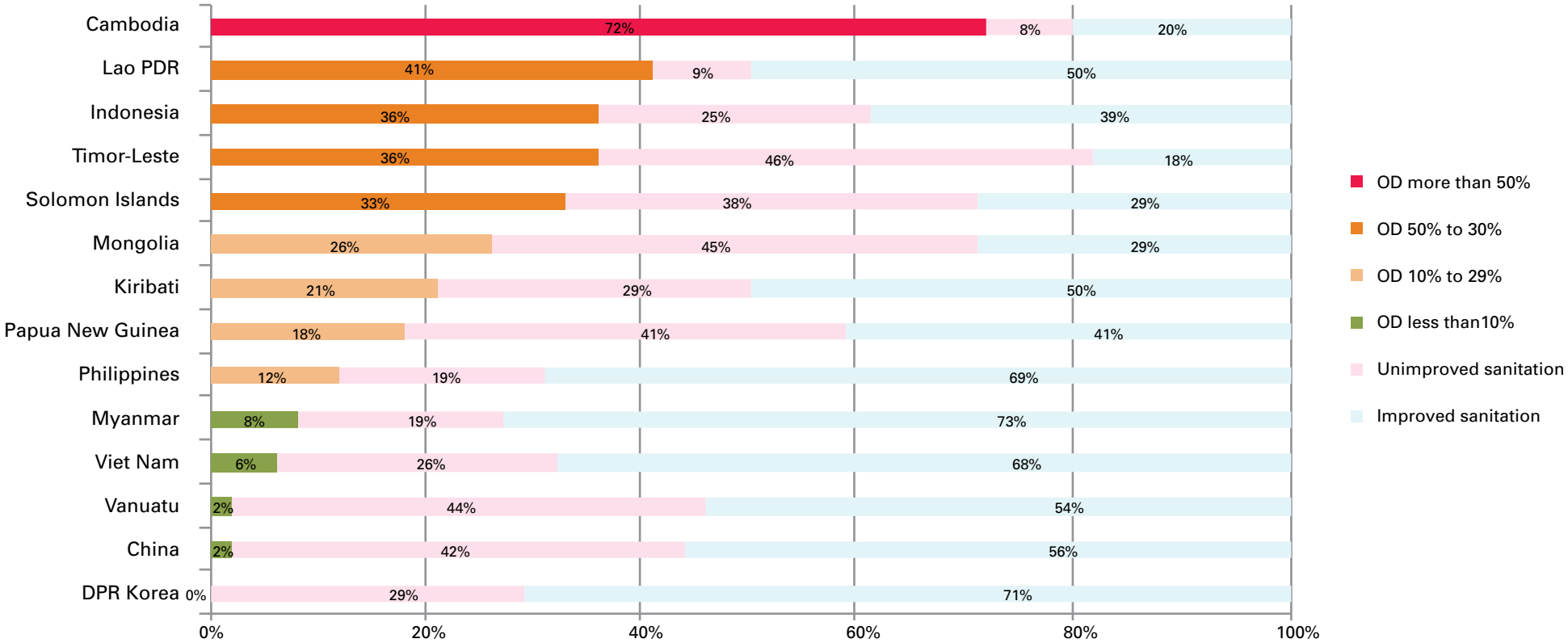
Table 1.1 Key development indicators (ranked by population)

Country	Population (2010)	GNI per capita US$ (2010)	Poverty (% below $1.25)	Stunting (%)[5]
East Asia				
China	1,341.3 million	$4,260	16%	10%
DPR Korea	24.3 million	-	-	32%
Mongolia	2.8 million	$1,890	22%	27%
South-East Asia				
Cambodia	14.1 million	$760	28%	40%
Indonesia	239.9 million	$2,580	19%	37%
Lao PDR	6.2 million	$1,010	34%	48%
Myanmar	48.0 million	-	-	35%
Philippines	93.3 million	$2,050	23%	32%
Timor-Leste	1.1 million	$2,220	37%	58%
Viet Nam	87.8 million	$1,100	13%	31%
Pacific				
Kiribati	0.1 million	$2,010	-	-
Papua New Guinea	6.9 million	$1,300	36%	43%
Solomon Islands	0.5 million	$1,030	-	33%
Vanuatu	0.2 million	$2,760	-	-
Total	**1,866.6 million**			

Source: UNICEF online statistical information (accessed September 2012).

[5] Moderate and severe (latest data available from www.childinfo.org).

Figure 1.1 Rural population practicing open defecation (percent)



Source: JMP progress report, 2012.

As shown in Figure 1.1, there are also dramatic variations in the sanitation situation in the 14 review countries, with OD rates varying from 0-72 per cent:

- less than 10 per cent OD in DPR Korea, China, Vanuatu, Viet Nam, and Myanmar
- 10-30 per cent OD in Philippines, Papua New Guinea, Kiribati, and Mongolia
- 30-50 per cent OD in Solomon Islands, Timor-Leste, Indonesia, and Lao PDR
- 72 per cent OD in Cambodia.

In total, the 14 review countries contain a rural population of 85 million people practicing OD in 21 million households. Remarkably, 83 per cent of this OD population resides in three of the review countries:

- Indonesia: 48.1 million OD rural population (57 per cent regional total)
- China: 13.5 million OD rural population (16 per cent regional total)
- Cambodia: 8.1 million OD rural population (10 per cent regional total).

Figure 1.1 also illustrates some variations in the proportions of the rural population using improved and unimproved sanitation facilities:

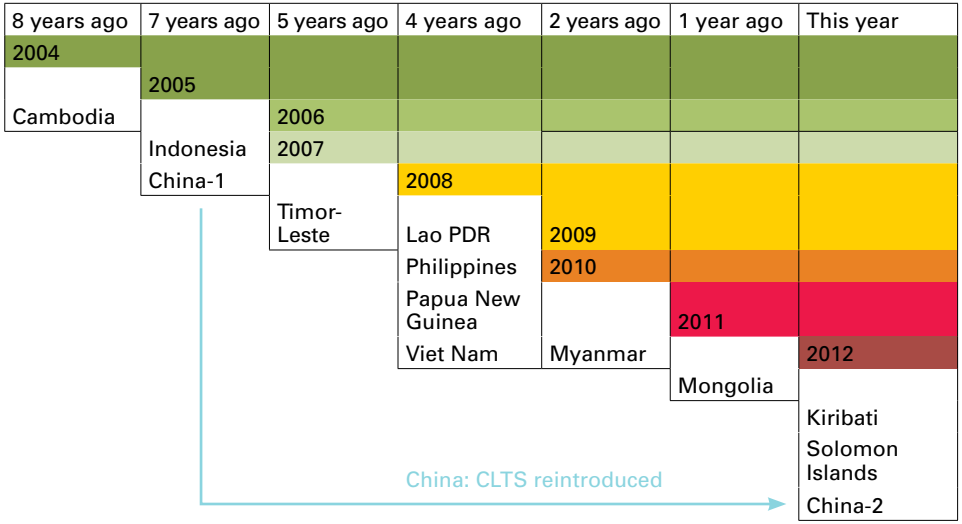
- over 40 per cent unimproved and shared sanitation coverage in five countries (Timor-Leste, Mongolia, Papua New Guinea, Vanuatu, and China)
- 15-39 per cent unimproved and shared sanitation coverage in six countries (Indonesia, Solomon Islands, Kiribati, Philippines, Myanmar, Viet Nam, and DPR Korea)
- less than 10 per cent unimproved or shared sanitation coverage in Cambodia and Lao PDR.

1.2 COUNTRY CLTS OVERVIEWS

1.2.1. Date of CLTS introduction

CLTS was first introduced into the region in 2004, reaching 12 of the 14 countries by 2012 as illustrated in the timeline figure below. DPR Korea and Vanuatu were the only two countries examined by the review where CLTS had not been introduced.

Timeline: Date of introduction of CLTS



The timeline suggests three groups:

- 2004-05 'Early adopters': Cambodia and Indonesia
- 2007-08 'Mid-term adopters': Timor-Leste, Lao PDR, Philippines, Papua New Guinea, and Viet Nam
- 2010-12 'Late adopters': Myanmar, Mongolia, Kiribati, Solomon Islands, and China

CLTS was first introduced into China by Plan International in 2005, but the approach was not adopted after the initial pilots due to overriding government and NGO support for subsidy-based approaches. No further progress was made until July 2012, when UNICEF and government counterparts organized another CLTS training workshop in Jilin province to build capacity for its Community Approaches to Total Sanitation (CATS) programme in 50 villages of five provinces.

The review revealed a range of different CLTS introduction processes and purposes, perhaps reflecting the diverse stakeholders responsible for introducing CLTS into these 12 countries. In at least four cases, international NGOs introduced CLTS into their country programmes following success in other countries (CONCERN in Cambodia, WaterAid in Timor-Leste, Oxfam in Papua New Guinea, SNV in Viet Nam); in three other countries, WSP introduced CLTS either as part of a larger programme or as a precursor to a "scaling up rural sanitation" programme (Indonesia, Philippines and Lao PDR[6]); UNICEF was involved in China and Myanmar, with significant support from WSSCC[7] in China; while in the Solomon Islands, CLTS was introduced as a direct result of an initiative by an individual working in the WASH sector.

Remarkably, Dr. Kamal Kar – the originator of CLTS – was involved in introducing or supporting the CLTS development process in eight of these countries. He ran CLTS training courses in six countries, and conducted policy and advocacy workshops with high-level government official in another two. Only the three Pacific island states (Kiribati, Papua New Guinea, and Solomon Islands) and Timor-Leste were not visited by Dr. Kar.[8]

[6] Through a number of mechanisms, including study tours to countries where CLTS had already scaled up, hiring of key CLTS trainers (including Dr. Kar), and extensive knowledge management and advocacy efforts.

[7] Water Supply and Sanitation Collaborative Council.

[8] Dr. Kar made his first visit to Timor-Leste immediately after EASAN in September 2012, following a request from the government of Timor-Leste after it learned that he would be attending the regional conference in Bali (which is only a two-hour flight from Dili, the capital of Timor-Leste).

1.2.2 Geographical spread

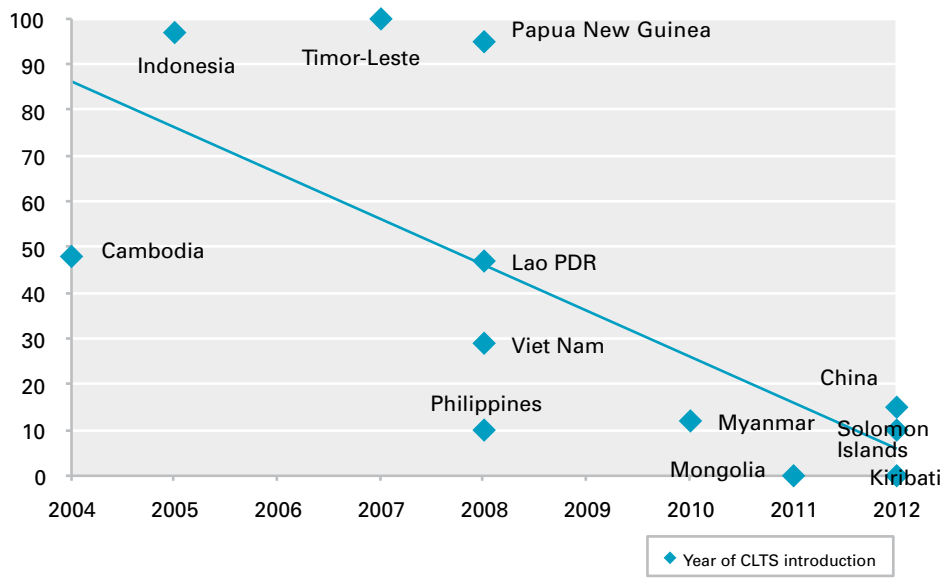
The review also examined the extent to which CLTS has spread within the countries reviewed. The scale of CLTS activity was measured separately (see Sections 1.2.4 and 1.2.5), with this indicator used to examine the number of provinces or districts to which CLTS implementation had been introduced, in the understanding that geographical targeting often constrains programme spread[9] to specific provinces. This indicator recognized countries where CLTS had been introduced throughout the country even if implementation was only in a few locations or communities in each sub-national unit.

The review confirmed that CLTS has spread furthest in the early and mid-term adopting countries, but highlighted some anomalies: geographical spread has been relatively low in Cambodia (48 per cent), and is low in Viet Nam and the Philippines (29 per cent and 10 per cent). In general, the differences in the rate of spread reflect the different CLTS evolution processes and programme environments in these countries.

Most rural sanitation interventions in Cambodia are concentrated in the provinces of the central and Tonle Sap lake areas, with few programmes yet implementing in the North-Eastern and Southern provinces. In Viet Nam, CLTS interventions are concentrated in the programme areas of UNICEF, SNV, Plan and World Vision, which have not yet reached two-thirds of the country. There are no major CLTS programmes in the Philippines, with implementation to date confined to the relatively small WSP and Plan programme areas. However, in Cambodia, Viet Nam and the Philippines, larger programmes are planned that will increase the geographical spread.

[9] For example, the 2007-2011 WSP TSSM programme in East Java, which was implemented in all 29 districts within the province, did not finance any implementation in other provinces; and the UNICEF Seth Koma WASH programme in Cambodia, which introduced CLTS to the six rural provinces where UNICEF focused its support.

Figure 1.2 Geographical spread of CLTS implementation (per cent of provinces)



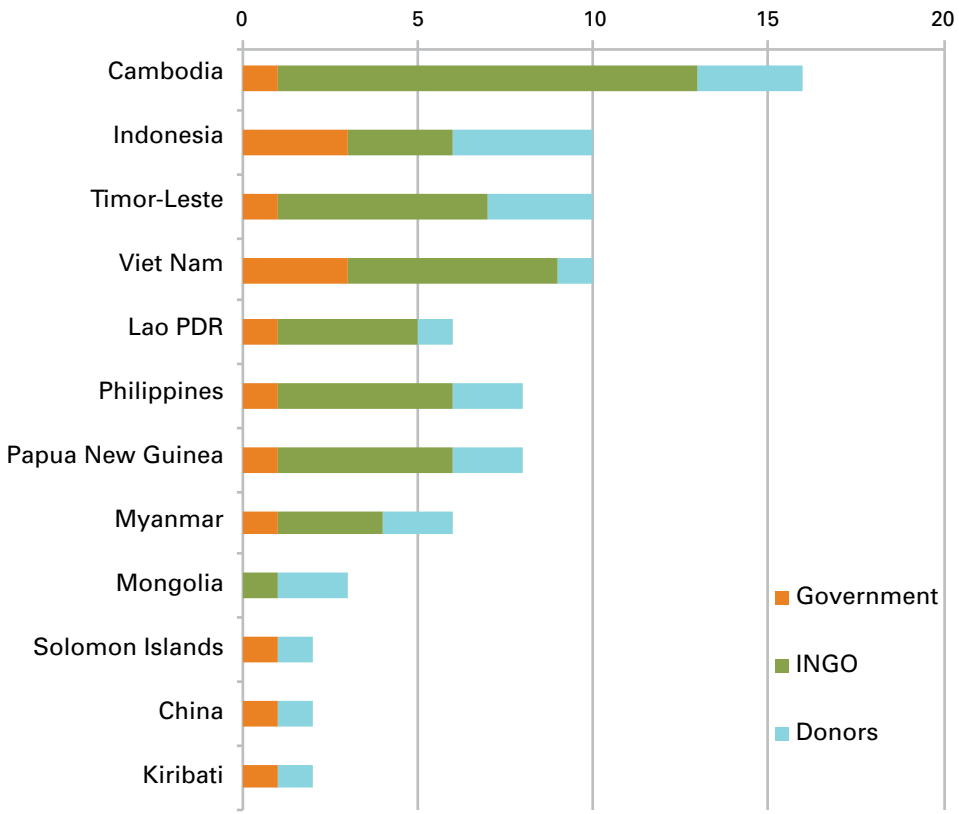
While the reasons behind geographical programme targeting vary by country and programme, most sanitation programmes target areas with high rates of open defecation and areas where sub-national governments show demand and commitment to sanitation improvement. However, CLTS interventions are sometimes included in broader WASH programmes, where rural water supply status and road access often have a bigger influence on targeting criteria than sanitation status.

Further work is required to examine the reasons behind the limited spread in some countries, and to understand better the factors that encourage targeting of CLTS interventions to areas where OD rates and health indicators, such as the rate of stunting, suggest that the need is greatest.

1.2.3 Institutional spread

The data on institutional spread – the number of sector organizations that were known to be actively promoting or implementing CLTS – confirmed the growing institutional support for CLTS.

Figure 1.3 Number of organizations promoting or implementing CLTS[10]



Key: Dev. agencies = Multi-lateral and bi-lateral development support agencies.

As with geographical spread, the institutional spread is strongly associated with the length of time since CLTS was introduced – with greater spread amongst the early and mid-term adopters, and only two or three organizations involved in each of the late adopters.

The review highlighted some differences between geographical and institutional spread: Cambodia has the highest institutional spread, particularly among the large group of international NGOs, but relatively low geographical spread; and the situation was similar in Viet Nam, with good institutional support in the four years since CLTS introduction, but a relatively low implementation coverage across the country.

Cambodia has a large development and NGO sector, with several competing (sometimes complementary) sanitation improvement approaches[11] being promoted by major agencies. Support for CLTS has grown, but some significant institutions promote latrine hardware subsidies and alternative approaches. In this case, a more in-depth review is needed to examine the proportion of institutions that support CLTS (or not), and the scale, finance, duration and effectiveness of their programmes.

The situation is slightly different in Viet Nam, where consensus on the value of CLTS appears to have developed fairly recently, and institutional support among non-government institutions has not yet translated into large programmes. However, while early indications suggest that the National Target WASH Programmes Third Phase (NTP-3) will utilize the CLTS approach, there remain concerns that the NTP-3 may continue to subsidize latrine hardware, which could undermine the spread and effectiveness of CLTS interventions.

Only limited spread was observed across government departments, with just two countries (Indonesia and Viet Nam) reporting more than one government department promoting or implementing CLTS. In most cases, limited spread among government institutions reflects both low support for CLTS among infrastructure-focused departments, and the reality that only one government department – often the health department – has responsibility for environmental health and behaviour-change activities. A more in-depth review would be able to examine how the spread among central and local government departments influence policy, programming and practice.

[10] Countries ordered by date of CLTS introduction

[11] Such as sanitation marketing, the provision of up-front latrine hardware subsidies, and the ADB's combined demand creation and hardware subsidy approach.

1.2.4 CLTS scale

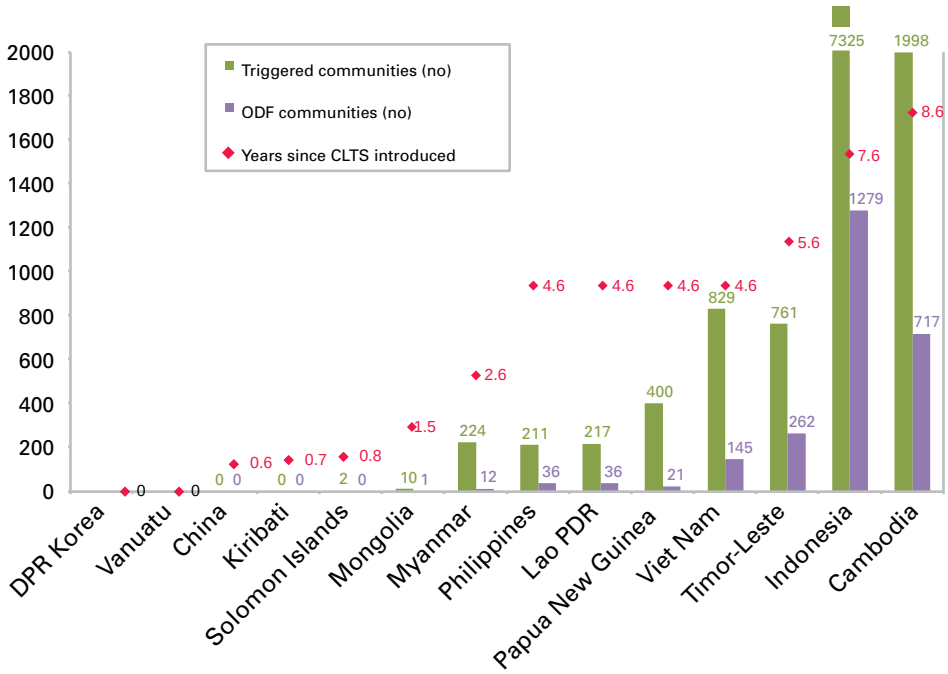
CLTS scale was measured by collating data on the number of communities where CLTS had been used to trigger sanitation improvement; and on the number of ODF communities. These indicators provide some measure of the scale of CLTS implementation in each country, and the scale of improved outcomes.

Few countries in the region have operational systems to verify ODF status or check whether ODF outcomes are sustained. Therefore, the data presented in Figure 1.4 are the number of ODF communities reported by the country review teams based largely on information that they received from implementing agencies. These data include a mixture of self-declared ODF communities, and ODF communities certified by the implementing agencies or local governments. None of the review countries were able to confirm that all of the ODF communities reported had been verified independently, and very few sustainability checks have been carried out. Therefore, these data may include some communities that were self-declared ODF but have not fully met ODF criteria, and other communities that were genuinely ODF at declaration, but in which some households have since reverted to OD.

Figure 1.4 charts the scale of CLTS activities by country, in terms of the number of triggered and ODF communities, with the order determined by the time in years since CLTS was introduced. This chart highlights the greater progress made by the early adopters, and points to relatively small differences in the progress made by the five countries that introduced CLTS two to four years ago.

While it may seem intuitive that the early adopting countries have made greater progress, and that mid-term countries would be not far behind, this intuition neglects significant differences in context, history, CLTS introduction processes, and sanitation enabling environments, all of which might be expected to significantly influence the adoption, evolution and scaling up of the CLTS approach.

Figure 1.4 CLTS progress (number of triggered and ODF communities)



In practice, the review data show that CLTS has scaled well in the two early adopting countries, with Cambodia and Indonesia triggering 2,000-7,300 rural communities; and reveal that Myanmar has joined the five mid-term countries in implementing CLTS in 200-850 rural communities since 2008. Little progress has been made outside these eight countries, due to the recent introduction in Mongolia, Solomon Islands and Kiribati, and the on-going re-introduction of CLTS in China.

ODF impact on national sanitation coverage

In all, 3.1 million people across the 14 review countries were reported to live in ODF communities. However, despite this significant achievement, progress has been quite slow. Optimistic progress reports presented at the 2009 Regional Workshop on CLTS in the South-East Asia and Pacific, held in Cambodia,[12] suggested that CLTS would have made significant impacts on national sanitation coverage in both Indonesia and Cambodia before 2012.

[12] About 60 participants from eight countries in the EAP region gathered in November 2009 in Phnom Penh to discuss CLTS progress and issues: http://www.communityledtotalsanitation.org/resource/regional-workshop-clts-south-east-asia-and-pacific-region

Indonesia now has 2.27 million people living in 1,279 ODF communities,[13] but even this major achievement represents only 1.7 per cent ODF rural population. Cambodia reports 575,000 people living in 717 ODF communities, amounting to 5.1 per cent of the rural population. Similarly, while progress is consistent across the mid-term adopters, the numbers remain small and CLTS is yet to make national impacts in most of these countries – less than 1 per cent of the rural population live in ODF communities in Lao PDR, Viet Nam, Papua New Guinea, the Philippines and Myanmar.

The one exception is Timor-Leste, where the relatively small rural population – only 750,000 people in total – means that moderate CLTS progress has had a significant national impact over the last four years. Today, 119,000 people are estimated to live in the 262 ODF communities, which is 16 per cent of the rural population – more than one in seven Timorese rural households.

In many respects, as detailed in the following sections, Timor-Leste's CLTS performance is closer to those of the two early adopters than to the mid-term adopters, thus for the rest of this review Timor-Leste has been grouped with and compared against the early adopting countries.

Incremental increases in sanitation coverage

While the main focus of CLTS interventions is on achieving ODF communities and areas, there remains a significant proportion of triggered communities that do not reach ODF status. Incremental increases in sanitation coverage occur in most of these triggered communities, with some achieving 80-95 per cent latrine coverage.

[13] The ODF population in Indonesia is much larger than in other countries both because of the high number of ODF communities achieved and because the STBM secretariat in Indonesia provided data using the larger village (*desa*) unit whereas most country review teams reported using the smaller sub-village unit. Programme data suggest that more than 19,000 sub-village communities (*dusun*) have been triggered in Indonesia, and that 4,200 of these dusun have achieved ODF status.

The review has focused on ODF achievement because only limited data were available on non-ODF achievements – the number of latrines built and the sanitation coverage achieved in communities that do not achieve ODF status. However, data from Timor-Leste suggest that around two-thirds of the new toilets that resulted from CLTS interventions were found in ODF communities, which suggests a further 12,000 new household latrines were built in non-ODF communities.

These data suggest that the number of new and rehabilitated latrines triggered outside ODF communities is likely to be significant – about 50 per cent of the new toilets found in ODF communities according to the Timor-Leste data – and also highlight the importance of follow-up interventions in the growing number of project communities that do not achieve ODF status following CLTS interventions in order to sustain these outcomes and attempt to improve sanitation facilities and practices among the remainder of the population.

1.2.5 ODF success rate

The ODF success rate, defined as the proportion of triggered communities that become ODF, is a key indicator of the effectiveness of CLTS implementation. The ODF success rate does not tell us anything about the quality or sustainability of collective sanitation outcomes, but it is a key indicator of CLTS effectiveness that can highlight problems as programmes spread and scale up.

The ODF success rate might be expected to decrease as programmes scale up, due to the more difficult physical conditions and challenging social contexts encountered, and the challenges of maintaining the quality of CLTS facilitation and processes on a larger scale. In practice, most CLTS reviews find substantial variations in ODF success rate across both large and small programmes, and even under the same conditions within the same programme.

The WSP promoted the same implementation approaches in all 29 districts of the East Java province of Indonesia under its Total Sanitation and Sanitation Marketing (TSSM) project. Yet the ODF success rate varied from only 8 per cent in low performing districts to as high as 99 per cent in one of the best performing districts. Many factors influence the ODF success rate, and analysis of the factors behind different ODF effectiveness is an important component of any CLTS evaluation.[14]

The review found a surprising consistency in the national ODF success rates reported across the EAP region (see Figure 1.5):

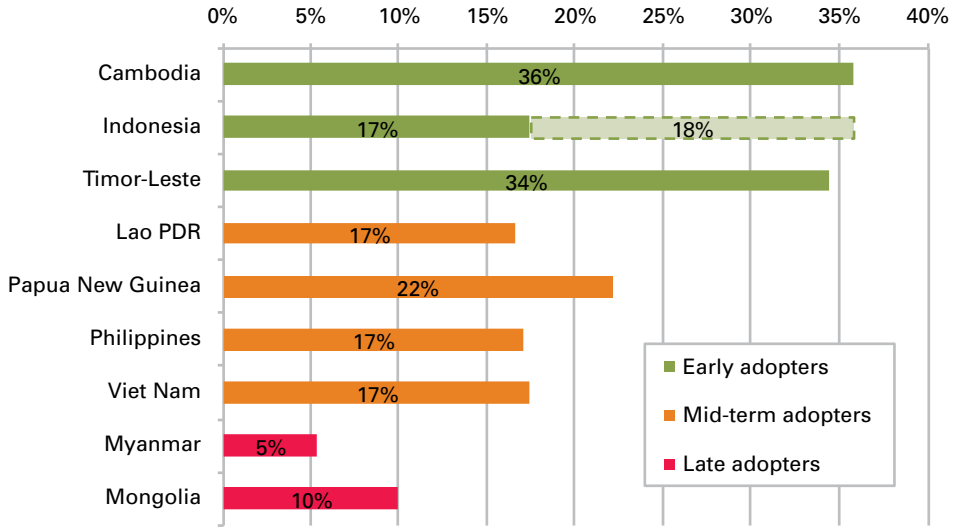
- early adopters including Timor-Leste reported 34-36 per cent ODF success rates;
- mid-term adopters reported 17-22 per cent ODF success rates; and
- late adopters reported only 5-10 per cent ODF success.

These data appear to show the opposite of the scale problem mentioned above – average CLTS effectiveness seems to be lower in countries where it was more recently introduced, and increases over time. These data suggest that countries in the region are following a form of learning curve.

However, it should be noted that many of the communities reported as ODF were self-declared, that is without independent verification that the community meets the local agreed ODF criteria, and that some of these ODF declarations took place several years ago (particularly in the early adopting countries). For instance, the validity of the reported 36 per cent ODF success rate in Cambodia has been questioned, as no ODF verification process was followed, and several evaluations have suggested that reversion to OD is common in Cambodia. Further work will be required to examine the validity and sustainability of the reported ODF outcomes.

[14] WSP conducted action research in 80 CLTS communities in East Java (Indonesia) to better understand the triggering processes, their consequences, and the factors that influenced outcomes (Mukherjee et al, 2012, *Achieving and sustaining open defecation free communities: learning from East Java,* The World Bank, Water and Sanitation Program, report.)

Figure 1.5 ODF success rate (percentage)



Note: data for Indonesia reflect the 17 per cent average national ODF success rate, as well as the higher 35 per cent rate achieved by programmes other than the large-scale PAMSIMAS.

Nonetheless, these data suggest a steady increase in ODF success rate as the country programmes, sector capacity and enabling environments have developed and strengthened. While surprising given the different contexts and challenges found in, for example, early adopting countries – Cambodia, Indonesia and Timor-Leste, these data suggest that the review countries are at different stages of broadly similar CLTS development trajectories; and that it takes time for CLTS policy, programmes and practice to translate into larger scale progress and greater effectiveness (which we are now starting to see in these three higher performers).

The main discrepancy was in Indonesia, where the latest progress data provided by the STBM Secretariat suggested a national ODF success rate of only 17 per cent. Further investigation revealed that a substantial proportion of CLTS progress in Indonesia was reported by the World Bank supported PAMSIMAS programme, which has triggered almost

12,000 sub-village *dusun* communities in the last two years, but has only managed a 14 per cent ODF success rate (1,663 ODF communities).[15] The reason for the low ODF success rate in the PAMSIMAS programme was not reported, but it seems likely that the rapid and dramatic scaling up of CLTS implementation by this programme has been a significant factor. If the PAMSIMAS progress data are considered a special case, the ODF success rate across the 7,000 *dusun* communities triggered by other programmes in Indonesia[16] is 36 per cent, which closely matches the 34-36 per cent ODF success rates achieved in Cambodia and Timor-Leste.

CLTS was introduced to Papua New Guinea in 2008, and has made rapid strides in recent years. However, there is no formal monitoring system, which meant that reliable progress data were hard to find. The EU-RWSSP programme recently conducted an end of programme evaluation that reported 11,000 new latrines resulting from interventions in more than 400 communities. In addition, a national NGO called Touching The Untouchables (TTU) reported 5,000 new latrines achieved in 77 communities, with 17 communities declared ODF. No ODF data were available from the larger EU-RWSSP programme, hence the average ODF success rate quoted for Papua New Guinea was based on the TTU NGO programme in the Eastern Highlands.

1.2.6 Capacity developed

The rollout of CLTS in West Africa was aided by two regional CLTS workshops – one Francophone and one Anglophone – in 2008 and 2009, and by formal efforts from the UNICEF regional office to develop national CLTS training courses, arrange exchange visits and provide technical support. In particular, UNICEF supported a regional training institute, Centre for Low Cost Water Supply and Sanitation (CREPA), to provide reliable capacity development and facilitator training across the region (particularly in the Francophone countries).

A less coordinated approach was found in the EAP. WSP was instrumental in transferring the CLTS approach from South Asia to Indonesia, and subsequently in encouraging its spread to the Philippines and Lao PDR. But few other organizations were involved in introducing CLTS into more than one country, and there was little evidence of any regional approach, or of the use of a common training or capacity development model.

As noted earlier, Dr. Kamal Kar's involvement was a consistent feature: he worked for several different agencies to provide CLTS facilitator training in six of the review countries as the CLTS approach was introduced, and ran CLTS workshops in another two review countries following earlier introduction and training. Dr. Kar's activities produced a core group of well-trained and committed facilitators in half of the CLTS countries in the region, but the different processes and levels of government involvement in each country meant that this initial training did not always lead to larger scale capacity development or cascade training programmes.

By 2009, CLTS had been successfully introduced and was expanding in seven countries in the region, which led a group of key stakeholders (Institute of Development Studies at Sussex University, Plan International, UNICEF, WSP, WaterAid Australia, Swiss Red Cross, LienAid and SNV) to support a regional CLTS workshop in Cambodia. Participants from eight countries took part, including Myanmar (at that time, CLTS had not yet been introduced).

One of the key issues to emerge from the regional CLTS workshop was that, while facilitator training and implementation quality are critical to the triggering phase, government involvement and commitment are central to the long-term institutional support needed for post-triggering follow-up, monitoring and sustainability. The side event that preceded the recent EASAN-3 conference in Bali was the first time that this regional CLTS group had reconvened since the 2009 workshop.

[15] Data from PAMSIMAS website provided via WSP Indonesia. The rapid scaling up of this huge community WASH programme, which also implements water supply projects through the Ministry of Public Works, is a significant factor in the relatively low effectiveness data.

[16] 93 per cent of the other CLTS progress in Indonesia was under the WSP TSSM project in East Java (6,672 sub-villages triggered and 2,399 declared ODF) with the remaining 7 per cent attributed to UNICEF and Plan Indonesia programmes.

CLTS capacity

The review examined the extent of CLTS capacity development in each review country, but found that there was little formal tracking of capacity development. Most of the review countries provided approximate numbers of CLTS facilitators trained, but further investigation revealed that these reports varied significantly – some review countries reported everyone that attended CLTS training workshops, which then included larger stakeholder groups invited to raise local awareness; while others reported only those trained specifically as CLTS facilitators.

In addition, only some of those trained as CLTS facilitators persevered to become active facilitators, and fewer still would be classed as effective CLTS facilitators. A more comprehensive capacity review will be required to determine the number of active CLTS facilitators in each country, and examine facilitator performance.

Two main capacity questions need to be addressed:

- Is sufficient CLTS capacity available to achieve national goals?
- Is CLTS capacity being translated into progress?

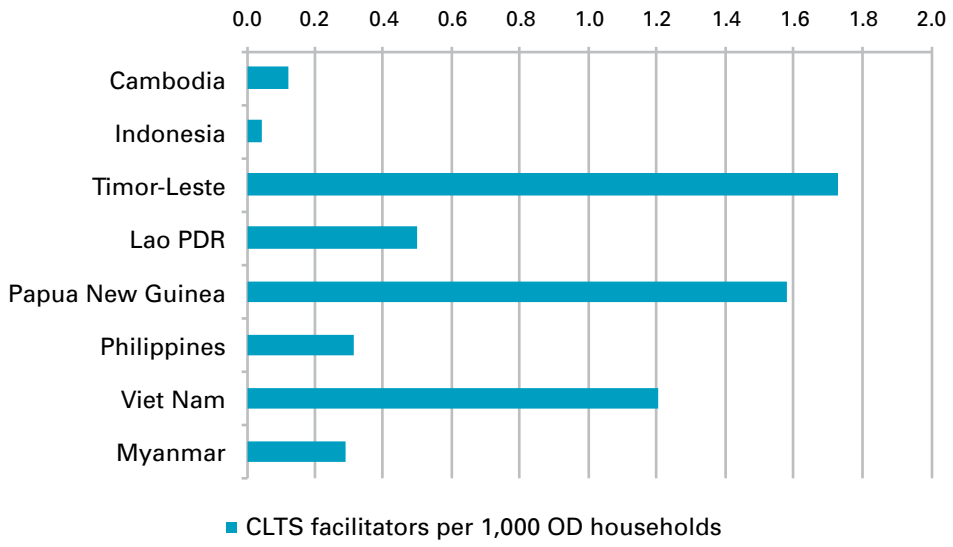
In countries where CLTS was introduced at least two years ago, the country review teams reported that around 100-400 CLTS facilitators had been trained, with the main exceptions being:[17]

- Timor-Leste: only 85 facilitators trained
- Indonesia: 530 facilitators trained[18]
- Viet Nam: 1,132 facilitators trained.

[17] The review reports the data submitted by the country review teams, but it should be noted that different countries reported different things – some reported everyone that has been trained, however peripheral their involvement in implementation; while others reported only those explicitly trained as CLTS facilitators. Further work will be required to understand better both national CLTS implementation capacity and effectiveness (based on reliable data on active facilitators).

[18] Data reported by the STBM secretariat. However, WSP Indonesia suggests that around 1,300 individuals have been trained by CLTS or STBM related programmes, and that around 3,000 individuals (facilitators and natural leaders) were trained in East Java under its TSSM programme.

Figure 1.6 National CLTS implementation capacity

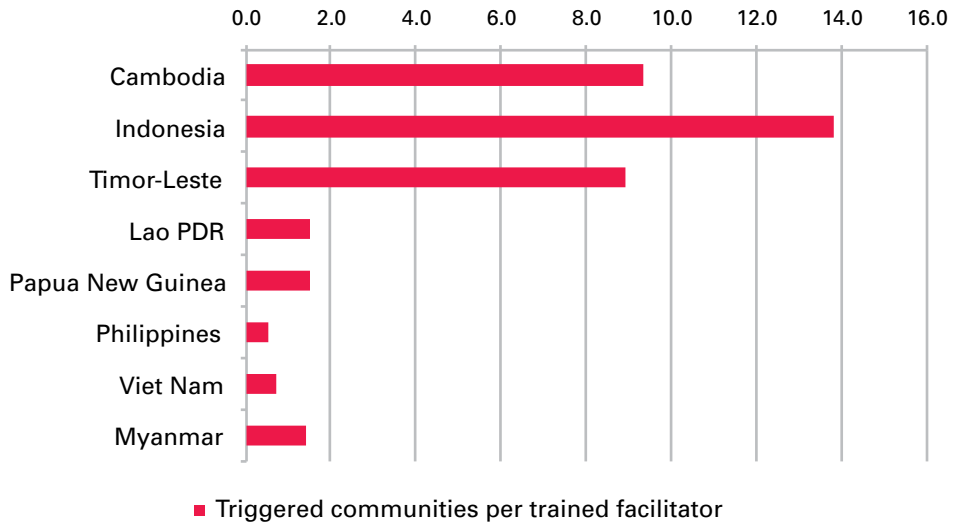


The capacity assessment should recognize the different population size and sanitation requirements in each country. Figure 1.6 highlights this aspect by comparing the number of trained CLTS facilitators per 1,000 households without toilets in eight of the review countries. Timor-Leste, Papua New Guinea and Viet Nam have trained at least one CLTS facilitator for every 1,000 OD households, whereas the other countries have trained less than one facilitator for every 2,000 OD households, with only one trained facilitator per 23,000 OD households reported in Indonesia.

These differences also reflect different stages of the capacity development process. The later adopting countries reported everyone that had received some form of CLTS training, which presents a relatively good ratio of CLTS facilitators to OD households. However, the early adopting countries generally only reported on active CLTS facilitators, as these countries have realized that it is relatively easy to train facilitators, but that the real challenge is to build up a cadre of effective and committed CLTS facilitators.

This issue is illustrated Figure 1.7, which graphs the number of triggered communities per trained facilitator, and highlights the difference between the triggering efficiency of those "reported as trained facilitators" in the early and mid-term adopting review countries. This efficiency indicator needs to be considered alongside the ODF success rate in order to get a better measure of the overall effectiveness of facilitation, as rapid triggering may not lead to good results.

Figure 1.7 Efficiency of trained CLTS facilitators



A comparison of the number of communities triggered against the number of trained CLTS facilitators confirms the greater implementation efficiency of the two early adopting countries and Timor-Leste (see Figure 1.7): all three report more than eight triggered communities for every facilitator trained, whereas the other countries report an average of around one triggered community per trained facilitator.

Cambodia and Indonesia appear to have the most efficient and effective facilitators, in terms of both numbers of triggered communities and ODF success rates.[19] These two countries have also made the greatest progress in scaling up CLTS, yet have the lowest capacity when assessed against national requirements.[20] While this issue relates to the variable reporting mentioned above, it also reflects the huge rural sanitation challenges in these two countries, which between them contain 66 per cent of the population that practices OD in the region (56 million people).

1.3 CLTS ENABLING ENVIRONMENT

The following sections summarize the review findings on the enabling environment for CLTS in each of the review countries. Table 1.2 summarizes the enabling environment findings from the country CLTS overviews, with the countries ordered according to when the CLTS approach was adopted.

This summary of the first stage of the regional CLTS review presents basic information on the current status of the CLTS enabling environment in each review country. However, the review does not attempt to examine why or how the different enabling environments have developed because of the limited information available (across all 14 countries) from the rapid review conducted. The complexity of sanitation enabling environments, and the difficulty of any accurate determination of causality, suggest that more detailed work will be required to better understand the key factors that have influenced and improved enabling environments.

The significant "red" sections in Table 1.2 highlight the large amount of work still required to strengthen and improve enabling environments across the region. However, the table also demonstrates the progress made by the two early adopting countries and Timor-Leste, all three of which now have sanitation policies supportive to CLTS, and are making progress in improving other areas of the enabling environment.

[19] Except in the PAMSIMAS programme, which reported only 14 per cent ODF success rate.
[20] As noted earlier, this may reflect these countries only reporting active facilitators rather than all those trained as facilitators.

Table 1.2 Summary of CLTS enabling environment

Country	Policy	Plans	Finance	Integration	Monitoring
Early CLTS adopters					
Cambodia	Yes	No	Indirect	Maybe	Maybe
Indonesia	Yes	Yes	Yes	Yes	Yes
Mid-term CLTS adopters					
Lao PDR	Maybe	Yes	Indirect	Maybe	Planned
Papua New Guinea	No	No	Indirect	No	No
Philippines	No	Yes	Indirect	No	No
Timor-Leste	Yes	Draft	Indirect	Maybe	Yes
Viet Nam	Maybe	No	Planned	Maybe	No
Late CLTS adopters					
Myanmar	Maybe	No	Indirect	No	No
Mongolia	No	No	No	No	No
China	No	No	No	No	No
Solomon Islands	No	No	Indirect	No	No
Kiribati	No	No	No	No	No

Key: "Yes" = enabling in place (green); "Draft/Planned/Maybe" = partially enabling (yellow); "Indirect" = indirect financial support provided (orange); "No" = not in place (red).

1.3.1 CLTS in government policy

The country CLTS overviews suggest that government sanitation policy and technical guidelines were important factors in the scaling up and effectiveness of CLTS programmes. However, only Cambodia, Indonesia and Timor-Leste reported government policies that recognized and promoted the principles of the CLTS approach.

Indonesia sanitation policy

The 2008 National Strategy for Community-Led Total Sanitation (STBM strategy) in Indonesia provided a definition for an improved latrine – an effective sanitary facility to break the transmission of disease – and stated that subsidies should not be provided for household sanitary facilities. Indonesia was the first government in the region to adopt a CLTS-friendly policy and, while the explicit "no hardware subsidy" statement in the STBM strategy has not prevented the provision of latrine hardware subsidies by some projects and programmes, it has demonstrated government commitment to demand creation and behaviour-change interventions ahead of hardware subsidies, and has encouraged the harmonization of programme approaches and policies.

Cambodia sanitation policy

The Royal Government of Cambodia formally approved and issued its National Strategy for Rural Water Supply, Sanitation and Hygiene (RWSSH) 2011-2025 in August 2012. The principle on sanitation financing states: *"For sanitation, public finance should mainly be used to stimulate demand and develop the enabling environment (including affordable products) so that households pay for their own toilets. Those who can pay should pay. While targeted hardware subsidies may be provided to poor households to buy toilets, and to reach the vision of 100 per cent coverage, direct hardware subsidies should be used with caution and only as a last option, and alternative mechanisms should be prioritized." (page 8)*

The Cambodian national RWSSH strategy has been under discussion and development for several years, which has allowed a range of sometimes conflicting sanitation policies, programmes and practices to flourish. Several major rural sanitation programmes are now underway in Cambodia – including the US$ 5 million Global Sanitation Fund programme, US$ 5 million iDE sanitation marketing programme,[21] US$ 8 million sanitation component of the ADB Second Rural Water Supply and Sanitation Sector Project, and US$ 11 million East Meets West Sanitation and Hygiene programme in Viet Nam and Cambodia[22] – and it is hoped that the principles promoted by the national strategy will enable these programmes to complement each other in improving sanitation at scale and achieving the national development objectives.

[21] Jointly financed and supported by the Bill and Melinda Gates Foundation, the Stone Foundation, and the Water and Sanitation Program.

[22] A large proportion of the programme finance is allocated to the Viet Nam component of the programme.

Timor-Leste sanitation policy

The Government of Timor-Leste approved its National Basic Sanitation Policy in January 2012. The first of the four main policy objectives is for the achievement of "an open defecation free environment"; the policy defines a hygienic toilet according to five principles;[23] and states that "households shall be responsible for the construction and maintenance of their own sanitation facilities, including a hygienic toilet and handwashing facility," and that "the construction of household toilets and other household sanitation facilities shall not be subsidized except in specific situations where the households are disadvantaged". Despite recent approval of the policy, most sector stakeholders had already adopted the policy principles in their programmes following extensive consultations during the four-year long policy development process.

Table 1.3 Sanitation policies in other countries

Country	Rural sanitation policy
Supportive policy framework but no formal policy	
Lao PDR	Emphasis on creating demand through community-based approaches to contribute to achieving ODF communities (in 2012 National RWSSH Strategy).
Viet Nam	2011 National technical regulation: principle-based definition of hygienic latrine that is supportive to CLTS approach; draft CLTS guidelines circulated by the Ministry of Health.
Philippines	No formal national policy, but the 2011 National Sustainable Sanitation Plan of the Department of Health includes ODF targets, and is seen to provide guidance on implementation in rural areas.
Myanmar	2012 National Sanitation Campaign will (reportedly) promote the CLTS approach.
Non-supportive policy framework	
China	2003 technical standards require leak-proof latrine pits and tanks, and National Patriotic Health Campaign Committee (NPHCC) promotes relatively expensive standard designs, which limits the role of CLTS.
DPR Korea	Government building codes define construction standards in rural areas.
No sanitation policy	
Kiribati, Mongolia, Papua New Guinea, Solomon Islands, Vanuatu	

[23] The minimum requirements of a hygienic toilet are that it: prevents human contact with human excreta; prevents the discharge of human excreta into open spaces, drains and water bodies; prevents flies, other insect vector and animal contact with human excreta; includes a solid, raised platform with a smooth and easy-to-sweep finish; and prevents the emission of bad smells.

Policy relating to the provision of latrine hardware subsidies remains a central issue; with household expectations of latrine hardware subsidies mentioned as a constraint to sanitation progress in seven of the review countries. Rigid technical standards were another policy constraint identified by the review, most notably in China where the government technical standards do not allow latrines with leach pits due to concerns about the risk of groundwater contamination.

1.3.2 CLTS in government plans

Government development strategies and plans were found to be supportive of CLTS in Indonesia, Lao PDR and the Philippines; with the Government of Timor-Leste in the process of developing a National Strategic Sanitation Plan to operationalize the policy objectives in the recently approved National Basic Sanitation Policy.

However, even in the handful of countries where sanitation strategies and plans appear supportive, there is little evidence that these planning frameworks translate into larger scale or more effective programmes or outcomes.

Indonesia's previous five-year development plan 2005-2009 included 100 per cent ODF coverage as a target for 2009, but neglected to support this ambitious target with either the required investment or implementation programmes. The same plan target has now been set for 2014, although this time with greater finance attached to the over-arching PPSP programme. However, this review finds that currently only 1.7 per cent of the 75,000 plus villages in Indonesia are ODF, which suggests that it is extremely unlikely that the target will be met within the next two years. Similarly, the 2011 National Sustainable Sanitation Plan developed by the Department of Health in the Philippines sets a target of 10 per cent ODF villages in 2012, rising to 60 per cent ODF by 2016, yet this plan target is not supported by any substantial investment, implementation or capacity development programmes. The review estimated that only 36 out of the

42,000 *barangays* in the Philippines (0.1 per cent) are currently ODF, which represents less than one hundredth of the 2012 plan target.

The review suggests that there is a significant disconnect between national sanitation targets, sanitation strategies and plans (where they exist), sector investments and implementation programming, with few national sanitation strategies or plans that appear to be based on realistic, costed assessments of how targets will be reached, or any attempt to map out the strategic priorities en route to these targets.

Table 1.4 Rural sanitation strategies and plans

Country	Rural sanitation strategies and plans
Sanitation strategies and plans supportive of CLTS	
Indonesia	2010-2014 National Mid-Term Development Plan (RPJM-N) sets the target of 100 per cent ODF villages nationally by 2014, with finance for 20,000 villages to be provided through the Accelerated Sanitation Development for Human Settlements (PPSP) programme.
Lao PDR	2012 National Strategy for Rural Water Supply, Sanitation and Hygiene includes strategic targets for improved sanitation coverage (including in the lowest wealth quintile) and latrine usage; and proposes monitoring of the proportion of ODF villages achieved.
Philippines	2011 National Sustainable Sanitation Plan of the Department of Health aims for 60 per cent zero open defecation (ZOD) *barangays* by 2016. However, the 2010 Philippines Sustainable Sanitation Roadmap[24] mentions neither ODF targets nor the CLTS approach.
Supportive sanitation strategies and plans under development	
Timor-Leste	Draft National Strategic Sanitation Plan under development, with the aim of operationalizing the 2012 National Basic Sanitation Policy.
Non-supportive planning framework	
Cambodia	No ODF targets in the 2012 National Strategy for Rural Water Supply, Sanitation and Hygiene, although CLTS is mentioned as one of the approaches to be evaluated for hygiene behaviour change.
Viet Nam	National Target Program RWSS III Phase 2012-2015 focuses on increasing household latrine coverage rather than ODF targets.
No sanitation strategy or plan	
Kiribati, Mongolia, Myanmar, Papua New Guinea, Solomon Islands, Vanuatu	

[24] An inter-agency collaboration developed through a Technical Working Group of the National Economic and Development Authority (NEDA) Infracom Sub-committee on Water Resources.

1.3.3 CLTS financed by government

Government financing for CLTS is one of the weakest areas of the enabling environment in the EAP region. Indonesia is the only national government that invests directly in CLTS activities, through support to STBM activities, finance to the PPSP programme, and counterpart financing to the World Bank supported PAMSIMAS programme and ADB CWSH programme.

Governments in seven other countries were reported to provide indirect finance to CLTS activities, through the provision of counterpart staff and facilities for the management, implementation and monitoring of externally financed programmes. However, in most cases, government staff involvement is enabled through the payment of field allowances, transport costs and per diems by the external agencies.

Surprisingly, given that as many as 3.1 million people are now living in ODF communities, the review found that none of the national governments in the 14 review countries have financed large-scale CLTS programmes. District and provincial governments have financed the implementation of local CLTS projects in East Java province (Indonesia) and Sarangani province (Philippines), but these investments were triggered and directed by WSP support programmes rather than by local priorities or policies. Local government investments to implement Indonesia's STBM strategy are increasing as awareness and priority for this national strategy grows, but many local governments require technical assistance and institutional support to plan, develop and implement CLTS and wider sanitation improvement programmes.

While rural sanitation finance remains generally low in the region, the review found that, where governments had invested in rural sanitation, they tended to finance the provision of latrine hardware subsidies, often either in similar areas to existing CLTS programmes, or explicitly linked to CLTS activities in order to take advantage of the sanitation demand created by these activities.

This issue appears to be the most significant in the region: consensus on the utility and effectiveness of CLTS appears to be growing and spreading, and is starting to find its way into government policies, plans and practice, yet the majority of government finance continues to be allocated to more hardware-focused and infrastructure-based approaches, perhaps because of the perception that these approaches result in faster progress and can deliver a higher level of service. Further study is required to determine whether these investment decisions are evidence-based, i.e. is there evidence that latrine hardware subsidies have resulted in faster, more cost-effective progress and better sanitation outcomes – or whether this regional preference derives more from the political economy, institutional legacies, information gaps or other factors.

1.3.4 CLTS integrated with other approaches

In light of the growing enthusiasm for sanitation marketing (and other new approaches) in the region, the review examined the extent to which CLTS planning, implementation and monitoring have been integrated with other approaches. The intention was to highlight cases where efforts had been made to ensure that the policies, programmes and practices required by different implementation approaches had been harmonized to complement each other and, conversely, where competing approaches and programmes clash, undermine or detract from each other.

The review found few examples of the effective integration of CLTS with other approaches. In large part, this lack of integration reflects the governments' preference for latrine hardware subsidies discussed in the previous section. Most of the review countries reported problems related to the provision of latrine hardware subsidies alongside CLTS programmes, with multiple references to the suppression of sanitation demand because of the rationing of hardware subsidies – households in communities where latrine hardware subsidies have been provided often prefer to wait for the next tranche of subsidies rather than invest in their own simple facilities. Some programmes, such as the ADB-supported Second Rural Water Supply and Sanitation Program (RWSSP-2) in Cambodia, intend to employ a form of CLTS to create demand for rural sanitation while also offering hardware subsidies through local suppliers. The cost-effectiveness of this combined or 'hybrid' approach have not been tested, with significant concerns that the project reliance on latrine hardware subsidies will dominate the process, limit the effectiveness of any CLTS component, and result in an overly long and expensive process.

The WSP TSSM programme in East Java (Indonesia) was the best example of a large-scale programme that was effective in combining the CLTS approach with interventions on sanitation marketing and behaviour-change communication. The scaling up of the integrated approaches promoted by the TSSM programme was assisted by the government's STBM strategy, but local governments in Indonesia have considerable autonomy, thus while the majority of districts embraced both the CLTS and sanitation marketing approaches, at least one district in East Java continued to use latrine hardware subsidies despite programme efforts to promote a more integrated approach.

The Global Sanitation Fund (GSF) is financing a rural sanitation programme in Cambodia that aims to combine CLTS-based demand creation and supply strengthening through sanitation marketing. The initial CLTS achievements of this programme were included in this review, but the sanitation marketing component was not sufficiently advanced to determine the scale, effectiveness and sustainability of this integrated approach.

1.3.5 CLTS sustainable monitoring

Basic CLTS monitoring data were not readily available at either national or programme levels. Ten out of 12 review countries were unable to provide current CLTS progress data without contacting implementing agencies for updates, and some of these implementing agencies were unable to provide progress data without first contacting specific project and sub-national offices.

As a result, the data collection process was long and iterative,[25] with some doubt remaining over the reliability of data in several cases.

The two early adopting countries (Cambodia, Indonesia) and Timor-Leste reported national sanitation monitoring systems that were designed to collect CLTS progress data, such as the number of triggered and ODF communities. However, while up-to-date progress data were available from the monitoring systems in both Indonesia and Timor-Leste, the CLTS database had not been maintained in Cambodia, with little data added since 2010. Subsequent efforts to update the progress data for Cambodia revealed that the large number of implementing organizations now active in the sanitation sub-sector makes regular maintenance of the CLTS database a significant undertaking.

The review confirms that the limited demand for, and utilization of, CLTS progress data (or other sanitation progress data) diminishes incentives to maintain monitoring systems through regular collection, processing and reporting. This issue is a systemic problem – large-scale projects routinely establish monitoring systems, often in government departments supported by computer systems, training and technical assistance, but few of these sanitation monitoring systems prove sustainable.

The central problem appears to be a lack of demand for the data – projects require monitoring data to report against their results frameworks, but few national monitoring systems are linked to governance mechanisms, such as annual strategic reviews, that regularly pull sanitation progress data and reports up through the system. Sporadic attempts to report on progress, such as this review, generate a brief flurry of activity, but are insufficient motivation to maintain large-scale systems.

ODF verification

Inconsistent criteria and procedures for declaring, certifying and verifying ODF achievement were a common constraint. Indonesia and Timor-Leste were the only countries where an ODF verification process has been finalized at the national level, although the process has not yet had official government approval in Indonesia.

In several countries where national criteria had not yet been agreed, different implementing agencies were reported to adopt different criteria and follow different processes, with some reported to be less rigorous than others. National processes also reflect the different policy and programme environments in each country: the stringent ODF criteria in Indonesia require that every household owns and uses an improved sanitation facility, whereas in other countries, including Timor-Leste, the ODF criteria allow some households to share latrines within ODF communities.

ODF verification is important because it provides some guarantee that commonly agreed ODF criteria have been reached, and that these criteria have been assessed by an independent group some time after the ODF status was originally declared by the community or implementing agency. While an ODF verification process will not tell us much about the sustainability of sanitation outcomes, it provides a more reliable source of progress data, and often encourages government involvement.

The review was unable to gather sufficiently detailed information to report on the progress of the review countries towards the institutionalization of national ODF verification processes. Further work on ODF verification should be included in the next phase of the regional review, including the documentation of functional ODF verification processes in the region to be used as a resource by other countries.

[25] The author would like to acknowledge the considerable and urgent efforts made by the country review teams in chasing, collating and verifying the CLTS progress data used in this review.

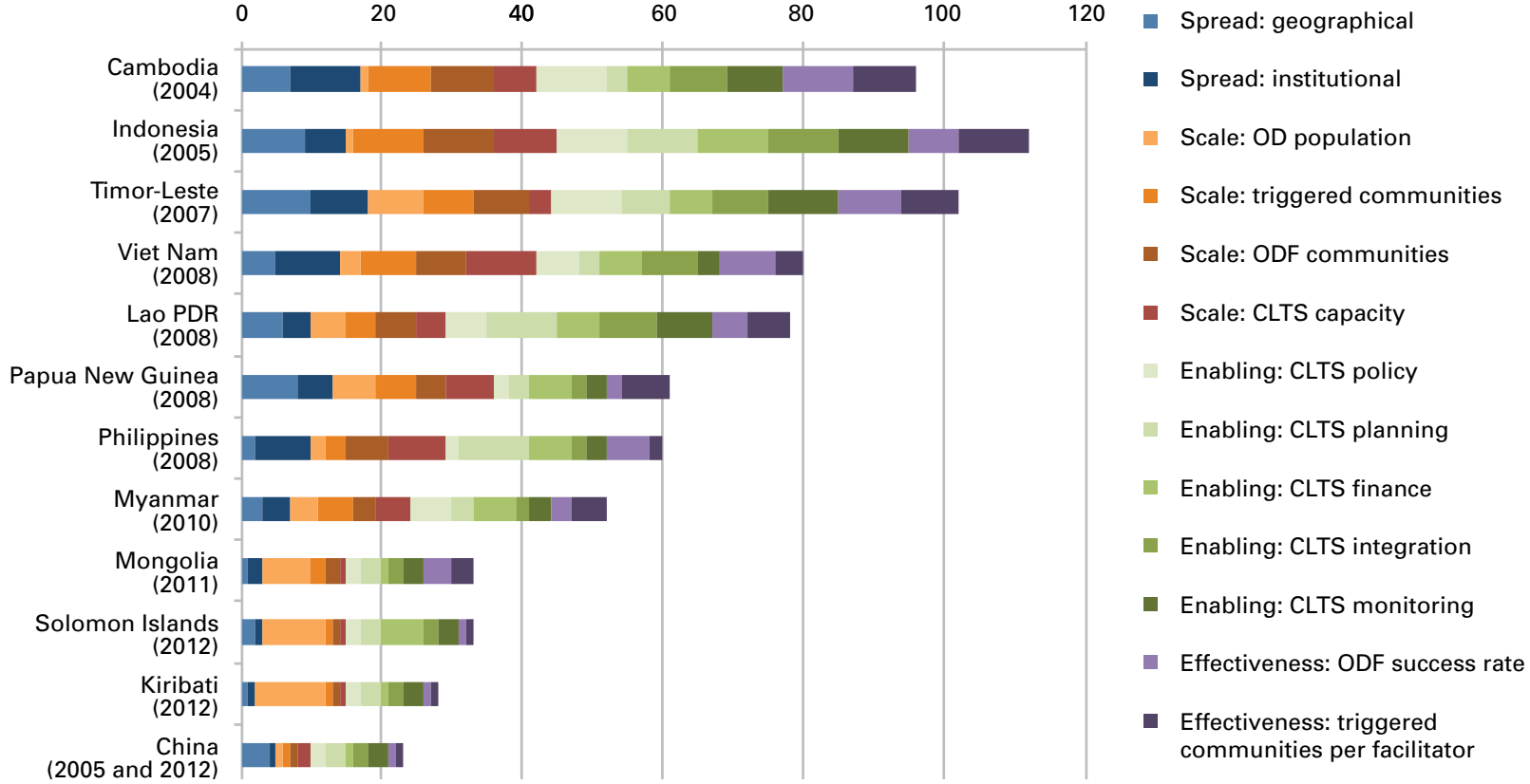
1.4 REGIONAL CLTS OVERVIEW

Each of the 14 review countries in which CLTS has been introduced was ranked for all of the 13 indicators examined in the country CLTS overviews, and the 13 ranking scores[26] were then aggregated. No effort was made to score or weight these indicators to reflect their relative importance, as the intention was simply to gain some idea of relative CLTS performance across the review countries.

The regional CLTS ranking (see Figure 1.8 below) orders the review countries according to the date of CLTS introduction, and suggests that Cambodia has progressed slightly more slowly than the other high-performing countries, Indonesia and Timor-Leste. In particular, the review found that the enabling environment for CLTS in Cambodia was less well developed than in the other two countries.

The other mid-term adopting countries took the next four places in the regional ranking, led by Viet Nam and Lao PDR, with Myanmar closing

Figure 1.8 Overall ranking of the CLTS review countries (by date of CLTS introduction)



[26] 10 points was scored for a first place ranking; 9 points for second; 8 points for third and so on, with 1 point scored for a 10th, 11th or 12th place ranking (hence possible ranking scores were 13 – 130 points).

in on the rankings of Papua New Guinea and the Philippines despite only introducing CLTS in 2010. Unsurprisingly, the late adopting countries where little or no implementation had taken place – Mongolia, Solomon Islands, Kiribati and China – filled the bottom rankings.

Associations between high-ranking countries

The review found that the two early adopting countries (Cambodia and Indonesia) and Timor-Leste performed better in almost every area examined:

- more CLTS spread;
- greater CLTS scale;
- higher CLTS effectiveness; and
- better CLTS enabling environments.

Further work will be required to determine why these countries have performed better than the other review countries. This will require a deeper understanding of why CLTS was introduced earlier in these countries than others, and whether the development of CLTS processes and capacity followed along similar lines or not.

Was CLTS introduced earlier because these countries were more progressive and receptive to new approaches to sanitation development; or because the support agencies working in these countries were proactive in promoting and introducing CLTS; or perhaps both of these conditions arose because the scale of the rural sanitation challenge was larger in these countries? Even today, Indonesia has 48 million people practicing OD; Cambodia has the highest proportion of OD in the region; and Timor-Leste reports the highest percentage (82 per cent) of rural population without improved sanitation facilities?[27]

The urgency and priority accorded to rural sanitation development was apparently lower in the Philippines and Myanmar, where improved sanitation coverage was higher in rural areas;[28] and in China, Papua New Guinea and Viet Nam, where OD rates were below 20 per cent. Possible exceptions were Lao PDR and Mongolia, which despite having either high OD (56 per cent in Lao PDR in 2006) or low improved sanitation coverage (31 per cent in Mongolia in 2006), were slower to adopt CLTS – perhaps because of the more traditional and risk-averse governments in these two formerly centralized economies.

Another hypothesis emerging from the review is that the early introduction of CLTS strengthened the rural sanitation sub-sector in these countries, encouraging the evaluation and comparison of competing approaches, and forcing agencies and countries to review and improve policy and practice in the face of evidence of ineffective or badly targeted subsidies, low cost-effectiveness and slow progress. While consensus is still developing, CLTS challenged the status quo in many countries, and stimulated improvements in the enabling environment and in the resources and capacity allocated to rural sanitation and hygiene.

The review confirms that the enabling environment for CLTS is much stronger in the early-adopting countries and Timor-Leste, but this CLTS-focused snapshot does not allow an assessment of whether the broader enabling environment for rural sanitation (including supply strengthening, behaviour-change communication and other forms of sanitation demand creation) has been improved by the development and institutionalization of the CLTS approach.

The progressive sanitation and WASH policies and strategies recently adopted in Indonesia, Timor-Leste and Cambodia suggest that CLTS has contributed to improvements in the enabling environment. However, these reforms may also have resulted from normal policy and planning cycles, which tend to lead to new policies and strategies every five or 10 years. Again, further work would assist in understanding the drivers for these reforms, and the role that CLTS has played in improving enabling environments for rural sanitation.

[27] According to the 2010 Timor-Leste Population and Housing Census.

[28] 72 per cent in the Philippines, 82 per cent in Myanmar according to the estimates in the 2008 JMP progress report.

Rapid CLTS progress in Timor-Leste

The review highlighted the rapid CLTS progress made by Timor-Leste, both in improving the scale and effectiveness of its CLTS interventions, and in achieving national impacts, with 16 per cent of the rural population now reported to live in ODF communities.

A significant factor in this achievement has been the high level of support provided by the AusAID-supported East Timor Rural Water Supply and Sanitation Program (BESIK[29]). This AU$ 41 million[30] 2007-2012 programme[31] included significant sanitation components, financing full-time sanitation staff since 2009; bringing in policy, monitoring, capacity building and sanitation marketing specialists to develop sanitation systems and institutions; and providing resources to support sector coordination, evaluation, capacity development and learning exchanges.

In a relatively small country, not only this major WASH programme but a large number of external sanitation stakeholders have been actively engaged in supporting government efforts to improve sanitation: including USAID, WSP, UNICEF, Plan, WaterAid, Oxfam, ChildFund, Triangle DH, AFMET, CVTL,[32] and World Vision. In early 2012, their combined efforts resulted in the approval of the National Basic Sanitation Policy, the establishment of a National Directorate for Basic Sanitation Services, and a significant increase in the government budget allocation rural sanitation.

Comparative analysis with other regions

UNICEF conducted a comparable CLTS review in West and Central Africa (WCA) in 2011.[33] The WCA region is smaller in population than the EAP region, with a population of around 350 million spread across 25 countries. However, when China's large population is excluded, the rural population of the other 13 review countries is similar at around 308 million. The populations practicing OD are also comparable: 100 million in the WCA region, and 85 million in the EAP region (including the 13 million OD population in China).

The WCA review examined CLTS progress in 18 countries, including three early adopters where CLTS was introduced in 2007-08 (Ghana, Nigeria and Sierra Leone), another 14 countries where CLTS was introduced in 2009-2010, and Burkina Faso, where CLTS did not progress beyond the initial pilots in five villages in 2008.[34]

As in the EAP region, CLTS has become one of the main rural sanitation approaches in the WCA region, with only two large countries that have not yet introduced CLTS (Gabon and the Democratic Republic of Congo). The slightly later start (and the earlier review, which took place a year before the EAP review) has resulted in lesser overall progress – the WCA review reported 2,100 ODF villages and around 1 million people living in these ODF villages. However, the recent rapid scaling up in the FAS early adopters and Timor-Leste in suggests that the WCA progress figures may have advanced considerably since the regional review was completed in July 2011.

The progress data are also similar – two early adopting countries progressed rapidly to trigger 2,100-2,600 villages; then a group of seven countries that triggered 80-400 villages; and a final group of eight countries that have triggered only 25-60 villages. As in the EAP region, the country with the largest scale CLTS programme also has a low ODF success rate: in this case, Nigeria with only 16 per cent ODF success rate (compared to 17 per cent in Indonesia). It is not known whether this low success rate is the result of rapid scaling up by a large programme, as postulated in Indonesia, or whether there is a more widespread effectiveness issue in Nigeria.

[29] The project is widely known by its Tetum acronym: Be'e Saneamentu no Ijieneiha Komunidade (BESIK).

[30] US$ 42.2 million.

[31] A second phase US$ 44 million BESIK-2 is due to start in 2013.

[32] Timor-Leste Red Cross (Cruz Vermelha de Timor-Leste).

[33] Bevan J (2011) *A review of the UNICEF roll-out of the CLTS approach in West and Central Africa*, 35th WEDC International Conference, Loughborough University.

[34] Although since the WCA regional review, CLTS has apparently been re-launched in Burkina Faso with Presidential support.

One major difference is the variation in ODF success rate found in the WCA region, which ranged from 3 per cent in Chad to 93 per cent in Cameroon, with four moderate sized country programmes reporting 41-74 per cent ODF success rates. This large variance may relate to the smaller programme sizes in the WCA countries, but in general the ODF success rate was significantly higher in the WCA region – averaging 33 per cent across 17 countries, compared to an average of only 21 per cent in the EAP region.

The WCA review also presented some CLTS cost data. However, the basis of these cost assessments was not clear, for instance whether they included direct and indirect programme support costs (such as capacity development, project overheads, management support, local government support). Reliable cost data are important to any comparison of programme effectiveness, but all too often these cost data are partial and lead to unfair or mis-matched comparisons.

Some cost data are available from the EAP region, including a 2010 WSP-ADB study on sanitation finance in Cambodia[35] that reported CLTS software costs of US$ 48 per toilet constructed, plus another US$ 40 in programme support costs;[36] and a 2009 Joint Sanitation Evaluation in Timor-Leste,[37] which found total CLTS costs averaged US$ 89 per toilet constructed. However, further work is required to examine CLTS programme costs and effectiveness in the region in more detail, and to agree common assessment frameworks that encourage the documentation and analysis of reliable and comparable sanitation cost data.

[35] This study used the same cost assessment framework as the six-country WSP comparative review of financing on-site sanitation for the poor (Tremolet et al, 2010 Financing on-site sanitation for the poor: a six country comparative review and analysis The World Bank, Water and Sanitation Program, technical paper).

[36] Robinson A (2012) Sanitation finance in Cambodia.

[37] Shapiro J et al (2009) Timor-Leste Joint Sanitation Evaluation: a study of program outcomes.

1.5 CLTS REGIONAL ISSUES

The following sections summarize the key issues highlighted by the regional CLTS review. These issues were raised either by key informants interviewed for the review, in the documents reviewed in the preparation of the country CLTS overviews, or in the discussions held at the EASAN-3 side event and conference sessions.

In most cases, insufficient information was available to conduct any comparative analysis of experience with these issues in the review countries, thus the issues are discussed below in general terms, and are highlighted in the conclusions and recommendations as areas where further study and analysis are required.

1.5.1 Reversion to open defecation

Widespread concerns about the sustainability of the sanitation improvements gained from CLTS interventions were apparent from the review. In general, these concerns centred on the durability of low-cost pit latrines, which are often built rapidly following CLTS triggering without technical guidance,[38] and on the sustainability of community commitment to sanitation improvement once the main intervention is completed.

Unfortunately, few evaluations have taken place addressing the sustainability of CLTS sanitation outcomes in the EAP region, thus little reliable data are available on reversion to OD. This gap in the data reflects both the low level of evaluation within the rural sanitation sub-sector, and the need for several years to elapse before an evaluation of sustainability can be undertaken.

In a separate exercise to the country CLTS review process, seven studies on ODF sustainability were reviewed (detailed in Annex 3 and summarised in Table 1.5 below). These studies showed a wide range of outcomes: three studies (in

[38] One of the tenets of CLTS is to encourage households to solve their own sanitation problems, which generally precludes the provision of top-down technical guidance such as standard latrine designs.

South Asia and Africa) reported 1-10 per cent OD in formerly ODF communities; another three studies, including studies in Indonesia and Lao PDR, found 0-19 per cent OD in previously ODF communities; and the final study, in Cambodia, found that 57 per cent of households were not using latrines in previously ODF communities[39] – 29 per cent reported a 'dig and bury' practice during flooding that prevented them using their latrines, and another 28 per cent were either practicing OD or sharing other people's latrines.

Table 1.5 Summary of ODF sustainability studies

Country	Main study findings	Study size
High performing cases		
Bangladesh (2011)	3% OD 8% use of unimproved sanitation facilities	3,000 households in 53 ODF Unions
Himachal Pradesh, India (2010)	10% OD 10% shared use of improved sanitation facilities	300 households in 15 ODF communities
Africa (2012)	Ethiopia: 9% OD Kenya: 8% OD Sierra Leone: 1% OD Uganda: 1% OD	1,851 households in 57 ODF villages 821 households in 20 ODF villages 1,860 households in 19 ODF villages 512 households in 20 ODF villages
Moderate performing cases		
Nigeria (2008)	0-18% OD 76% OD in excluded tribal group	3 ODF communities
Indonesia (2011)	1 'quickly ODF' community with some OD (19 others still ODF) 20% OD in 'late ODF' villages	20 'quickly ODF' communities 20 'late ODF' communities
Lao PDR (2009)	0-19% OD in ODF villages 2-25% OD reversion in non-ODF villages[40]	3 ODF villages 6 non-ODF villages
Low performing case		
Cambodia (2008)	29% 'dig and bury' and 28% OD or shared latrine use	10 ODF villages

Source: Annex 3 Evidence: ODF sustainability.

[39] Although only 84 per cent of households owned latrines when these communities were declared ODF, with another 16 per cent reported to share other people's latrines.

[40] In the case of non-ODF villages, the reported rates of reversion to open defecation were among households that had built new latrines following CLTS interventions.

The three studies of CLTS interventions in the EAP region (Indonesia, Lao PDR and Cambodia) were all classified as either moderate or low performing cases due to the relatively high levels of reversion to OD found in these studies. However, other studies from outside the region confirmed that OD reversion levels are low in some programmes, even where most households use low-cost pit latrines. Studies in Bangladesh, Sierra Leone and Uganda found less than 3 per cent OD across 5,000 households in 82 communities.

A preliminary analysis of these study findings, and of the reasons given by these studies for the different OD reversion rates, suggests that good performance is linked to:

i) the quality of the CLTS process;
ii) whether the process is well implemented; and
iii) whether the programme was operating within a supportive environment for rural sanitation improvement.

Outcomes were found to be much better where the CLTS process was comprehensive and well-designed; facilitators were well trained, committed and supported (often by NGO partners); and government and development partner policies, programmes and practices were aligned with the CLTS approach. In contrast, where the CLTS approach was newly introduced; where local government was implementing with only limited training, experience or support; and where sector policies and practices were less supportive of the CLTS approach, OD reversion rates were much higher.

The better ODF outcomes were found in older CLTS countries, where more time and experience had allowed implementers to refine the approach, improve implementation and strengthen the enabling environment: the study in Bangladesh was made after 11 years of CLTS; in Himachal Pradesh after four years of CLTS; and in Sierra Leone after five years of CLTS. The studies that found less successful outcomes in Nigeria, Lao PDR and Cambodia were conducted only one to three years after CLTS had been introduced to these countries.[41]

[41] The projects and programmes studied were not started at the same time that CLTS was introduced. This finding relates to the hypothesis that the improved enabling environment in countries that adopted CLTS earlier encourages better quality CLTS processes and more effective institutional support systems.

Once again, the exception is the Indonesia study, which was conducted six years after CLTS was introduced yet reported moderate levels of OD slippage. However, this study examined two different ODF performance strata: in 'quickly ODF' communities, which declared ODF status within two months of triggering, 19 ODF communities (out of 20 studied) were found to have sustained 100 per cent coverage of functional latrines, which would be classed as a high performing case; whereas in 'late ODF' communities, those that were slow to achieve ODF status, the study found 20 per cent OD reversion. The study reported that a "lower quality CLTS process" was implemented in the 'late ODF' communities, and that progress monitoring tended to focus on latrine construction rather than behaviour change.

Association between process and outcomes

A 2011 WSP assessment of the first decade of the Total Sanitation Campaign (TSC) in India[42] found "a strong and positive correlation between the processes and the outcomes – wherever the combination of process indicators has been good,[43] so are the outcomes". Where district progress was lagging behind, the local governments had not used the TSC processes effectively or in the spirit intended by the TSC guidelines.

These findings concur with the preliminary analysis conducted for this regional CLTS review: OD reversion is not necessarily an inherent weakness of the CLTS approach, but rather a reflection of the quality of the CLTS process and its implementation, and of the local enabling environment for rural sanitation improvement. Further work is required to understand better the reasons for OD reversion, and in particular the reasons for the relatively high OD reversion rates reported in the EAP region; and to examine which process elements are most critical to CLTS outcomes.

[42] WSP (2011) *A Decade of the Total Sanitation Campaign: rapid assessment of processes and outcomes,* New Delhi: The World Bank, Water and Sanitation Program South Asia, Volume 1 Main report.

[43] Process indicators included: strategy for TSC implementation, institutional structure and capacity; approach to creating demand and scaling up; technology promotion and supply chain; financing and incentives; and monitoring.

1.5.2 Latrine quality

Latrine quality and durability were highlighted as constraints in three country CLTS overviews. Little data on latrine durability, or assessments of how this issue affects ODF sustainability and OD reversion, were available in the EAP region.

A related issue concerns the provision of technical advice to CLTS communities. One of the core tenets of the CLTS approach is that communities and households should solve their own sanitation problems, and that the exercise of solving these problems through building simple latrines with local materials will encourage ownership, commitment and innovation. Other stakeholders suggest that a lack of technical advice during the latrine construction phase often results in badly constructed latrines, use of non-durable materials and designs, unhygienic facilities, and risk of contamination (from badly contained excreta), pit collapse and latrine abandonment.

Unhygienic latrines were mentioned as CLTS constraints in several countries, as were construction and durability problems related to flooding, termite damage and difficult ground conditions. However, many of these reports are anecdotal, and it is often difficult to differentiate between poor CLTS implementation, which can result in limited conviction and temporary behaviour change among latrine users, and good implementation and genuine behaviour change that is subverted by latrine durability problems. Some well-designed research and evaluation in this area would greatly enhance our understanding of the influence of these technical factors on the sustainability of CLTS outcomes, and the best form of technical (and other) support to encourage the long-term use and maintenance of hygienic sanitation facilities.

Similar concerns have been expressed about the potentially frequent repair and rebuilding costs faced by rural households that use non-durable sanitation facilities. While there is evidence that poor households have to repair and

rebuild facilities on a fairly regular basis, particularly those living in areas with heavy rainfall and seasonal flooding or high groundwater problems, there is less evidence that these costs place any unnecessary burden on poor households who are used to repairing and rebuilding their housing on a regular basis. Most of these latrines are extremely low cost, built using locally available materials, thus the repairs generally cost very little.

The household survey conducted for Phase 2 of the Economics of Sanitation Initiative (ESI-2) in Cambodia found that the average imputed cost of the dry pit latrines built under the Plan CLTS programme was US$ 13, and that around 20 per cent of owners had made repairs to the latrine enclosures that they valued at 'zero cost'.[44] In contrast, more expensive latrines with rendered brick enclosures required fewer repairs, but repair costs were much higher (averaging US$ 45 per latrine) due to the need for market-bought materials, transport and masonry skills.[45]

1.5.3 Latrine hardware subsidies

The continuing use of direct latrine hardware subsidies[46] was identified as perhaps the biggest challenge to the scaling up and effectiveness of CLTS in the EAP region.

Despite the successful spread of CLTS across the region, there remains little consensus on the role of hardware subsidies in sanitation development. CLTS advocates suggest that the provision of subsidized latrine components and latrine construction services disrupts CLTS interventions by raising local expectations regarding an adequate level of service; suppressing household investments in the self-provision of facilities; and constraining the development of local producers and service providers. Conversely, subsidy advocates note that the higher standard of latrines that can be provided through hardware subsidy programmes tend to be more hygienic and more durable, and question whether ODF outcomes achieved with low-cost pit latrines are more beneficial than high levels of coverage achieved with pour-flush latrines that have easy to clean concrete slabs. The evidence base is surprisingly thin, and the little evidence available often reflects the shortcomings of particular programmes and contexts more than any inherent characteristic of either latrine hardware subsidies or CLTS programmes.

A 2010 WSP study on sanitation finance in Cambodia[47] found that only 10 per cent of subsidized latrines reached the poor households targeted by the programme; that the latrine components and construction services provided by this programme cost more than twice as much as similar products and services available from the private sector; that the subsidy programme limited the choice of options available to the beneficiary households; and that the large-scale programme had constrained the development of local latrine production and construction businesses.

Discussions of sanitation subsidies now focus on the provision of 'smart subsidies' that are well targeted, outcome-based, cost-efficient, and designed to promote competition for customers and avoid disruption to local markets. Unfortunately, few examples of the implementation of 'smart subsidies' exist, and no documentation or evaluation of the practical application and effectiveness of smart subsidies were found by the review. Ongoing projects in Cambodia plan to pilot a range of smart subsidies, from latrine vouchers to outcome-based rebates and cash transfers, but there is as yet little or no evidence that these 'smart subsidies' are effective in improving the targeting, cost efficiency and market integration of latrine subsidies; or that 'smart subsidies' can be provided without undermining CLTS interventions and affecting the self-provision of sanitation facilities.

[44] In terms of the value of the materials and labour.

[45] Robinson A (2012) *Sanitation finance in rural Cambodia*. The World Bank, Water and Sanitation Program, guidance note.

[46] Direct subsidies are usually provided in the form of subsidized or free latrine materials and construction services.

[47] Robinson A (2012) Sanitation finance in Cambodia.

1.5.4 Supply-side interventions

The CLTS approach focuses on triggering rural households to use locally available resources to build and use affordable latrines that meet their sanitation needs. In some cases, the simple latrines that result from CLTS interventions do not meet the aspirations of these households, or do not provide an effective or sustainable solution to local sanitation problems. Increasing efforts are being directed at improving the supply of affordable, appropriate and aspirational sanitation goods and services, and information about these goods and services, to allow rural households to upgrade and improve facilities, and promote the sustained use of hygienic toilets.

The condition of local sanitation supply chains can be an important factor in the availability and affordability of sanitation goods and services, and in household decisions about whether or not to build a toilet, and what type of toilet to build.

The regional CLTS review did not examine supply-side factors as these are beyond the usual areas addressed by CLTS interventions, thus few data were available. However, the next phase of the review should consider how supply-side factors influence CLTS outcomes, and whether there is any evidence that greater scale, effectiveness, sustainability and benefits can be achieved when programmes tackle weaknesses in sanitation supply chains.

1.5.5 CLTS and equity

One of the strengths of the CLTS approach is its inclusive nature – achievement of an ODF community requires that every member of the community, however poor or disadvantaged, stops OD and improves their sanitation behaviour. As a result, the biggest challenge of CLTS is often around reaching the poorest and most disadvantaged households – those who generally have the highest disease burden – and encouraging them to build and use sanitation facilities that are within their means.

CLTS uses a number of different mechanisms to encourage sanitation behaviour change among the poorest and most disadvantaged households, including disgust, peer pressure and collective action. While these triggers can be effective, evidence of reversion to OD by some CLTS households and communities questions whether the assumed 'equity bonus' of the CLTS approach can be lost. Those that revert to OD are often households that did not manage to build durable and hygienic sanitation facilities close to their homes (due to problems including affordability, lack of materials, land tenure and labour shortages), or those marginalized in the CLTS process. Further work is required to determine how equitable CLTS outcomes are over time, and whether there is any learning from the region on how best to ensure that poor and disadvantaged households gain sustained access to hygienic sanitation facilities.

2. Conclusions

2.1 CLTS WORKS

The review confirms that CLTS is working in the EAP region. Despite concerns that CLTS was not appropriate to the cultural and social contexts in the region, CLTS has already spread to 12 countries, triggered sanitation improvements in more than 12,000 rural and peri-urban communities, and led to more than 3.1 million people living in 2,300 ODF communities. The review found that CLTS implementation and support are growing across the region, and that enabling environments are become increasingly supportive.

CLTS alone will not be enough to meet rural sanitation objectives in the region, and this review recognizes that the approach has weaknesses (see following conclusions). Nevertheless, the 12 country CLTS overviews suggest that CLTS has been more effective than previous approaches to sanitation development in triggering sanitation improvement and behaviour change, and in raising government awareness and priority for rural sanitation.

CLTS still faces substantial obstacles in the region, not least being strict technical regulations in China and DPR Korea which limit the use of low-cost sanitation facilities, and the incompatibility of current latrine subsidy programmes with CLTS. Nonetheless, the review found that CLTS is spreading and scaling up in the region, and has already led to improved sanitation for several million people.

2.2 BASIC CLTS DATA NOT READILY AVAILABLE

CLTS monitoring remains a significant weakness, at both national and project levels. The review found that, in most countries, even basic CLTS progress data were not readily available. Few countries have mechanisms that require routine reporting or analysis of monitoring data, thus there is little demand for the data. As a result, monitoring systems are rarely maintained or sustained, and the reliability of monitoring data is rarely checked. In part, this weakness reflects the lack of CLTS or sanitation-related objectives in national plans and strategies, which limit high-level interest or the need for regular reporting of CLTS progress and outcomes. The country CLTS review teams often had to collect data directly from implementation agencies in order to compile national summaries of CLTS progress, and there remain questions about the reliability and accuracy of some of the data reported.

2.3 CLTS SCALE UP TAKES TIME

The review findings suggest that CLTS spread, scale and effectiveness have taken time to develop, but that CLTS progress appears remarkably consistent despite the very different contexts and challenges found across the review countries.

It was anticipated that the different CLTS introduction processes and sectoral dynamics would influence overall country outcomes significantly. However, the review suggests that the CLTS 'learning curve' is a more critical factor. Progress after CLTS introduction is relatively slow, as efforts are made to show that CLTS can work, attract more implementers and develop a more supportive policy environment.

The two early adopting review countries and reported consistently greater progress and performance than the mid term-adopting countries: ODF

success rates were 34-36 per cent in Cambodia, Indonesia and Timor-Leste, and only 17-22 per cent in the other mid-term adopters.

The review argues that it takes time to build an evidence base, develop consensus on what works, refine implementation processes, and elaborate the CLTS-friendly policies, plans and programmes that allow progress to scale and spread.

The review recognizes that the larger rural sanitation challenges faced by the early adopting countries, Cambodia and Indonesia, and Timor-Leste, attracted more external support and encouraged greater government priority and commitment. However, despite these supportive starting conditions, it has taken more than five years to reach a stage where CLTS scale, effectiveness and sustainability are in a position to generate national impacts and attract large-scale government finance.

The review also highlighted the risk that rapid scaling up can lead to lower quality CLTS implementation, and to lower programme effectiveness. The low ODF success rate in Indonesia was affected by the poor performance of the PAMSIMAS programme, which appears to have dramatically increased the scale of CLTS implementation in the last two years.

2.4 LIMITED CLTS IMPACT ON NATIONAL SANITATION COVERAGE

Despite the review findings that CLTS works, and that the early adopters managed to achieve reasonable spread, scale and effectiveness, CLTS has had only a limited impact on national sanitation coverage in the review countries.

Timor-Leste's relatively small rural population mean that it is the only review country where CLTS has achieved significant impact on national sanitation coverage: 16 per cent of the rural population are reported to live in ODF communities, and another 8 per cent of the rural population living in non-ODF communities have built new toilets. Cambodia reported that 5 per cent of the rural population live in ODF communities, but the sustainability of these ODF outcomes is in question.

The review suggests that the lack of national impact is the result of *ad hoc* implementation and limited government investment in CLTS – few of the review countries have national strategies for CLTS, provide government finance to national CLTS programmes, or have developed formal CLTS capacity development or monitoring systems. The review confirms that there is often a disconnect between rural sanitation targets, strategies and development plans, and investment and implementation programmes that lack the resources, capacity and priority needed to achieve the government's sanitation objectives.

2.5 CLTS HAS INFLUENCED ENABLING ENVIRONMENTS

The review confirms that the early adopting countries and Timor-Leste have made significant progress in improving CLTS enabling environments since CLTS was introduced. While it is hard to determine the true drivers of these reforms, this review argues that CLTS has had a significant influence on national discussions on sanitation finance, technical standards, sustainability, cost-effectiveness, scaling up, equity and targeting throughout the region. CLTS challenged conventional thinking and programming, leading to greater awareness and engagement with rural sanitation improvement among sector specialists and government decision-makers, which has led to recent improvements in sanitation policies, strategies and programmes.

2.6 SUSTAINABILITY OF CLTS OUTCOMES

The review was unable to shed much light on the sustainability of CLTS outcomes due to the limited evidence available from the region. However, an analysis of seven recent studies of ODF sustainability in Africa, South Asia and South-East Asia suggested that the sustainability of ODF and other CLTS outcomes was linked to the quality of the CLTS process: inadequate or badly implemented processes tended to result in significant reversion to OD and low sustainability, whereas good processes tended to result in good sustainability and low slippage rates. While intuitive, the review of these studies confirmed that sustainable outcomes can be achieved by CLTS interventions, and that widespread reversion to OD is not an inevitable next step in the process.

The analysis also noted that two of the review country studies on ODF sustainability, in Lao PDR and Cambodia, were conducted within one to three years of the introduction of CLTS, when implementation processes, facilitator training and CLTS enabling environments were relatively under-developed.

2.7 CLTS VARIATIONS WITHIN THE REGION

The review highlighted the significant sanitation challenge faced by Indonesia: 57 per cent of the rural population of the 14 review countries that practices OD lives in Indonesia, 48.1 million people in total. The review found that Indonesia has responded to this challenge well, making more CLTS progress since 2005 than all of the other review countries combined: 2.3 million people in Indonesia are now living in ODF communities, 72 per cent of the total ODF population in the region. Indonesia also came first in the regional ranking of CLTS performance, the only country to have made progress in all five enabling environment areas.

Timor-Leste was another strong CLTS performer. Despite only introducing CLTS in 2007, Timor-Leste was found to have one of the best CLTS programmes in the region, and is the only country reviewed where CLTS is thought to have made a significant impact on national sanitation coverage. In contrast, few of the Pacific island states introduced CLTS until relatively recently. Only Papua New Guinea implemented CLTS before 2012, with scaling up currently dependent on the efforts of a few committed individuals. CLTS was introduced into the Solomon Islands and Kiribati during 2012, but has not yet reached Vanuatu.

The lack of CLTS engagement in the Pacific reflects both the perception that the cultural and contextual differences in these island states would limit the relevance and effectiveness of the approach, and the lack of Pacific engagement by some of the key agencies that introduced CLTS to the region (WSP, UNICEF, WaterAid, Plan International). As in many other countries previously, experiences in Papua New Guinea and the Solomon Islands now suggest that the cultural differences do not prevent CLTS from working, and that the approach has great potential in remote island communities where market goods and services are expensive and hard to access.

2.8 IS THE ROLE OF CLTS BEING MAXIMIZED IN THE EAP REGION?

The main conclusion of the review is that the potential of CLTS in the EAP region has not been maximized. While the review found that CLTS is working and spreading, progress has been much slower than anticipated even in the early adopting countries. Furthermore, CLTS has not penetrated far into the Pacific island states, China and DPR Korea.

CLTS effectiveness in the EAP region appears to be lower than that in more recent CLTS programmes in WCA. This is surprising given the generally greater resources and capacity found in the EAP region, but may reflect the greater tension between the use of latrine hardware subsidies and CLTS implementation in the EAP region, or perhaps the higher expectations of this rapidly urbanizing region (which constrains the adoption and use of simple pit latrines).

Further enabling environment development is required: CLTS remains absent from many national strategies and implementation programmes; there is limited government investment in CLTS implementation (or in other behaviour change and sanitation and hygiene software activities); few formal capacity development programmes exist for CLTS; and major policy alignment issues are created by the provision of latrine hardware subsidies alongside CLTS interventions.

The role of CLTS in the region is important: a recent paper[48] analysed child height and sanitation data from 140 nationally representative demographic health surveys (DHSs) to find that sanitation coverage alone explained 54 per cent of cross-country variations in the height of children under three years old.[49] Another study by the same author, of household survey data in India,[50] found that "children who live in villages where fewer households openly defecate are taller, on average", and that children living in ODF villages are taller than children living in villages with less than 50 per cent open defecation.

While these studies do not establish a causal effect of sanitation on height,[51] they do suggest that OD and sanitation coverage are strongly linked to stunting, and that more attention should be paid to this critical issue.

[48] Spears D (2012) Sanitation and open defecation explain international variation in children's height: evidence from 140 nationally representative household surveys. RICE working paper.

[49] This result is not driven by time trends, and is robust to the inclusion of control variables including for GDP, with no similar effect found for other plausible cross-country differences such as electrification, water supply, political autocracy or estimates of calorie deficits (Spears D, 2012a Policy lessons from implementing India's Total Sanitation Campaign New Delhi: National Council of Applied Economic Research, India Policy Forum 2012).

[50] Spears D (2012a) Policy lessons from implementing India's Total Sanitation Campaign New Delhi: National Council of Applied Economic Research and The Brookings Institution, India Policy Forum 2012.

[51] As children and families with other disadvantages may sort into neighborhoods and communities with more OD.

3. Recommendations

The recommendations provided in this review report are general in nature because of the limited secondary data and information on which the rapid review was able to draw. More specific and detailed recommendations would need to be based on an in-depth examination of country-level issues and in-country consultations.

3.1 IMPROVE CLTS ENABLING ENVIRONMENTS

Scaling up CLTS progress and improving CLTS effectiveness and sustainability will be dependent on further strengthening of enabling environments for rural sanitation in the review countries. Few governments or development partners in the region have yet developed strategic sanitation plans that elaborate the role of CLTS in creating large-scale demand for sanitation, or financed national implementation programmes that combine CLTS with other approaches.

Further work is required to examine the sort of interventions that can influence the political economies, institutional legacies, information gaps and other areas that determine government direction on rural sanitation.

While some of these areas are resistant to sector interventions, there is growing evidence that governments are willing to reform and adopt new approaches where credible evidence is available that new approaches and arrangements are appropriate and cost-effective. Realistic, costed and well-prioritized strategic sanitation plans are central to persuading governments in the region, which historically prefer infrastructure investments, that it is in their interest to allocate more finance and capacity to behaviour-change programmes like CLTS which can reach the poor and reduce health costs.

3.2 STRENGTHEN CLTS MONITORING SYSTEMS

The review recommends more detailed monitoring and evaluation of CLTS progress and effectiveness. The main problem seems to be the lack of mechanisms that encourage the regular collection, analysis and reporting of CLTS or other sanitation performance data. Annual strategic reviews, ideally linked to the monitoring of CLTS progress against strategic sanitation targets, and local government benchmarking systems are useful mechanisms for pulling monitoring data and reports up through government and programme systems.

The review also suggests that there is a need for more regular regional updating and reporting of national CLTS and other sanitation progress data. The two to three year EASAN conference cycle is too long, and the biennial JMP progress report contains insufficient detail. Therefore, it is recommended that the review partners consider whether an annual update of national sanitation progress and performance data can be made part of any existing regional processes or monitoring mechanisms.

3.3 CLTS QUALITY

The review confirmed strong demand for information on how best to improve CLTS quality and accelerate progress. Most stakeholders agreed that CLTS facilitation, process and follow-up quality were critical, but there were few concrete suggestions on what needs to be done to improve implementation and follow-up.

The review recommends more detailed monitoring and assessment of CLTS implementation quality and capacity development. More effort needs to be made to track the number of trained facilitators that become active, and assess the relative effectiveness of active facilitators and support staff. Analysis of the factors that lead to higher ODF success rates and more sustainable outcomes – for instance, why outcomes are better in one programme area than another – should be an essential part of any CLTS intervention.

The regional CLTS review in WCA highlighted the use of regional training institutions as a factor in the consistent scaling up and improvement of implementation. The limited specialist CLTS capacity found in many countries in the region suggests that there may be advantages to supporting or developing a regional CLTS training institute. This regional training institute could provide standard training packages, encourage routine assessment of CLTS quality, and be responsible for disseminating learning and best practice to key programmes and institutions around the region.

3.4 ODF SUSTAINABILITY

The review highlighted strong regional demand for information on ODF sustainability and, therefore, recommends that further work is undertaken to collate ongoing and recently completed studies on ODF sustainability within the EAP region.

Despite frequent suggestions that follow-up and long-term support after CLTS triggering are critical to sustainability, little finance or capacity are allocated to these areas by projects or programmes. The review recommends that greater priority be allocated to post-triggering activities in plans, programmes and practice, and that efforts are made to document best practices for the long-term institutional support and monitoring of ODF (and non-ODF) communities.

Concerns about the possible negative effects of institutional incentives for collective sanitation improvement on sustainability appear to have limited their use in the EAP region. Nonetheless, the broad family of incentives available, which include numerous non-financial awards in addition to more conventional conditional grants and financial rewards, offers a useful mechanism through which to increase the monitoring and support provided to post-ODF communities. The review recommends that further attention is given to testing and implementing mechanisms that encourage, support and enhance the sustainability of ODF outcomes.

Supply-side factors, such as the availability and affordability of sanitation goods, services and information, can also influence ODF sustainability and the benefits generated. This review did not examine the role of supply-side factors on latrine durability, facility upgrading and ODF sustainability. Further work is recommended in this area to contribute to the understanding of the relative importance of key factors such as CLTS facilitation quality, post-ODF follow-up and supply-side factors.

3.5 LATRINE HARDWARE SUBSIDIES

The review confirmed that policy on latrine hardware subsidies remains an emotive and important issue. More effort is required to understand how government and development partner policies on latrine hardware subsidies can be improved and better aligned with CLTS, sanitation marketing and other interventions designed to improve rural sanitation and hygiene.

The discussions held at the EASAN-3 side event and main conference sessions highlighted the strong polarity of those that either support or oppose latrine hardware subsidies (even among the regional CLTS review partner agencies), and the limited extent and reliability of the evidence base that informs these debates. The next phase of the regional CLTS review would make a significant contribution to the sub-sector if it was able to clarify and disseminate better the existing evidence base on latrine

hardware subsidies (and smart subsidies), and encourage greater and more rigorous efforts to evaluate ongoing and completed latrine subsidy and CLTS programmes, and compare the results.

Programme costs

Programme cost data should be central to any discussion of the scaling up, effectiveness and sustainability of a sanitation development approach. Proper assessment of cost-effectiveness is difficult, but should start with reliable data on programme costs (including indirect support and capacity development costs). The review recommends that efforts are made to collect cost data from the major CLTS implementing agencies in each review country in order to encourage informed discussion of the relative costs and benefits of different processes and approaches.

3.6 NON-ODF COMMUNITIES

This regional CLTS review has focused on progress in achieving ODF communities. However, the relatively low ODF success rates in the region remind us that, at least at present, almost 80 per cent of the CLTS-triggered communities do not reach ODF status: in the 12 review countries that have introduced CLTS to date, 9,500 triggered communities (out of the total of 12,000) did not reach ODF status.

Few CLTS programmes offer any solution in these cases, with most activities directed towards repeat triggering or to following up with ODF communities. Therefore, it is recommended that the next phase of the regional CLTS review should examine appropriate post-CLTS strategies and programme options for these triggered but non-ODF communities, and compile more reliable data on the extent and sustainability of the sanitation gains made in these communities.

3.7 ASSISTANCE TO NEW CLTS COUNTRIES

The review suggested that coordinated efforts were involved in the introduction and evolution of CLTS in several of the early adopting countries. Significant learning and capacity was developed from these country processes, which should now be utilized to benefit the countries that are currently introducing CLTS.

The review recommends that the agencies supporting the regional CLTS review should take a proactive role in the Pacific to provide CLTS assistance and guidance in order to accelerate progress and effectiveness gains in these new CLTS countries. In particular, lessons from the rapid and relatively successful development of CLTS in Timor-Leste are likely to be relevant to these small Pacific island states.

As noted at EASAN-3, the next regional conference should be called the East Asia and Pacific Ministerial Conference on Sanitation (EAPSAN), and efforts should be made in the interim to support and include the Pacific island states in sanitation development forums and networks.

3.8 FURTHER RESEARCH

The regional CLTS review was envisaged as the first stage in a collaborative effort to assess the progress of CLTS in the region, increase understanding of how best to accelerate progress, and ensure that the potential benefits of the CLTS approach were being maximized.

The rapid review reported herein was able to collate and document CLTS progress data, and highlight the key issues raised by the various country review and regional review teams. However, this first stage of the review also confirmed the strong demand in the region for more detailed knowledge on a wide range of issues – in particular, most stakeholders are now familiar with CLTS and its main strengths and weaknesses, but

would like to know how best to go about strengthening CLTS enabling environments, improving the effectiveness of CLTS programmes, tackling sustainability concerns, complementing CLTS with other approaches, and accelerating the scaling up of sanitation improvement.

A second phase of the regional CLTS review would enable the more detailed and specific study required to respond to these demands. The first phase of the review recommends that in-country visits should be made to the three highest performing countries – Indonesia, Timor-Leste and Cambodia – to understand better the evolution of CLTS approaches and programmes in each country, and the factors that have helped or hindered their scale, effectiveness and sustainability. It is also recommended that visits be made to some of the countries that have either recently or not yet introduced CLTS – perhaps two of the Pacific island states and one of the three East Asian states – in order to examine how best to use the learning from the rest of the region to speed up CLTS development and accelerate progress.

A large number of issues were highlighted for further study through the second phase of the review. The first list comprises review areas that require more detailed documentation of available data and knowledge products which were not possible to collect or document in the short time available to the first phase of the review; the second list is of areas that require further investigation and assessment, and which may require some primary research.

Areas to be *documented* further:

1. Existing evidence base on the relative effectiveness and benefits of hardware subsidies and CLTS.
2. ODF verification processes: existing and planned processes; number of communities verified to date (or at various stages in the process).
3. ODF sustainability: existing evaluation findings.
4. Capacity development: data on the number of active facilitators, and on their relative effectiveness.
5. CLTS quality: existing assessments of key factors.
6. Progress in Non-ODF communities: data on number and quality of new latrines built in non-ODF communities.
7. Technical factors: availability and affordability of sanitation goods and services; number of toilets sold in CLTS programme areas.
8. Enabling environment: document the enabling environment lessons from Indonesia and Timor-Leste and use these to inform development of similar processes in other countries.
9. Combined approaches: collate existing evaluations of combined approaches (CLTS and sanitation marketing, or other approaches).
10. Cost data: collate existing cost data on CLTS and latrine hardware subsidy programmes; examine cost components included in these cost assessments.
11. Monitoring: document best practices and lessons learned from existing CLTS monitoring systems.
12. Institutional spread: document the proportion of sector organizations that implement or promote CLTS, and the scale or influence of their programmes (size, duration and sustainability).

Areas to be *researched* further:

1. Evidence base on subsidies: does the provision of hardware subsidies help or hinder CLTS and other demand creation approaches?
2. ODF verification processes: best practice for scaling up and sustaining ODF verification processes.
3. ODF sustainability: best practice for post ODF monitoring; reasons for OD reversion; best practice to improve ODF sustainability.
4. Capacity development: what factors increase the effectiveness of CLTS facilitation, and the effectiveness of CLTS facilitator training?
5. CLTS quality: how to accelerate progress? What is the best practice for larger scale, more effective and mores sustainable programmes?
6. Progress in Non-ODF communities: best practice for achieving post-CLTS improvements in non-ODF communities?
7. Technical factors: role of technical support in CLTS (informed choice, capturing local innovations), role of sanitation marketing.

8. Enabling environment: what were the factors that environments to improve or not improved?
9. Combined approaches: best practice for CLTS and sanitation marketing.
10. Cost data: what does it cost to scale up?
11. Monitoring: best practice mechanisms to encourage sustainable monitoring
12. Reasons for limited spread: examine best practice for spread – the introduction of new approaches into new areas (e.g. outside the parent programme areas).

Participants at the EASAN-3 side event also recommended a number of additional areas for research that were beyond the scope of this first stage of the regional CLTS review. Some of these suggestions are beyond the scope of a multi-stakeholder review, but have been included for the sake of completeness:

i) Technical thresholds: relationships between level of service, coverage levels, outcomes and the benefits generated.
ii) Sanitation solutions in difficult conditions (cold climates, flooding, collapsible and rocky soils, congested areas).
iii) Child excreta disposal: how best to integrate the improvement of child excreta disposal into rural sanitation programmes (implementation and monitoring).
iv) Handwashing with soap: how best to integrate the handwashing with soap interventions with CLTS and other rural sanitation programmes.
v) Sanitation and hygiene in nutrition programmes: whether increased understanding of the link between inadequate sanitation and stunting can be utilized to build sanitation and hygiene components into large nutrition programmes.

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References

- Curtis V, Danquah L, and Aunger R (2009) *Planned, motivated and habitual hygiene behaviour: an eleven country review* Health Education Research Advance Access, doi:10.1093/her/cyp002.
- JMP (2008) *Progress on drinking water and sanitation: special focus on sanitation* Geneva and New York: WHO-UNICEF Joint Monitoring Programme for Water Supply and Sanitation.
- JMP (2012) *Progress on drinking water and sanitation* Geneva and New York: WHO-UNICEF Joint Monitoring Programme for Water Supply and Sanitation.
- Journal of the Republic (2012) *Government Resolution No.8/2012 14th March: National Basic Sanitation Policy* Democratic Republic of Timor-Leste, Journal of the Republic Series 1, No.10 14th March 2012 *(unofficial translation)*.
- Kar, K and Pasteur, K (2005) *Subsidy or self-respect? Community-led total sanitation: an update on recent developments* Brighton: University of Sussex, Institute of Development Studies, IDS Working Paper 257.
- Kar, K and Milward, K (2011) *Digging in, spreading out and growing up: Introducing CLTS in Africa* Brighton: University of Sussex, Institute of Development Studies, IDS Practice Paper: Volume 2011 Number 8.
- Ministry of Health (2008) *National Strategy for Community-Led Total Sanitation (CLTS)* Jakarta: Ministry of Health of the Republic of Indonesia *(unofficial translation)*.
- Mukherjee N, Robiarto A, Effentrif S and Wartono D (2012) *Achieving and sustaining open defecation free communities: learning from East Java* The World Bank, Water and Sanitation Program, report.
- Robinson A (2005) *Scaling up rural sanitation in South Asia: lessons learned from Bangladesh, India and Pakistan* World Bank, Water and Sanitation Program, Report.
- Robinson A (2011) *Scaling up rural sanitation in Indonesia: enabling environment endline assessment* World Bank, Water and Sanitation Program.
- Robinson A (2012) *Sanitation finance in rural Cambodia* The World Bank, Water and Sanitation Program, Guidance Note.
- Rosensweig F, Perez E and Robinson A (2012) *Scaling up rural sanitation: Policy and Sector Reform to Accelerate Access to Improved Rural Sanitation* Washington DC: World Bank, Water and Sanitation Program, working paper.
- Royal Government of Cambodia (2012) *National Strategy for Rural Water Supply, Sanitation and Hygiene 2011-2025* Ministry of Rural Development.
- Shapiro J, Soares R, Robinson A and Bond M (2009) *Timor-Leste Joint Sanitation Evaluation: a study of program outcomes* Dili: Democratic Government of Timor-Leste, Ministry of Health, report.
- Spears D (2012) *Sanitation and open defecation explain international variation in children's height: evidence from 140 nationally representative household surveys* RICE working paper.
- Spears D (2012a) *Policy lessons from implementing India's Total Sanitation Campaign* New Delhi: National Council of Applied Economic Research, India Policy Forum 2012.
- WSP (2011) *A Decade of the Total Sanitation Campaign: rapid assessment of processes and outcomes* New Delhi: The World Bank, Water and Sanitation Program South Asia, Volume 1 Main report.

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PART II

COUNTRY OVERVIEWS

Cambodia

CLTS Summary

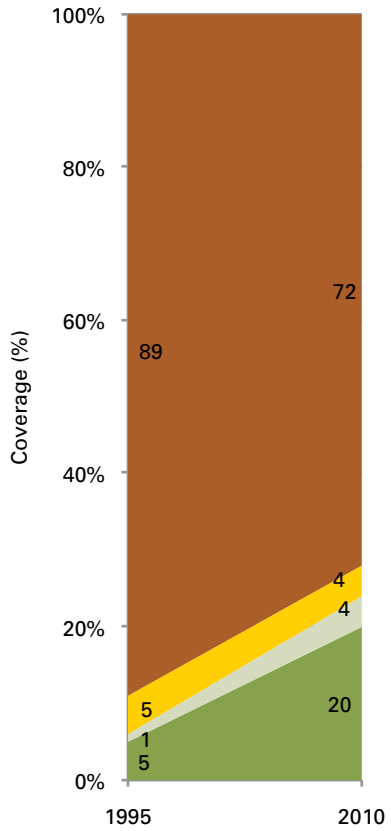
			Regional Ranking (14 countries)
Status	CLTS date of introduction	2004	1
	CLTS introduced: % of country	48%	4
	CLTS coverage: major organizations	16	1
Scale	OD population *(2010, millions)*	8.1m	10
	Communities triggered *(number)*	1,502	2
	ODF communities *(number)*	608	2
	Capacity developed *(trained facilitators)*	214	5
Enabling	CLTS in government policy	Yes	1
	CLTS targets in government plans	No	8=
	CLTS financed by government	Indirect	5=
	CLTS integrated with other approaches	Maybe	3=
	CLTS sustainable monitoring	Maybe	3
Effectiveness	ODF success rate	40%	1
	Triggered communities per facilitator	9.3	2
Summary	**CLTS potential maximized?**	**Yes**	**3**

Performance

- High
- Middle
- Indirect*
- Low

* Indirect finance

JMP estimate: Rural sanitation



- Improved sanitation
- Shared sanitation
- Unimproved sanitation
- Open defecation

Scale of rural sanitation challenge

Category	Rural sanitation coverage		
	Percent	Households	Population
Open defecation	72%	1,730,300	8,132,400
Unimproved sanitation facilities	4%	96,100	451,800
Shared sanitation facilities	4%	96,100	451,800
Total without improved sanitation	**80%**	**1,922,500**	**9,036,000**

Source: 2012 JMP estimate; UN population forecast.

Rural: improved sanitation coverage

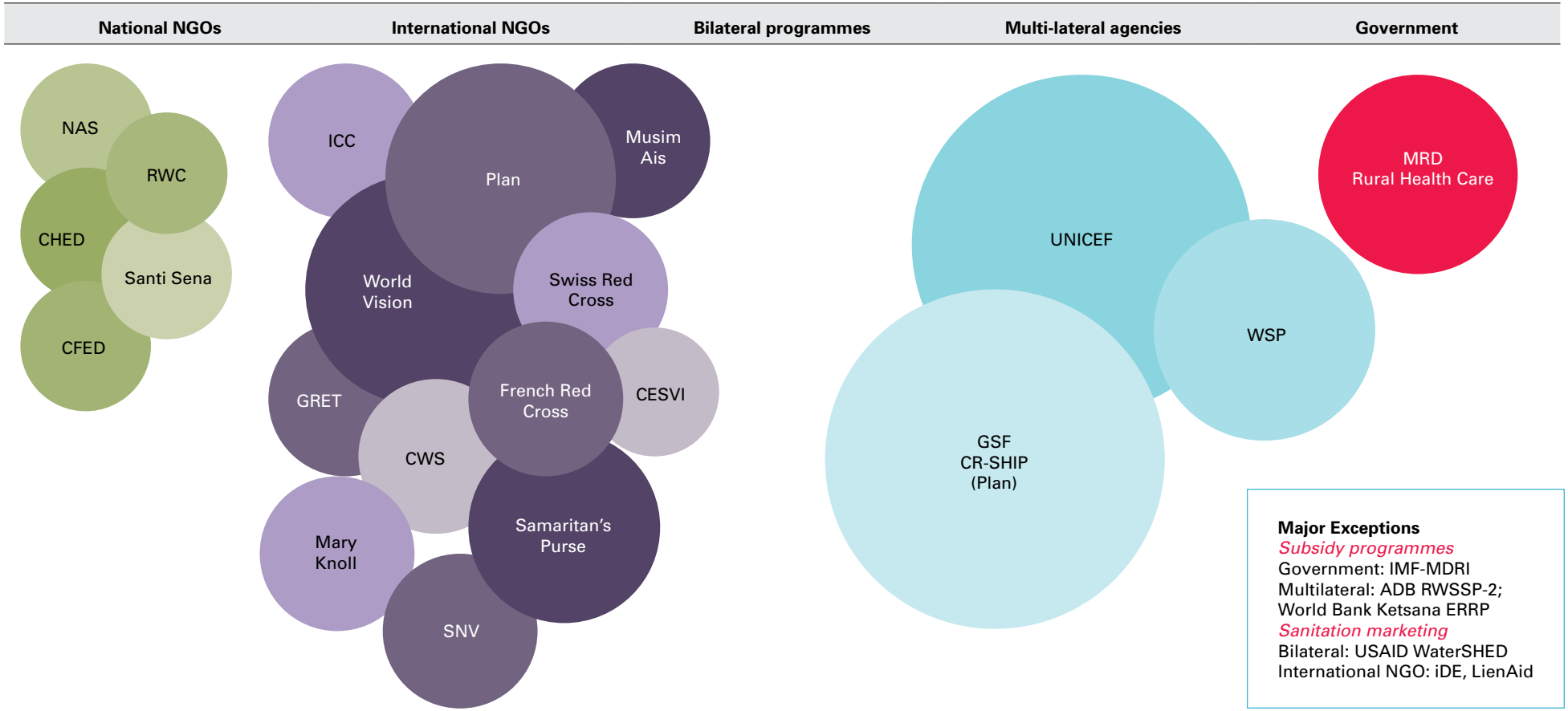
The JMP estimate suggests a steady increase in improved sanitation coverage in rural areas from a low baseline of 5 per cent in 1995 to 20 per cent in 2010. OD was estimated to be 72 per cent, which suggests that more than 1.7 million rural households (8.1 million people) do not use any form of sanitation facility.

The 2010 National Sanitation and Hygiene KAP survey confirmed that 70 per cent of rural households did not have a toilet, while a further 16 per cent reported burying their faeces, and another 3 per cent used their neighbours' toilet when at home. National development plans set the goal of 30 per cent rural sanitation coverage by 2015, and 100 per cent by 2025.

CLTS status

Introduced by CONCERN Worldwide in 2004, but not followed up. UNICEF and Plan Cambodia started to implement at a larger scale in 2006, and CLTS has since spread to 11 out of 23 provinces in the Cambodia (introduced in 48 per cent of the provinces).

CLTS institutional coverage



There is growing institutional support for the CLTS approach, particularly among NGOs. The Global Sanitation Fund (GSF) Cambodia Rural Sanitation and Hygiene Improvement Program (CR-SHIP) recently started implementing a US$ 5.1 million programme that uses CLTS to trigger sanitation demand and sanitation marketing to improve the availability and affordability of sanitation goods and services.

Major exceptions

Several major implementation programmes in Cambodia have used a subsidy-based approach, notably the ADB RWSSP-2 (US$ 5.25 million sanitation component), IMF-MDRI RWSSP (US$ 4.25 million sanitation component) and World Bank Ketsana Emergency Reconstruction and Rehabilitation Project (US$ 1.6 million sanitation component). Together these programmes account for about half of current rural sanitation investments in Cambodia.

ADB RWSSP-2: programme methodology based around a 'CLTS-hybrid' approach that is intended to use elements from the CLTS approach to create sanitation demand, which is followed by project support (subsidies) for latrine construction. The project design envisaged that a US$ 75 sanitation grant will be provided to each household covering the cost of an improved and hygienic dry-pit latrine with a concrete ring-lined pit (subground structure only). The sanitation grant may be applied in the construction of a water-sealed or a pour-flush latrine based on household preference and affordability levels.

The ADB hybrid approach is designed to recognize that CLTS is "(i) is effective generally in the dry season, (ii) promotes behaviour change, and (iii) contributes to institutional capacity building" while cautioning that "CLTS is not sustainable in some areas, as the commonly-built latrine (unlined dry-pit) is not durable and is prone to failure from flooding, loose soil conditions, termites and ants, and constant use. While CLTS advocates no subsidies for latrine construction, DRHC (Department of Rural Health Care) believes that (i) support is required to help sustain the behaviour-change aspects and to overcome the social, economic, technical and institutional barriers to the construction of sanitation facilities; (ii) support for latrine construction may start before a village achieves 100 per cent ODF status, as there is a 'learning-by-seeing' effect; and (iii) the total cost of the latrine should not include the cost of the superstructure.

Several organizations, including iDE, USAID WaterSHED and LienAid, are implementing sanitation marketing programmes designed to generate demand for toilets, strengthen the supply of sanitation goods and services, and assist local producers to sell toilets that increase the population using improved sanitation facilities. While some of these programmes have utilized some CLTS tools in demand creation and latrine promotion activities, the main objective of these sanitation marketing programmes is incremental increases in sanitation coverage through private toilet sales. As a result, these programmes do not have collective action goals (ODF community targets) and contain few specific pro-poor or equity objectives.

CLTS variations and practice

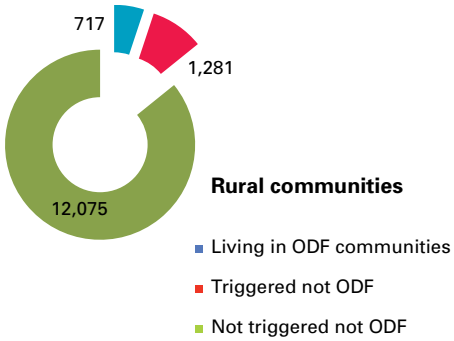
1. **Global Sanitation Fund CR-SHIP: CLTS + Sanitation Marketing**
   The GSF Cambodia Rural Sanitation and Hygiene Improvement Program (CR-SHIP) plans to implement CLTS in 2,000 villages. Plan Cambodia, the implementing agency for the GSF programme, reports that there will also be sanitation marketing projects implemented by partners to improve the availability and affordability of sanitation goods and services in the programme provinces.

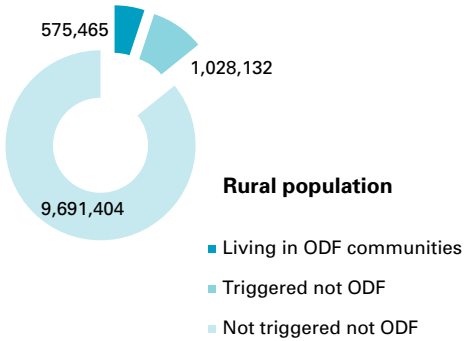
CLTS scale

About 4 per cent of the rural population in Cambodia, 486,000 people, are estimated to live in 608 ODF communities. While the proportion of ODF communities in Cambodia appears relatively low, it ranks second in the region behind Timor-Leste.

ODF success rate

Cambodia has a high ODF success rate: 40 per cent of triggered communities have been declared ODF. However, no formal process has yet been agreed for ODF verification – ODF villages are declared by the community in agreement with the provincial rural development offices (PDRD) when 100 per cent toilet coverage is reached.





CLTS capacity

The GSF programme had trained a total of 214 CLTS facilitators by the end of July 2012, with trainees from government and national NGOs that work in five provinces (Kampong Cham, Kampong Speu, Takeo, Svay Rieng and Kandal). The facilitator effectiveness appears good, with more than nine communities triggered for every facilitator trained.

CLTS impact on national sanitation coverage

Insufficient data were available to assess CLTS impact on national sanitation coverage.

CLTS enabling environment

Policy *CLTS in government policy*	**Yes**	1. National Strategy for Rural Water Supply, Sanitation and Hygiene (RWSSH) (2012) 2. National Policy on Water Supply and Sanitation (NPWSS) (2003) 3. Government CLTS guidelines and training manual (*Khmer*)	1. National Strategy for RWSSH: *"Public finance should mainly be used to stimulate demand and develop the enabling environment so that households pay for their own toilets". "While targeted hardware subsidies may be provided to poor households to buy toilets, and to reach the sector vision of 100% coverage, direct hardware subsidies should be used with caution and only as a last option".* 2. 2003 NPWSS: every person in rural communities will have access to safe water supply and sanitation services by 2025.
Strategy *CLTS targets in government strategies or development plans*	**No**	2012 National Strategy for Rural Water Supply, Sanitation and Hygiene	No ODF targets in national strategy for RWSSH or other government development plans. Strategic Objective 2 includes the following action "identify, develop media and evaluate approaches such as CLTS to change hygiene behaviour".
Finance *CLTS financed by government*	**Indirect**	Government support to programmes	The Department of Rural Health Care (DRHC) provides central support to CLTS and other rural sanitation programmes, with local implementation support provided through PDRD. However, the government has not yet allocated any finance to CLTS implementation.
Integration *CLTS integrated with other approaches*	**Maybe**	1. Sanitation marketing 2. Hardware subsidies 3. Sub-working group on sanitation and hygiene	1. iDE sanitation marketing pilot used a shortened CLTS approach to create demand for the Easy Latrine. The GSF programme aims to combine CLTS and sanitation marketing, with supply strengthening provided by its partners. 2. Several programmes, notably the ADB RWSSP-2, are planning to use CLTS to trigger demand for latrine subsidies. 3. Newly formed sub working group to discuss CLTS, sanitation marketing, school WASH and hygiene promotion themes.
Monitoring *Sustainable M&E of CLTS*	**Maybe**	1. MRD CLTS database 2. UNICEF-MRD (2009) *CLTS in Cambodia: formative evaluation*	1. Department for International Development (DFID) finance was used to establish a CLTS database to track progress in Cambodia, but this database is no longer regularly updated. The collection of reliable progress data from a large group of implementers using different indicators and monitoring systems is a significant monitoring challenge, with few incentives for the timely provision of data to the central database. 2. UNICEF and Plan Cambodia financed an MRD evaluation of the CLTS approach.

CLTS weaknesses and bottlenecks

What's not working?	
1. Reversion to OD during the rainy season 2. Some unhygienic latrines built 3. Overly coercive approach by some local leaders	1. Problems of durability and functionality of low-cost dry latrines resulting in reversion to OD during the rainy season. 2. Reports of CLTS latrine contents being accessible to animals, and providing sites for fly breeding. 3. In some cases, CLTS was viewed as a top-down process because village and commune chiefs were being given responsibility for achieving ODF villages, which led to overly coercive approaches.
Context issues?	
1. Flooding and high water tables 2. Termite and ant damage 3. Local culture does not encourage self-provision or initiative	1. Problems for rapidly constructed, low-cost latrines. Pit collapse and reversion to OD often attributed to flooding or high water table problems during rainy season. 2. Termite and ant damage decreasing the durability of simple latrines built from local materials (old wood, bamboo, thatch and palm ribs). 3. Local culture highly values donations, charity and the provision of gifts to poor, rural communities.
Constraints and bottlenecks?	
1. High-level support for subsidies 2. Demand for pour-flush latrines 3. Low quality facilitation 4. Poor collaboration between government departments	1. Latrine hardware subsidy programmes in CLTS areas undermine demand and interest in CLTS programmes. Limited high-level support for CLTS. 2. Community expectations are often higher than the simple pit latrines that generally result from rapid CLTS interventions. Most rural households would prefer to have a pour-flush latrine. 3. Shortage of experienced and high quality CLTS facilitators. 4. Lack of collaboration and coordination between government departments involved in rural sanitation and hygiene improvement.
Lessons learned	
1. Multiple external programmes confuse local government and communities 2. ODF declaration often dependent on unsustainable latrine sharing	1. Presence of too many external programmes and stakeholders in one area, often with different policies, objectives and approaches, can confuse local governments and communities. 2. 2009 formative evaluation found that only 79% of households in ODF communities had built latrines, with the rest reported to share latrines. Many of those reported to be sharing latrines were later found to have reverted to OD.

Sources: Kunthy and Catalla (2009) Community-Led Total Sanitation in Cambodia: a formative evaluation report, DRHC-MRD evaluation report; Davis (2011) Sanitation in Cambodia – a review, ADRA Cambodia.

CLTS strengths and opportunities

What's working?	
1. Good collaboration between DRHC and implementers 2. Committed leaders in communes 3. Relatively high ODF success rates	1. Good cooperation between government, local authorities and implementing agencies, with good implementation support from DRHC and PDRD. 2. Strong and committed leaders at commune level, such as members of the commune committees for women and children.
Success factors?	
1. Areas uncontaminated by subsidies 2. Reinforcing activities 3. Horizontal learning activities	1. CLTS works better in areas where no latrine subsidies have been provided. 2. Reinforcing activities such as village clean up days, national sanitation days, and global handwashing days (raise awareness and interest). 3. Village exchange visits, attendance at national sanitation events, village visits by national officials and international guests.
Opportunities?	
1.Prioritization of hygiene and sanitation by commune councils	1. Prioritization of hygiene and sanitation activities in commune development plans and commune investment plans.
Lessons learned	
1. CLTS worked better in dense settlements with few disposal options	1. UNICEF programme evaluation found that CLTS worked best in Prey Veng, where settlement patterns were denser and fewer OD and unsafe disposal options were available.

Sources: Kunthy and Catalla (2009) Community-Led Total Sanitation in Cambodia: a formative evaluation report, DRHC-MRD evaluation report; Davis (2011) Sanitation in Cambodia – a review, ADRA Cambodia.

China

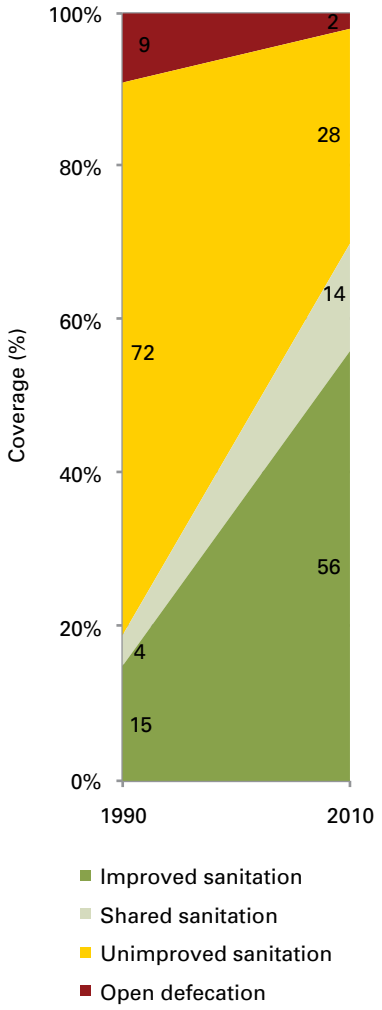
CLTS Summary

			Regional Ranking (14 countries)
Status	CLTS date of introduction	2012	10=
	CLTS introduced: % of country	15%	7
	CLTS coverage: major organizations	2	10=
Scale	OD population *(2010, millions)*	13.5m	11
	Communities triggered *(number)*	0	11
	ODF communities *(number)*	0	10=
	Capacity developed *(trained facilitators)*	53	9
Enabling	CLTS in government policy	No	9=
	CLTS targets in government plans	No	8=
	CLTS financed by government	No	11=
	CLTS integrated with other approaches	No	9=
	CLTS sustainable monitoring	No	8=
Effectiveness	ODF success rate	0%	10=
	Triggered communities per facilitator	0	11=
Summary	**CLTS potential maximized?**	**No**	**12**

Performance

- High
- Middle
- Low

JMP estimate: Rural sanitation



Scale of rural sanitation challenge

Category	Rural sanitation coverage		
	Percent	Households	Population
Open defecation	2%	4,085,800	13,483,000
Unimproved sanitation facilities	28%	57,200,600	188,762,000
Shared sanitation facilities	14%	28,600,300	94,381,000
Total without improved sanitation	**44%**	**89,886,700**	**296,626,000**

Source: 2012 JMP estimate; UN population forecast.

Rural: improved sanitation coverage

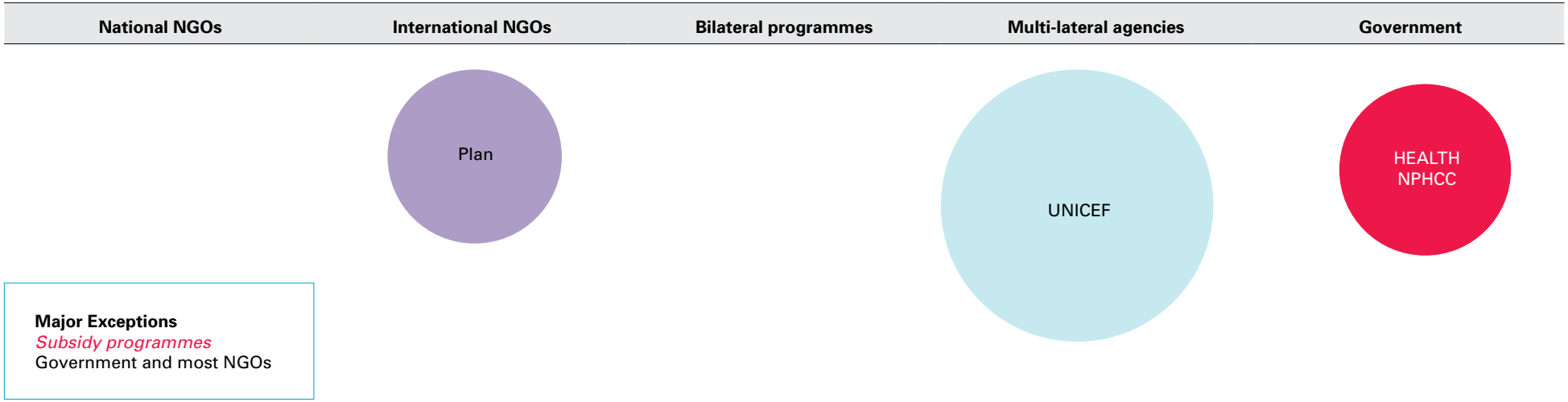
The JMP estimate for China suggests a dramatic rise in improved sanitation coverage in rural areas from a baseline of only 15 per cent in 1990 to 56 per cent in 2010. A significant proportion of the rural population in China continue to use unimproved sanitation facilities, but this has been reduced from 72 per cent to 28 per cent, with the OD rate estimated at only 2 per cent in rural areas. Nevertheless, the huge population means that more than 4 million rural households practice OD, and a further 86 million rural households use either unimproved or shared sanitation facilities.

OD is limited in rural areas of China because of the long history of using human excreta as organic fertilizer in farming. It has been reported that 93 per cent of rural human excreta is used as organic fertilizer, with most households using some form of latrine to collect the excreta. However, some research suggests that the use of human excreta is now practiced by only around 30 per cent of the population.

CLTS status

Introduced by Plan China in Shaanxi province in 2005, but the approach was not adopted after the initial pilots due to over-riding government and NGO preference for latrine subsidies. No further progress was made until July 2012, when UNICEF and its government counterparts organized another training workshop in Jilin province to build capacity for a CATS programme in 50 villages of five provinces (out of 33 provinces, which will mean that CLTS has been introduced in 15 per cent of the provinces nationwide).

CLTS institutional coverage



CLTS enabling environment

Policy *CLTS in government policy*	No	1. 2002 Requirements for development of rural sanitation 2. 2003 Hygienic standard for rural household latrines (GB19379-2003) 3. 'Harmless sanitary latrine' types promoted by National Patriotic Health Campaign Committee (NPHCC)	1. Health-based policy to support rural sanitation improvement. 2. Requirements of sanitary latrines: walls, roofs, seepage-free, leak-proof tanks, airtight covers, clean, free from flies and maggots, odourless, and harmless treatment of faeces. 3. NPHCC promotes six types of harmless sanitary latrine: - double-urn septic tank latrine - biogas septic tank latrine - urine-diverting eco-latrine - three compartment septic tank latrine - pour-flush latrine with sewerage - elevated alternating twin-pit latrine These 'harmless' sanitary latrines all have leak-proof tanks or pits designed to limit groundwater contamination and ensure sustainable development for millions of rural households.
Strategy *CLTS targets in government strategies or development plans*	No	1. Healthy China by Year 2020 2. Action to Speeding Up the National Urban and Rural Environmental Sanitation 2010	1. Medium and long-term plan for the health sector until 2020. 2. 2010 NPHCC Action led to a 2010-2012 national programme to strengthen the urban and rural environment, with the target of increasing rural sanitation coverage by 10% by the end of 2012.
Finance *CLTS financed by government*	No	No finance to date	Central and local government will provide implementation support to UNICEF CATS programme. No direct finance of CLTS activities to date, although the government has indicated that it may be willing to support supply strengthening to enable ODF communities to climb the sanitation ladder.
Integration *CLTS integrated with other approaches*	No	Subsidy approaches	Latrine subsidy approaches remain the default, with little information available how CLTS will integrate with subsidy programmes. Government policy to promote 'sealed tank' latrines is linked to high latrine costs and the perceived need for subsidies.
Monitoring *Sustainable M&E of CLTS*	No	1. National Bureau of Statistics (NBS) 2. Patriotic Health Campaign Committee Office (PHCCO) system	NBS conducts annual household surveys, which now categorise according to the JMP sanitation definitions. PHCCO is evaluating the government latrine subsidy programme, which will include collecting data on latrine quality and usage. Government recognizes the need to strengthen the sanitation monitoring system.

CLTS weaknesses and bottlenecks

What's not working?	
No CLTS implementation to date	
Context issues?	
1. Open pit and bucket toilets 2. Cold winter conditions 3. Long subsidy history	1. Many rural households use unimproved toilets (open pits, no pits, buckets) with severe smell and fly problems. Accumulated excreta are collected untreated and used on fields, often within one week. 2. Sub-zero winder conditions cause frozen excreta and water seals. 3. Rural households expect assistance from the government for sanitation improvement.
Constraints and bottlenecks?	
1. Belief that toilets are expensive 2. Previous technical prescriptions	1. As in many countries, rural households often perceive that sanitary toilets are unaffordable. 2. Most sanitation programmes adhere to strict technical specifications for toilet construction. Hygienic standard for rural household latrines requires that all latrines have seepage-free and leak-proof tanks or pits, which greatly constrains the construction of simple pit latrines made from local materials.
Lessons learned	
No CLTS lessons to date	

Sources: Kar (2005) CLTS in China: feasibility study and first orientation workshop, Plan China; UNICEF (2011) China State of Sanitation report, UNICEF China.

DPR Korea

CLTS Summary

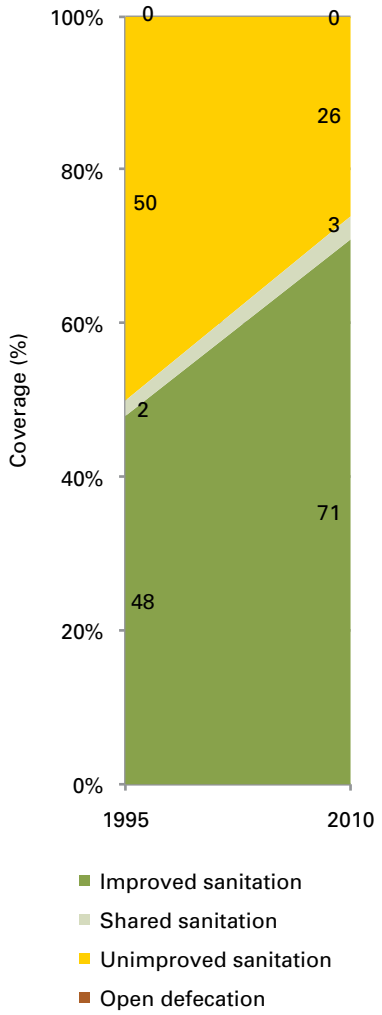
Status	CLTS date of introduction	Not yet	14
	CLTS introduced: % of country		
	CLTS coverage: major organizations		
Scale	OD population *(2010, millions)*	0m	1
	Communities triggered *(number)*		
	ODF communities *(number)*		
	Capacity developed *(trained facilitators)*		
Enabling	CLTS in government policy		
	CLTS targets in government plans		
	CLTS financed by government		
	CLTS integrated with other approaches		
	CLTS sustainable monitoring		
Effectiveness	ODF success rate		
	Triggered communities per facilitator		
Summary	**CLTS potential maximized?**	**No**	**14**

Regional Ranking (14 countries)

Performance

- High
- Middle
- Low

JMP estimate: Rural sanitation



Scale of rural sanitation challenge

Category	Rural sanitation coverage		
	Percent	Households	Population
Open defecation	0%	-	-
Unimproved sanitation facilities	26%	629,600	2,518,400
Shared sanitation facilities	3%	72,600	290,600
Total without improved sanitation	**29%**	**702,200**	**2,809,000**

Source: 2012 JMP estimate; UN population forecast.

Rural: improved sanitation coverage

The JMP estimate suggests a rapid rise in improved sanitation coverage in rural areas from a baseline of 48 per cent in 1995 to 71 per cent in 2010. A significant proportion of the rural population in DRP Korea continue to use unimproved sanitation facilities, but this has been reduced from 50 per cent to 26 per cent, with no OD reported in rural areas. More than 700,000 rural households use unimproved or shared sanitation facilities.

Both the 2008 Census and the 2009 Multiple Indicator Cluster Survey (MICS) report 100 per cent latrine use in both urban and rural areas. The 2009 MICS survey provides more detailed information on rural sanitation coverage:

- 41.4 per cent flush or pour-flush to sewer system (improved)
- 5.9 per cent flush or pour-flush to septic tank (improved)
- 22.2 per cent pit latrine with slab (improved)
- 3.5 per cent VIP latrine (improved)
- 27.0 per cent pit latrine without slab or open pit (unimproved)
- *Total: 73 per cent using improved sanitation facilities*

CLTS status

CLTS has not been introduced in DPR Korea. Very low rates of OD meant that few stakeholders recognized rural sanitation as an important issue. There is now increasing recognition of the relatively high proportion of unimproved sanitation facilities, and of the health problems caused by the widespread use of untreated human excreta in agriculture.

Institutional mapping

There are relatively few development partners working in the rural sanitation sector: UNICEF, Swiss Agency for Development and Cooperation (SDC), International Federation of Red Cross (IFRC), Save the Children and CONCERN.

Key sanitation issues

The use of human excreta for fertilizer is highly prevalent – some estimates suggest it is practiced by up to 80 per cent of rural households, with systematic excreta collection and use in many rural communes. However, it remains a sensitive cultural and socio-political issue: the practice is sometimes linked to shortages of chemical fertilizers, and there is little awareness of the health risks related to the handling and application of untreated human excreta. In many areas, shallow latrine pits are utilized, sometimes using earthen pots to collect urine and faeces, that only provide one or two months storage, thus require emptying regularly without sufficient composting time to kill off pathogens.

Enabling environment

UNICEF has been raising awareness about the risks of existing sanitation practices and the benefits of investment in sanitation improvement among local authorities and the rural population. In 2011 after a long period of advocacy and negotiation, UNICEF supported the development of rural sanitation guidelines based around safe management of human excreta that was launched by the Ministry of City Management (MoCM), the government's lead WASH agency. The guidelines, which provide straightforward advice on the risks associated with untreated human excreta and outlines some low-cost, appropriate treatment options, are now being disseminated nationally to local governments, community leaders and farmers.

Opportunities

UNICEF and MoCM are also implementing a pilot project in two communities (total population of about 1,000 households) to promote "improved sanitation for all" using an "improved existing latrine" approach. MoCM has also agreed to review the national building code for rural areas and incorporate provision for improved sanitation facilities in the construction standards. This is a significant development as the government builds tens of thousands of new buildings every year in rural areas.

Potential for CLTS

Any new approaches have to be introduced gradually, with reliable evidence of effectiveness and sustainability required before the government is willing to scale up implementation. It will also be important to demonstrate that the approach will not prevent the use of excreta as fertilizer, because this practice remains important to a large population of subsistence farmers.

UNICEF hopes that the pilot "improved sanitation for all" project will demonstrate that it is possible to achieve 100 per cent ODF and improved sanitation status without compromising the use of treated excreta as a valuable fertilizer and soil conditioner. Once the government is convinced that community-wide outcomes are possible, then it is hoped that CLTS can be introduced as a tool for scaling up sustainable behaviour change and sanitation improvement across the country.

Indonesia

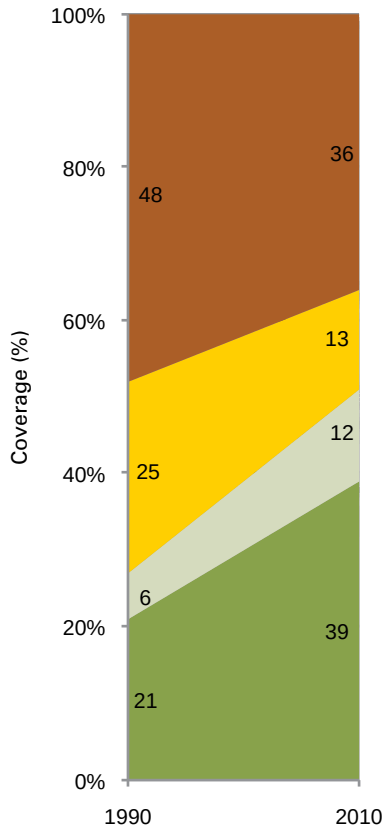
CLTS Summary

			Regional Ranking (14 countries)
Status	CLTS date of introduction	2005	2=
	CLTS introduced: % of country	97%	2
	CLTS coverage: major organizations	9	5
Scale	OD population *(2010, millions)*	48.1m	14
	Communities triggered *(number)*	7,325	1
	ODF communities *(number)*	1,279	1
	Capacity developed *(trained facilitators)*	530	2
Enabling	CLTS in government policy	Yes	1=
	CLTS targets in government plans	Yes	1=
	CLTS financed by government	Yes	1
	CLTS integrated with other approaches	Yes	1
	CLTS sustainable monitoring	Yes	1=
Effectiveness	ODF success rate	17%	5
	Triggered communities per facilitator	13.8	1
Summary	**CLTS potential maximized?**	**Yes**	1

Performance

- High
- Middle
- Low

JMP estimate: Rural sanitation



- Improved sanitation
- Shared sanitation
- Unimproved sanitation
- Open defecation

Scale of rural sanitation challenge

Category	Rural sanitation coverage		
	Percent	Households	Population
Open defecation	36%	12,028,900	48,115,400
Unimproved sanitation facilities	12%	4,343,800	17,375,000
Shared sanitation facilities	13%	4,009,600	16,038,500
Total without improved sanitation	**61%**	**20,382,300**	**81,528,900**

Source: 2012 JMP estimate; UN population forecast.

Rural: improved sanitation coverage

The JMP estimate suggests a recent increase in improved sanitation coverage in rural areas from a baseline of 21 per cent in 1990 to 39 per cent in 2010. A further 25 per cent of the rural population use either shared sanitation facilities or unimproved facilities. OD was estimated to be 36 per cent, which suggests that more than 12 million rural households (48 million people) do not use any form of sanitation facility.

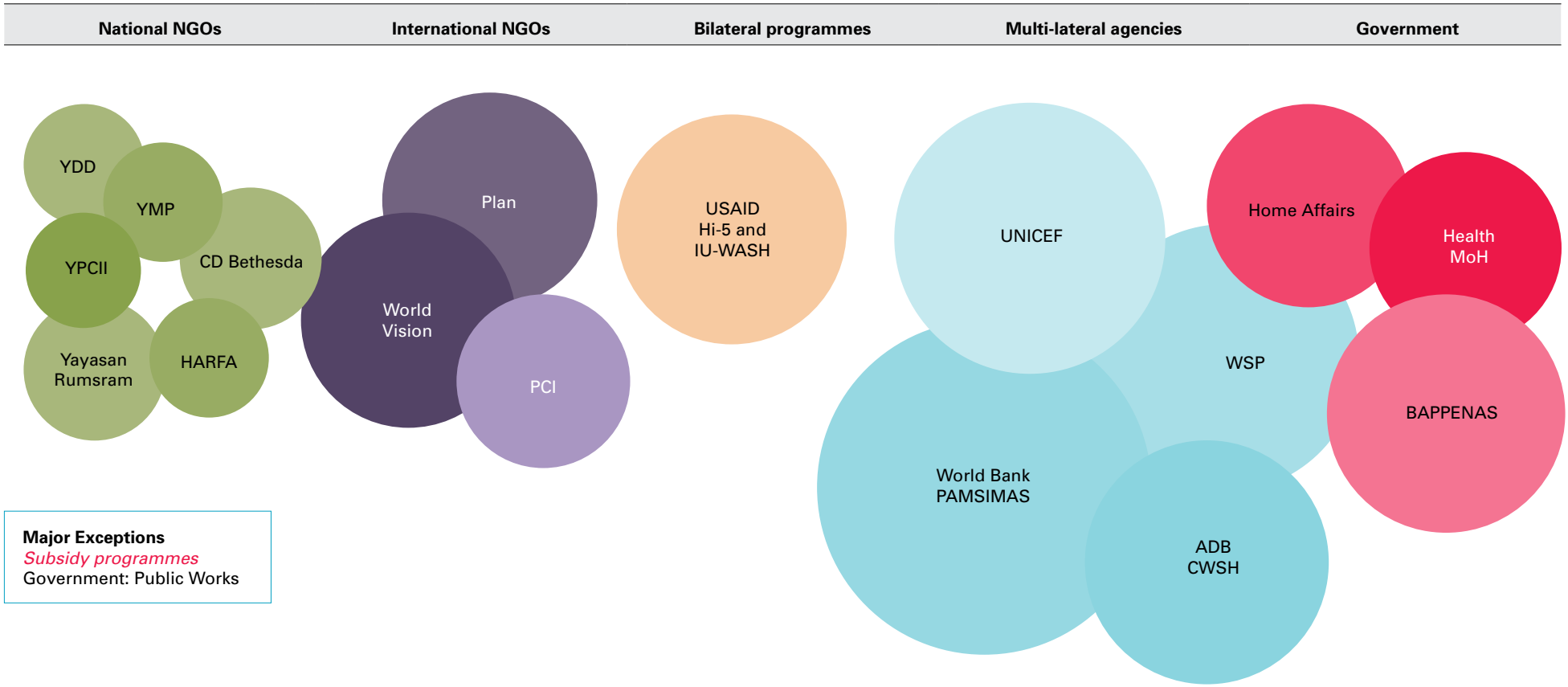
CLTS status

Introduced by WSP in 2005. By 2007, CLTS had reached 54 districts (13 per cent geographical coverage); and five years later it has spread to 234 out of 405 districts in Indonesia (58 per cent nationally) including 32 out of the 33 provinces (97 per cent geographical spread).

Major exceptions

The Ministry of Public Works (PU) is the main implementation agency for the World Bank PAMSIMAS programme, but remains ambivalent about non-subsidy approaches to rural sanitation improvement, such as CLTS. PU is an infrastructure-focused organization, with a long history of building subsidized public sanitation facilities (MCK), thus passes on responsibility for sanitation and hygiene demand creation and behaviour change to the Ministry of Health.

CLTS institutional coverage



Since 2005, CLTS has been implemented largely through external programmes, although the government provides counterpart national and local government finance and support to most of the multi-lateral and bilateral programmes. The US$ 1.6 billion PPSPs 2010-2014 was originally an urban programme based on citywide sanitation strategies, which included the goal of eliminating "open and careless defecation" from 330 cities. The PPSP has since expanded into rural areas with the aim of reaching 20,000 villages by 2014.

CLTS variations and practice

1. **STBM: Five pillar approach (ODF, handwashing with soap, safe drinking water and food, solid waste, liquid waste management)**
   The STBM promotes a broader conception of total sanitation, which includes the CLTS objective of becoming ODF and four other objectives: handwashing with soap (HWWS), safe management of drinking water and food, safe management of solid wastes, and safe management of household liquid wastes. The STBM approach is now being adopted and scaled up by most sanitation practitioners in Indonesia.

2. **USAID Hi-5 and IU-WASH programmes: urban CLTS with some modifications (linking to citywide sanitation strategies and utility projects)**
   USAID Hi-5 programme in three cities (Medan, Surabaya and Makassar) targets hygiene and sanitation practices in urban areas with high diarrhoea prevalence, it will contribute to achievement of the STBM and citywide sanitation strategies (SSK). The USAID IU-WASH programme works with government water utilities (PDAMs) and other sector stakeholders on urban CLTS.

CLTS capacity

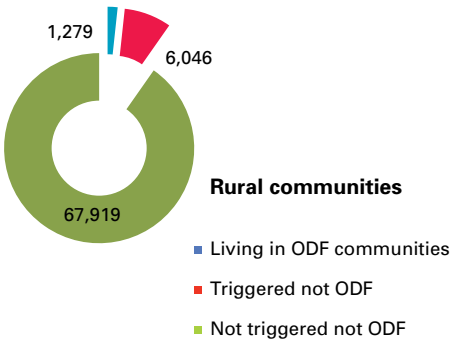
Large numbers of CLTS facilitators have been trained in Indonesia: UNICEF reports training 400 sanitarians, 100 facilitators from faith-based organizations; and 30 institutional facilitators; the national government has run several CLTS training of trainers courses; most of the large programmes have trained substantial numbers of CLTS facilitators; and some experienced district governments, such as Lumajang in East Java, have run CLTS training courses for NGOs and staff from other districts.

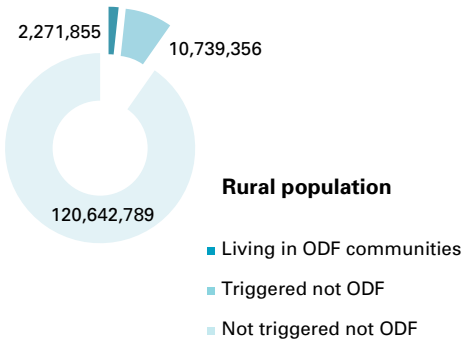
CLTS scale

About 1.7 per cent of the rural population in Indonesia, 2.3 million people, are estimated to live in 1,279 ODF villages (*desa*). While the proportion of ODF villages in Indonesia appears relatively low, it ranks third in the region behind Timor-Leste and Cambodia, with the number of people living in ODF villages estimated to be more than four times higher than in any other country in the region.

ODF success rate

Indonesia has a moderate ODF success rate: 17 per cent of triggered villages have been declared ODF according to the government monitoring system. Other programmes in Indonesia (WSP, Plan, UNICEF) report higher ODF success rates, averaging from 28-43 per cent, but some of these figures refer to triggering ODF sub-villages (*dusun*), whereas the lower overall ODF success rate reported by the government figures reflects the greater difficulty of triggering entire villages (*desa*).





CLTS impact on national sanitation coverage

Insufficient data were available to determine the impact of CLTS on national sanitation coverage.

CLTS enabling environment

Policy *CLTS in government policy*	**Yes**	STBM	STBM: "No hardware subsidy for household toilets". The STBM sets a clear no-subsidy policy for all rural sanitation programmes in Indonesia. Nonetheless, a few projects continue to flout this policy by providing subsidised latrines to rural households.
Strategy *CLTS targets in government strategies or development plans*	**Yes**	2010-2014 National Mid-Term Development Plan (RPJM-N)	RPJM-N: the current 5-year development plan sets the target of 100% ODF villages nationally by 2014, with finance for 20,000 villages to be covered under the PPSP programme. The 100% ODF target was also in the previous 5-year plan, but was inadequately supported by government finance, capacity development or implementation programmes. Given only 1.7% ODF villages reported in mid-2012, the 2014 target remains highly ambitious.
Finance *CLTS financed by government*	**Yes**	1. 2010-2014 PPSP 2. World Bank PAMSIMAS 3. ADB CWSH	1. The government allocated US$ 1.6 billion to the PPSP programme, which includes support to STBM activities. 2. PAMSIMAS: government policy prevents development loans financing software activities, thus CLTS components of the PAMSIMAS programme are financed by external donor grants. 3. CWSH: 30% project cost by central and district governments.
Integration *CLTS integrated with other approaches*	**Yes**	1. Sanitation marketing 2. Citywide sanitation strategies 3. STBM 6 pillars	1. WSP pioneered Total Sanitation & Sanitation Marketing in all 29 districts of East Java, and now forms of STBM and sanitation marketing have been adopted by Plan, UNICEF and others. 2. Several programmes are incorporating CLTS and STBM elements into urban sanitation interventions. 3. Some programmes have added environmental health or animal waste management components to the STBM strategy.
Monitoring *Sustainable M&E of CLTS*	**Yes**	1. STBM Secretariat online monitoring system 2. national water and sanitation information system (NAWASIS database) 3. ODF verification system	1. The STBM Secretariat is in the process of establishing an online monitoring system to track STBM progress nationally, but comprehensive data are not yet available from this system. 2. The national WASH working group (national Pokja AMPL) is developing NAWASIS that will track investments and water supply progress. 3. An ODF verification system has been introduced and is being scaled up through the local government system. Some reports that different organizations use different verification criteria.

CLTS weaknesses and bottlenecks

What's not working?	
1. Monitoring ODF by counting toilets 2. Poor quality CLTS process in some areas resulting in few improvements	1. Evaluations revealed that communities with 100% access to toilets were often not ODF, and that communities that were slow to reach ODF often focused on monitoring latrine ownership rather than behaviour change to eliminate OD. 2. No CLTS tools used, or none used correctly; only leaders and those without toilets involved in process; coercive approaches utilized.
Context issues?	
1. Subsidy expectations 2. Old habits die hard 3. Rotation of government staff 4. Presence of nearby water bodies	1. In some areas, rural households expect help in cash or kind from government or donors (thus are unwilling to invest in their own facilities), or have previously received latrine subsidies. 2. Hard to change defecation and hygiene habits, particularly among old people. Recognition and awareness of the costs of OD remain low. 3. Regular transfers of government staff constrain the CLTS awareness, skills and capacity. 4. Communities located next to water bodies tended to prefer defecation into water to latrine use.
Constraints and bottlenecks?	
1. Toilet sharing 2. Limited toilet repair or upgrading 3. Little technology awareness 4. Local autonomy law 5. Shortage of skilled facilitators	1. Toilet sharing is sometimes a means to achieve ODF status, but sharing arrangements can break down, and sharers sometimes revert to OD over time, or continue with OD while sharing (e.g. when large groups share and the toilet can be occupied at critical times). 2. Households report a lack of funds to repair damaged toilets or upgrade to pour-flush facilities. 3. Lack of knowledge and awareness about toilet technology options. 4. The Regional Autonomy Law No.32/2004 delegated responsibility for sanitation to elected district governments, which makes it hard for central authorities to scale up the STBM strategy if sanitation development is not a priority of local governments. 5. Shortage of skilled CLTS facilitators at provincial and district levels.
Lessons learned	
1. Institutionalising the STBM is a big job 2. Awareness of no-subsidy policy remains limited 3. Local leaders important to process 4. Revolving funds are open to misuse 5. No-cost latrines affect ODF sustainability	1. Institutionalizing the national STBM strategy in provincial and district governments will require not only advocacy work, but also guidance and support in planning and implementation. 2. Awareness of the national STBM strategy, including its non-subsidy policy, is growing, but it remains a challenge to convince local government leaders of the benefits of a non-subsidy approach. 3. Exclusion of community leaders from triggering process led to less effective process. 4. Revolving funds are open to misuse by influential community members, which can slow progress. 5. Very low-cost or no-cost facilities built by households or community leaders to help achieve ODF had significant durability problems, often not being repaired or repaired when damaged or blocked.

Sources: Mukherjee (2012) Achieving and sustaining open defecation free communities: learning from East Java, WSP; personal communications from Plan Indonesia, UNICEF, Ministry of Health and STBM secretariat.

CLTS strengths and opportunities

What's working?	
1. Triggering linked to demand 2. Community-devised systems of monitoring and sanctioning OD	1. Results were better where CLTS triggering was in response to community demand. 2. Community-devised systems for monitoring and sanctioning the practice of OD were found to be effective in sustaining ODF status.
Success factors?	
1. High social capital 2. Triggering not accompanied by technical advice	1. Trusted local leaders, mutual self-help traditions (*gotong royong*) and pride in collective achievements were found to be contextual factors that supported sustainable ODF achievement. 2. Triggering was found to be more effective in achieving rapid ODF when not explicitly linked to advice on toilet building. However, access to information on affordable sanitation goods and services was found to be another success factor – thus sequencing of activities is clearly important.
Opportunities?	
1. STBM Secretariat 2. Local strategies to manage and control hardware subsidies 3. PPSP programme 4. CCT National Program for Community Empowerment (PNPM) programme	1. STBM secretariat developing capacity and expanding: responsible for development of workplan for STBM programme; M&E; knowledge management; and technical assistance. 2. Elected leaders and district legislators have the power to regulate the use of local funds for sanitation, including the introduction of rules governing how public and external funds are used to achieve collective and improved sanitation and hygiene behaviour outcomes (to complement other finance and activities rather than undermining them). 3. Incorporating CLTS (in the broader STBM approach) into the PPSP programme offers the opportunity for dramatic scaling up and institutionalization of the approach. 4. WSP has been working on the incorporation of ODF status as a nutrition/health condition of the PNPM conditional cash transfer scheme. The possible future inclusion of an ODF indicator in this huge poverty alleviation programme would leverage substantial resources and capacity for sanitation improvement with significant long-term benefits for poor communities.
Lessons learned	
1. Contextual diversity requires range of methods and tools 2. Post-triggering monitoring is an important sustainability element 3. Clustering and phasing strategies can be effective in scaling up progress	1. Indonesia has 33 provinces and 525 districts/municipalities with diverse physical and cultural contexts, thus requires a range of different methods and tools that allow for these varying contexts and provide practical and flexible guidance. 2. Regular post-triggering monitoring and follow up of behaviour change was linked to improved outcomes (and limited monitoring linked to poor outcomes). 3. Context, support and social norms affect progress: clustering interventions can improve cost-efficiency, saturate areas and change social norms; phasing interventions can allow different contexts and challenges to be tackled as local capacity, experience and demand develop.

Sources: Mukherjee (2012). Achieving and sustaining open defecation free communities: learning from East Java, WSP; personal communications from Plan Indonesia, UNICEF, Ministry of Health and STBM secretariat.

Kiribati

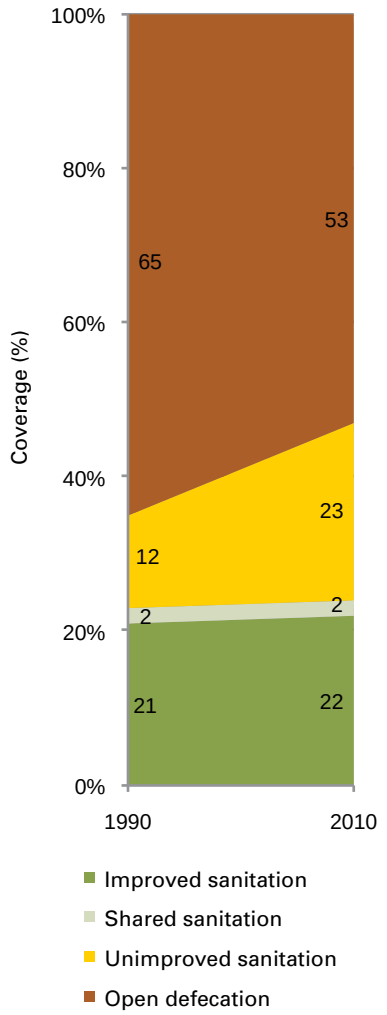
CLTS Summary

			Regional Ranking (14 countries)
Status	CLTS date of introduction	2012	11=
	CLTS introduced: % of country	0%	11
	CLTS coverage: major organizations	3	10=
Scale	OD population *(2010, millions)*	0.012m	1
	Communities triggered *(number)*	0	11=
	ODF communities *(number)*	0	10=
	Capacity developed *(trained facilitators)*	0	11=
Enabling	CLTS in government policy	No	9=
	CLTS targets in government plans	No	8=
	CLTS financed by government	No	11=
	CLTS integrated with other approaches	No	9=
	CLTS sustainable monitoring	No	8=
Effectiveness	ODF success rate	0%	10=
	Triggered communities per facilitator	0	11=
Summary	**CLTS potential maximized?**	**No**	**11**

Performance

- High
- Middle
- Low

JMP estimate: Rural sanitation



Scale of rural sanitation challenge

Category	Rural sanitation coverage		
	Percent	Households	Population
Open defecation	21%	1,900	11,900
Unimproved sanitation facilities	25%	2,180	13,700
Shared sanitation facilities	4%	398	2,500
Total without improved sanitation	**50%**	**4,478**	**28,100**

Source: 2006 Household Income and Expenditure Survey.

Rural: improved sanitation coverage

The JMP estimate for Kiribati is based on the 1990 and 2000 Censuses, thus is not based on any recent surveys or coverage data. More recent data from the 2006 Household Income and Expenditure Survey (HIES), which was not included in the 2012 JMP estimate, indicates that improved sanitation coverage[52] has increased to 50 per cent:

- 7 per cent were connected to the public sewage system (improved)
- 28 per cent used pour-flush latrines (improved)
- 15 per cent used pit latrines (improved)
- 4 per cent share use of pour-flush latrines (shared)
- 18 per cent use hanging latrines (unimproved)
- 6 per cent use "other facilities" (unimproved)
- 21 per cent do not use sanitation facilities (OD)

CLTS status

Introduced by UNICEF through the Water and Sanitation Scooping Mission (EU-KIRIWATSAN-1) programme in June 2011. Community engagement activities have commenced, but initial triggering has not yet been undertaken.

CLTS variations and practice

1. **UNICEF: CATS**
   CATS involves a range of interventions including CLTS, School-Led Total Sanitation (SLTS), sanitation marketing and HWWS.

CLTS scale

No triggering has yet taken place. UNICEF plans to implement CATS in 70 villages across 16 of the Outer Islands.

CLTS capacity

The programme is being established. No facilitators have yet been trained.

CLTS institutional coverage

[52] No disaggregation was available between rural and urban areas.

CLTS enabling environment

Policy *CLTS in government policy*	**No**	2010 National Sanitation Policy	General policy that promotes "enhanced community awareness of sanitation and public health and hygiene requirements" but does not contain any specific references to programme methodologies or detailed technical requirements.
Strategy *CLTS targets in government strategies or development plans*	**No**	National Sanitation Implementation Plan (10-year)	No specific ODF targets. Plan recognizes that simple and least costly solutions will be the most appropriate and sustainable; and that service improvement requires ongoing community motivation and commitment.
Finance *CLTS financed by government*	**No**	No CLTS programme	Formal CLTS programme yet to start. However, it appears that the government will support implementation of the UNICEF programme.
Integration *CLTS integrated with other approaches*	**No**	CATS	UNICEF is introducing its CATS approach, which will combine CLTS, supply strengthening and handwashing with soap.
Monitoring *Sustainable M and E of CLTS*	**No**	No formal monitoring system	Limited data available.

CLTS weaknesses and bottlenecks

What's not working?	
Insufficient CLTS experience to date	
Context issues?	
1. Inadequate sanitation contaminating groundwater 2. High infant mortality rate 3. High priority for water and sanitation	1. Inadequate sanitation is at crisis levels and pollution associated with sanitation systems threatens scarce and vulnerable groundwater resources in the atoll islands. 2. Kiribati has one of the highest infant mortality rats in the Pacific region. In 2002, 22% of under-five mortality was associated with diarrhoea. 3. Seven out of the top 10 priorities identified by communities are water and sanitation related (Kiribati Adaptation Program, World Bank).
Constraints and bottlenecks?	
1. Strong cultural views 2. Open defecation on the beach	1. The i-Kiribati hold strong cultural views on acceptable sanitation and hygiene practices. At a recent community consultation, one villager reported that "it is our culture that we never wash our hands". However, recent data from sampled households in three outer islands suggests that 74% of households have soap available somewhere in the home, and 32% have a specific place where soap and water are available. 2. OD on the beach is a common practice, even by households that own toilets.
Lessons learned	
Insufficient CLTS experience to date	

Sources: ISF (2011) Kiribati: WASH sector brief; UNICEF (2012) KIRIWATSAN-1 Initial visit – activity progress report, 19 July 2012.

Lao PDR

CLTS Summary

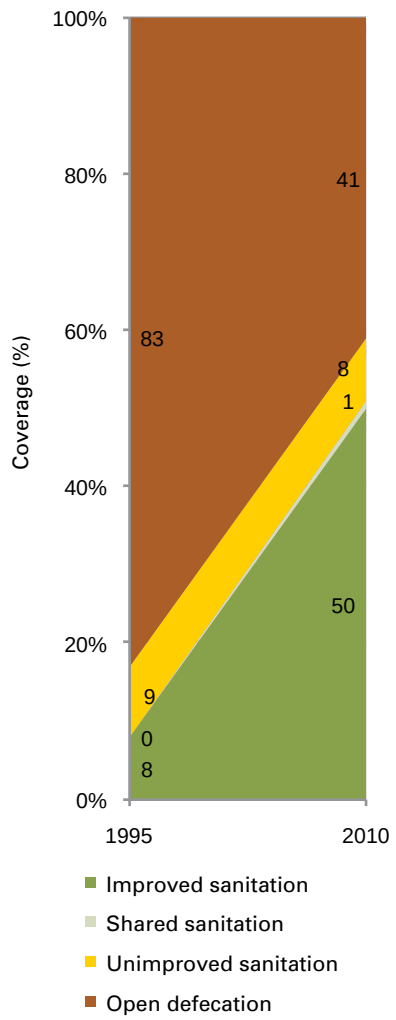
			Regional Ranking (14 countries)
Status	CLTS date of introduction	2008	5
	CLTS introduced: % of country	47%	5
	CLTS coverage: major organizations	7	7
Scale	OD population *(2010, millions)*	1.7m	8
	Communities triggered *(number)*	217	7
	ODF communities *(number)*	36	5
	Capacity developed *(trained facilitators)*	143	7
Enabling	CLTS in government policy	Maybe	5=
	CLTS targets in government plans	Yes	1=
	CLTS financed by government	Indirect	5=
	CLTS integrated with other approaches	Maybe	3=
	CLTS sustainable monitoring	Planned	3=
Effectiveness	ODF success rate	17%	6
	Triggered communities per facilitator	1.5	5
Summary	**CLTS potential maximized?**	**Maybe**	**5**

Performance

- High
- Middle
- Indirect*
- Low

* Indirect finance

JMP estimate: Rural sanitation



Scale of rural sanitation challenge

Category	Rural sanitation coverage		
	Percent	Households	Population
Open defecation	41%	287,900	1,698,600
Unimproved sanitation facilities	8%	56,200	331,400
Shared sanitation facilities	1%	7,000	41,400
Total without improved sanitation	**50%**	**351,100**	**2,071,400**

Source: 2012 JMP estimate; UN population forecast.

Rural: improved sanitation coverage

The JMP estimate suggests a rapid increase in improved sanitation coverage in rural areas from a low baseline of 8 per cent in 1995 to 50 per cent in 2010. OD was estimated at 41 per cent, which suggests that 288,000 rural households (1.7 million people) do not use a sanitation facility.

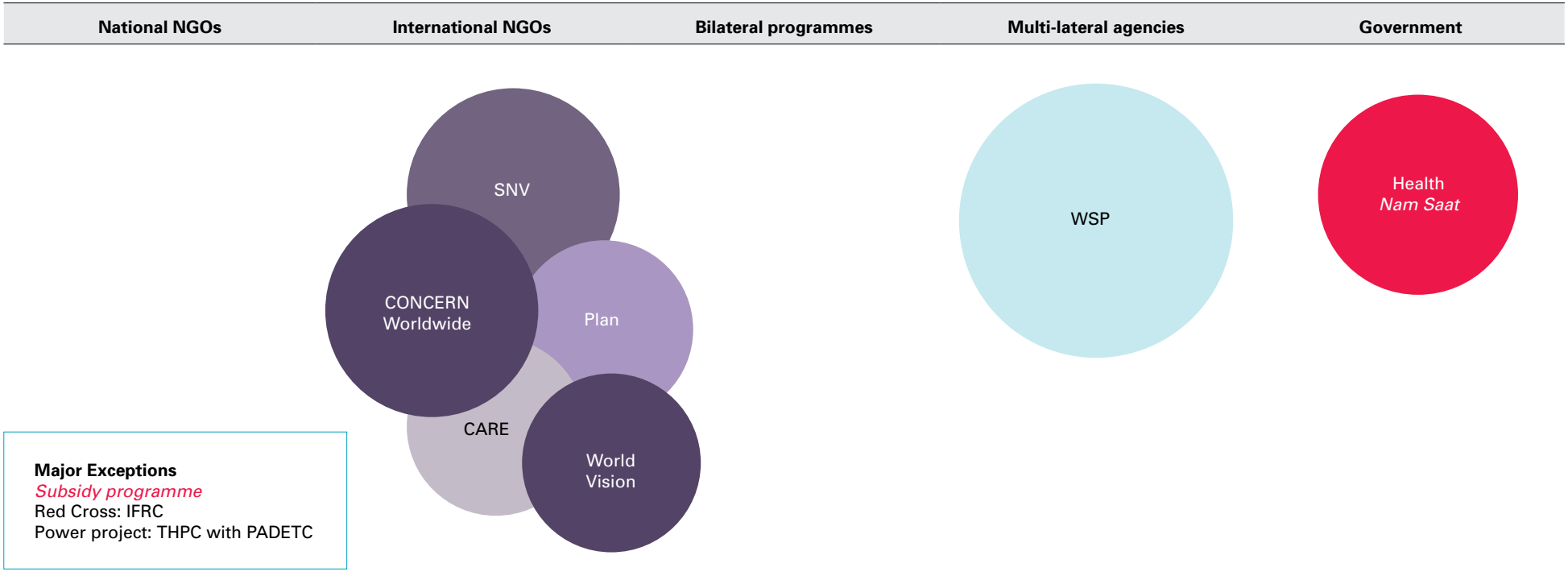
CLTS status

Introduced by WSP and CONCERN Worldwide in 2008. CLTS has since spread to 21 districts out of 143 nationally, in eight out of the 17 provinces in Lao PDR (47 per cent nationally), though at varying scale from piloting two to three villages up to initiatives covering 40-80 villages in a province.

Major exceptions

Ongoing rural sanitation activities in Lao PDR are small-scale and often integrated into livelihood projects, generally using a mix of hygiene promotion approaches, such as Participatory Hygiene and Sanitation Transformation (PHAST), and latrine subsidies. Most WASH projects promote pour-flush latrines, with few choices offered to households. The Lao Red Cross and a few other international NGOs continue to promote latrine subsidies in their WASH programmes. The Theun Hinboun (THPC) power project is planning to use a modified version of CLTS to trigger demand for the subsidized toilet components being provided in relocated villages. UNICEF Lao PDR continued with its latrine subsidy programme until January 2011, but is now planning to partner with WSP on a 2012-2015 programme designed to accelerate the eradication of OD, use of improved latrines and adoption of other key hygiene behaviours.

CLTS institutional coverage



CLTS variations and practice

A wide variety of different approaches and additional components are being piloted with CLTS in Lao PDR. Most of these interventions are small-scale, pilot projects, suggesting that there remains little clarity or consensus on suitable programme methodologies for the challenging and remote rural contexts found in Lao PDR.

1. **WSP: CLTS and sanitation marketing (and HWWS)**
   WSP piloted CLTS, but now proposes to utilize both CLTS demand creation and sanitation marketing supply strengthening components in its Scaling Up Rural Sanitation programme. WSP also reports that the demand creation component in its new projects in Champassak and Sekong provinces will use the results of formative research to integrate the promotion of HWWS with CLTS.

2. **SNV: Sustainable Sanitation and Hygiene For All programme (SSH4A)**
   SNV commenced a learning process with WSP to test and adjust CLTS to the Lao context. This pilot was taken to scale in Savannakhet Province in 2010, when the SSH4A programme integrated demand creation for sanitation and hygiene improvements with support to market-based supply chains for sanitation and hygiene products, behavioural change communication and WASH governance.

3. **Plan: Bokeo programme**
   The Plan programme in Bokeo province includes interventions to promote HWWS, household water treatment and storage, solid waste management, wastewater management, and aims to trigger schools before commencing CLTS.

CLTS capacity

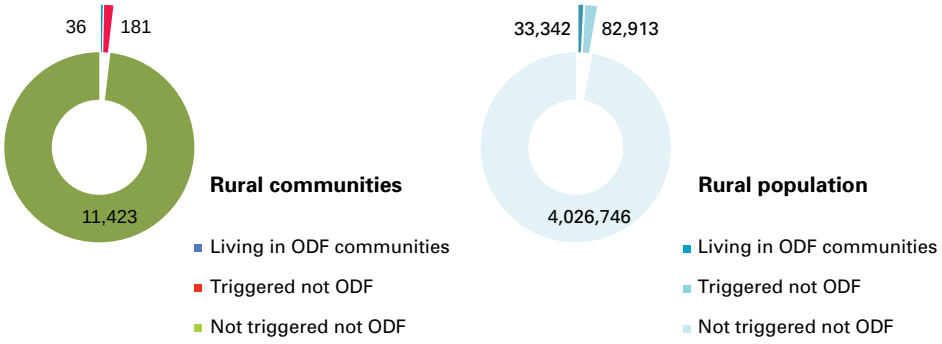
A total of 143 CLTS facilitators have been trained in Lao PDR, through capacity development activities supported by CONCERN Worldwide, WSP, Plan, SNV, World Vision and ChildFund. The main CLTS trainers have been from Participatory Development Training Center (PADETC), SNV and the National Centre for Environmental Health and Water Supply (*Nam Saat*).

CLTS scale

Only 0.8 per cent of the rural population in Lao PDR, just 33,000 people, are reported to live in ODF villages. More than 217 villages have been triggered using the CLTS approach, but to date only 36 villages have been reported to achieve ODF status.

ODF success rate

Lao PDR has a moderate ODF success rate: 17 per cent of triggered villages have been declared ODF according to data provided by the Lao PDR WASH Technical Working Group.



CLTS impact on national sanitation coverage

Insufficient data were available to determine the impact of CLTS on national sanitation coverage.

CLTS enabling environment

Policy *CLTS in government policy*	**Maybe**	National Strategy for RWSSH	*Section 4.4.4.2: "More emphasis will be given to creating demand through community-based approaches (for example, Community Led Total Sanitation [CLTS] and Participatory Hygiene and Sanitation Transformation [PHAST] to … contribute to achieving open defecation free (ODF) communities and villages".*
Strategy *CLTS targets in government strategies or development plans*	**Yes**	National Strategy for RWSSH	2012 National Strategy for RWSSH proposes strategic targets for improved sanitation coverage (rural and among lowest wealth quintile), latrine usage and HWWS; and monitoring indicators that include the proportion of ODF villages.
Finance *CLTS financed by government*	**Indirect**	Government support to programmes	*Nam Saat* provides central support to CLTS and other rural sanitation programmes, with local implementation support provided through its provincial offices. However, the government has yet to allocate any finance to CLTS implementation.
Integration *CLTS integrated with other approaches*	**Maybe**	1. Latrine subsidies 2. HWWS 3. Sanitation marketing	1. Latrine subsidies are still widely utilized by provincial and district governments, and by other NGOs and the Red Cross, pending approval of the draft national strategy for RWSSH. 2. HWWS promotion has been or will be combined with most CLTS and SLTS programmes in Lao PDR (SNV, WSP, Plan). 3. WSP financed research into the development and marketing of affordable technology options for sanitation in Lao PDR, and is now partnering with UNICEF, SNV and Plan on a national consumer preference and supply chains study.
Monitoring *Sustainable M&E of CLTS*	**Planned**	1. National Strategy for RWSSH (draft) 2. ODF verification system	1. Draft national strategy proposes two monitoring systems: one for progress versus annual and multi-year targets; and another to examine effectiveness and sustainability. However, no investment or progress has yet been made in establishing these monitoring systems. 2. WSP, SNV and Plan have established an ODF verification process that has been recognized by local governments, but it is yet to be revised for adoption and implementation nationally.

CLTS weaknesses and bottlenecks

What's not working?	
1. CLTS has limited impact on hygiene 2. Quality of latrine construction is poor	1. A WSP assessment suggested that CLTS "may have only limited impact on hygiene behaviour", notably HWWS. 2. 2009 SNV evaluation found that the quality of CLTS latrine construction was generally poor in the CLTS pilots, perhaps due to inadequate follow-up, which led to high numbers of 'unhygienic' latrines.
Context issues?	
1. Numerous defecation sites 2. Pour-flush latrines preferred 3. CLTS a 'foreign' approach	1. Lots of cover and alternative sites for defecation in rural areas. 2. SNV review found that Hmong villages had a preference for pour-flush latrines. 3. CLTS is viewed as a foreign approach that will require continuous learning, adaptation, innovation and quality assurance before it can go to scale.
Constraints and bottlenecks?	
1. Fixed attitudes and beliefs of key actors 2. Competition with other programmes 3. Shortage of human resources 4. More affordable designs needed 5. *Nam Saat* finance is inadequate 6. Government policy	1. Key actors and stakeholders remain unconvinced that CLTS works, including many government facilitators. 2. CLTS often competes with other programmes in neighbouring areas, many of which offer subsidies thus tend to undermine CLTS effectiveness. 3. Shortage of sufficiently experienced and skilled human resources: for participatory facilitation; technology advice; or knowledge management (capturing and sharing lessons and innovations). 4. More affordable hygienic toilet designs are needed to help scaling up. 5. Very limited funds were available for field work by *Nam Saat* staff, which limits their role in implementing, monitoring or supporting CLTS activities. 6. No formal government recognition in policy or plans that ODF is an important sanitation objective, or that demand creation is important for sustainable behaviour change, which makes it difficult to convince local governments to endorse or support CLTS interventions.
Lessons learned	
1. Start in easy villages 2. Local leaders critical to progress 3. Post-triggering support important 4. Back to basics: behaviour change	1. Try to avoid villages that have previously received latrine subsidies. Start in easy villages; cluster villages geographically for greater impact and spread. 2. The involvement of local formal and informal leaders and community structures is crucial to kick-start activities and maintain progress. 3. Effective post-triggering support and guidance are important to avoid slippage and improve the sustainability of outcomes 4. Focus on igniting changes in sanitation behaviour and practice rather than on latrine construction.

Sources: Colin (draft) Piloting CLTS in Southern Lao PDR: Lessons and prospects, WSP; SNV (2009) CLTS pilot evaluation; personal communications with Plan Lao PDR.

CLTS strengths and opportunities

What's working?	
1. CLTS triggering is effective 2. CLTS is cost-effective	1. CLTS triggering is an effective approach to create 'initial demand' for sanitation. 2. CLTS can be cost-effective if implemented through existing government and community structures.
Success factors?	
1. House-to-house support 2. Strong village leadership	1. House-to-house support was found to be the most effective mode for triggering and sustaining behaviour change. 2. Strong village leadership has been a critical factor in achieving ODF status.
Opportunities?	
1. Encourage local innovation 2. ODF verification process	1. CLTS offers the potential to move away from top-down technical standards towards more affordable, practical and appropriate sanitation technologies and services. 2. The development of an ODF verification process will encourage local government involvement and monitoring of progress, and assist in harmonizing definitions, criteria and approaches.
Lessons learned	
1. Village regulations reinforce action 2. Recognition and rewards help	1. Supportive village regulations can reinforce community action to improve sanitation. 2. Formal recognition of ODF status is a matter of great pride and should be continued in future programmes.

Sources: Colin (draft) Piloting CLTS in Southern Lao PDR: Lessons and prospects, WSP; SNV (2009) CLTS pilot evaluation; personal communications with Plan Lao PDR.

Mongolia

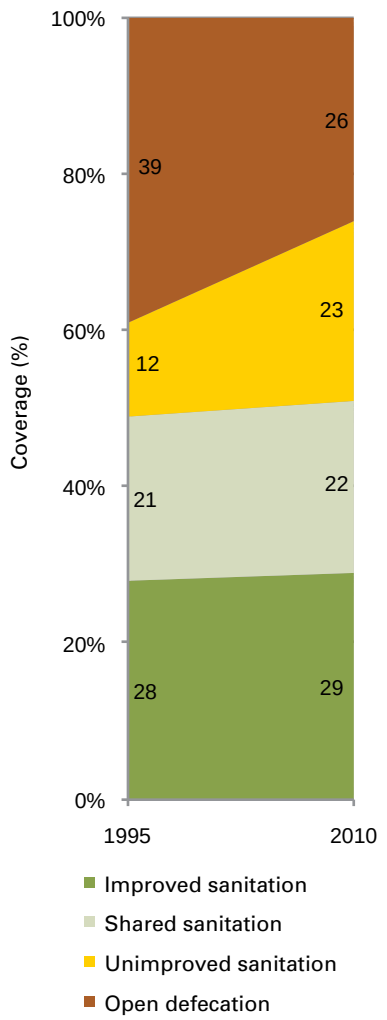
CLTS Summary

			Regional Ranking (14 countries)
Status	CLTS date of introduction	2011	10
	CLTS coverage: % of country	0%	11=
	CLTS coverage: major organizations	3	9
Scale	OD population *(2010, millions)*	0.27m	6
	Communities triggered *(number)*	10	9
	ODF communities *(number)*	1	9
	Capacity developed *(trained facilitators)*	15	11
Enabling	CLTS in government policy	No	9=
	CLTS targets in government plans	No	8=
	CLTS financed by government	No	11=
	CLTS integrated with other approaches	No	9=
	CLTS sustainable monitoring	No	8=
Effectiveness	ODF success rate	10%	7
	Triggered communities per facilitator	0.7	8
Summary	**CLTS potential maximized?**	**No**	**10**

Performance

- High
- Middle
- Low

JMP estimate: Rural sanitation



Scale of rural sanitation challenge

Category	Rural sanitation coverage		
	Percent	Households	Population
Open defecation	26%	63,300	272,200
Unimproved sanitation facilities	23%	56,000	240,800
Shared sanitation facilities	22%	53,500	230,300
Total without improved sanitation	**71%**	**172,800**	**743,300**

Source: 2012 JMP estimate; UN population forecast.

Rural: improved sanitation coverage

The JMP estimate suggests little change in improved sanitation coverage in rural areas, rising marginally from 28 per cent in 1995 to 29 per cent in 2010. OD was estimated to have reduced from 39 per cent to 26 per cent, due largely to an increase in the use of unimproved sanitation facilities.

CLTS status

Introduced by World Vision in September 2011. Two CLTS training workshops have been held, and UNICEF plans to implement CATS in its 2012-2016 country programme.

Major exceptions

CLTS is a new approach in Mongolia. ACF, UNDP and the Red Cross have WASH programmes in Mongolia that do not utilize the CLTS approach.

CLTS variations and practice

1. **UNICEF: CATS**
   CATS involves a range of interventions including CLTS, SLTS, sanitation marketing and HWWS. UNICEF plans to implement CATS in its 2012-2016 programme in Nailakh district and Khuvsgul *aimag*.

CLTS capacity

A total of 15 CLTS facilitators have been trained in Mongolia by World Vision, with five of these facilitators reported to be very active.

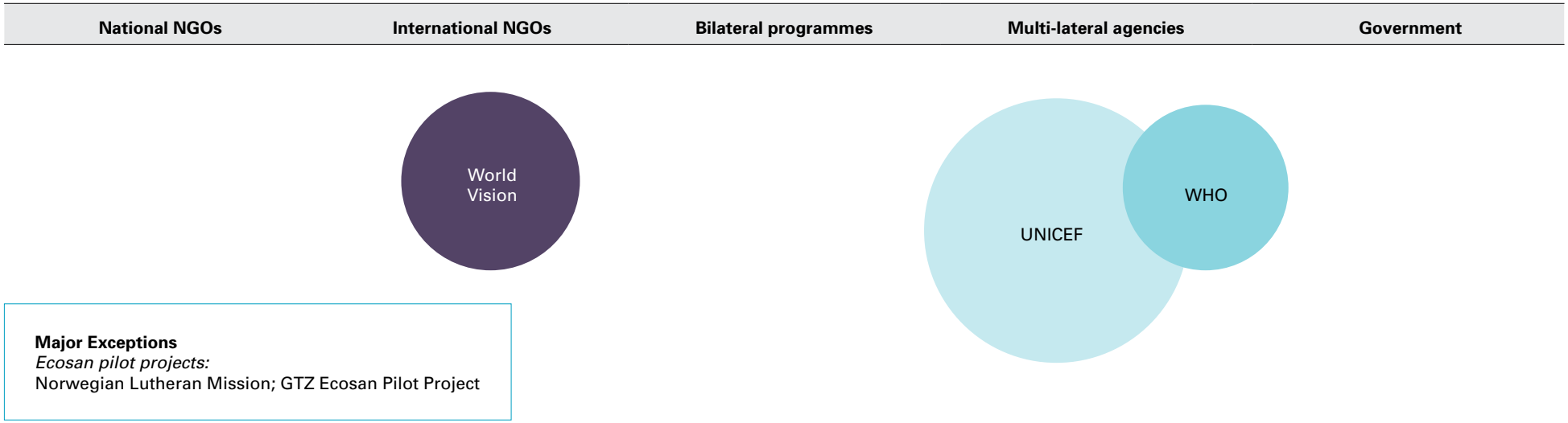
CLTS scale

Only one small, peri-urban community in Mongolia, comprising just 16 households, is reported to have achieved ODF status. About 10 small, peri-urban communities have been triggered during CLTS training events, but no other information was available on CLTS progress.

CLTS impact on national sanitation coverage

Insufficient data were available to determine the impact of CLTS on national sanitation coverage.

CLTS institutional coverage



CLTS enabling environment

Policy *CLTS in government policy*	No	1998 Law of Mongolia on Sanitation	Sanitation defined as "activities to eliminate adverse natural and social factors having potential impact on public health, and to prevent the public health from diseases". Normal sanitary conditions: "a healthy and safe environment for a human to work and to live".
Strategy *CLTS targets in government strategies or development plans*	No	No WASH strategy or plan	No CLTS targets in government strategies or national development plans.
Finance *CLTS financed by government*	No	No CLTS finance	No formal CLTS programmes established.
Integration *CLTS integrated with other approaches*	No	No combined approaches	No formal CLTS programmes established.
Monitoring *Sustainable M&E of CLTS*	No	No progress data	No monitoring system.

CLTS weaknesses and bottlenecks

What's not working?	
1. Hardware subsidies	1. The provision of latrine subsidies remains the default approach to sanitation improvement.
Context issues?	
1. Sub-zero temperatures in winter 2. Urban and peri-urban priority 3. Very low rural population density 4. Nomadic and semi-nomadic population	1. Technical challenges created by sub-zero temperatures in winter (and hot climate in summer), which freezes water seal toilets and excreta. 2. Serious sanitation problems in urban and peri-urban (*ger*) areas of Ulaan Baatar, which house approximately 60% of the national population, with groundwater contamination often attributed to inadequate sanitation. 3. Mongolia has the lowest population density in the world. 4. Challenges inherent in improving sanitation behaviours of large nomadic and semi-nomadic populations.
Constraints and bottlenecks?	
1. No lead sanitation agency 2. Little sector coordination	1. Lack of clarity over roles and responsibilities for sanitation. 2. Large number of NGOs implementing without coordination or cooperation.
Lessons learned	
1. Ecosan toilets not acceptable in *ger* areas	1. GTZ Ecosan project found that ecological sanitation toilets were not considered acceptable in peri-urban areas due to high costs, frozen urine lines, disposal problems, odour problems, limited composting in winter requiring frequent emptying, scepticism concerning human excreta use in agriculture, and a failure to address the significant wastewater problem.

Sources: Kar (2011) CLTS in Mongolia: report of the first hands-on training workshop; GTZ (2008) ECOSAN: ecological sanitation in Mongolia; personal communication from UNICEF Mongolia.

CLTS strengths and opportunities

What's working?	
1. ODF celebration attracted government interest	1. The first ODF celebration, in a small, peri-urban community triggered during the CLTS training, attracted local governors and generated significant interest.
Success factors?	
None to date	
Opportunities?	
1. High priority for sanitation	1. *Ger* residents, who live in the peri-urban areas of Ulaan Baatar, ranked water supply, drainage and sanitation as their most immediate concerns.
Lessons learned	
None to date	

Sources: Kar (2011) CLTS in Mongolia: report of the first hands-on training workshop; GTZ (2008) ECOSAN: ecological sanitation in Mongolia; personal communication from UNICEF Mongolia.

Myanmar

CLTS Summary

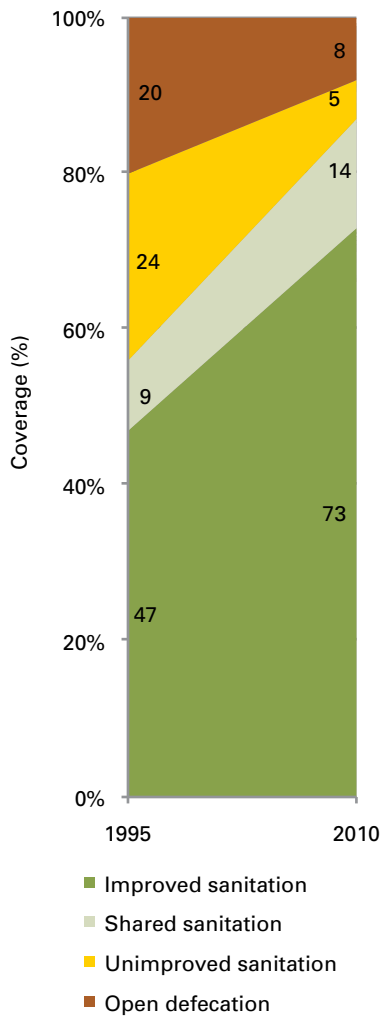
			Regional Ranking (14 countries)
Status	CLTS date of introduction	2010	9
	CLTS introduced: % of country	12%	8
	CLTS coverage: major organizations	7	7
Scale	OD population *(2010, millions)*	2.5m	9
	Communities triggered *(number)*	224	6
	ODF communities *(number)*	12	7
	Capacity developed *(trained facilitators)*	158	6
Enabling	CLTS in government policy	Maybe	5=
	CLTS targets in government plans	No	8=
	CLTS financed by government	Indirect	5=
	CLTS integrated with other approaches	No	9=
	CLTS sustainable monitoring	No	8=
Effectiveness	ODF success rate	5%	8
	Triggered communities per facilitator	1.4	6
Summary	**CLTS potential maximized?**	**Maybe**	**8**

Performance

- High
- Middle
- Indirect*
- Low

* Indirect finance

JMP estimate: Rural sanitation



Scale of rural sanitation challenge

Category	Rural sanitation coverage		
	Percent	Households	Population
Open defecation	8%	545,200	2,546,000
Unimproved sanitation facilities	5%	340,700	1,591,250
Shared sanitation facilities	14%	954,100	4,455,500
Total without improved sanitation	**27%**	**1,840,000**	**8,592,750**

Source: 2012 JMP estimate; UN population forecast.

Rural: improved sanitation coverage

The JMP estimate suggests a rapid increase in improved sanitation coverage in rural areas from a relatively high baseline of 47 per cent in 1995 to 73 per cent in 2010. A further 19 per cent of the rural population use either shared or unimproved sanitation facilities. The OD rate was estimated to be 8 per cent, which equates to 545,000 rural households (2.5 million people) who do not use any form of sanitation facility.

CLTS status

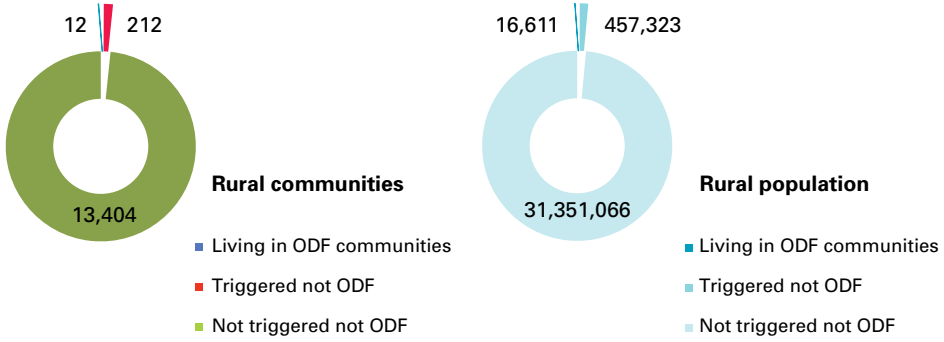
Introduced by UNICEF and Save the Children in 2010. CLTS has since spread to eight districts in four regions and states (12 per cent geographical coverage).

CLTS capacity

A total of 158 CLTS facilitators have been trained in Myanmar, although it is uncertain how many of these facilitators are currently active.

CLTS scale

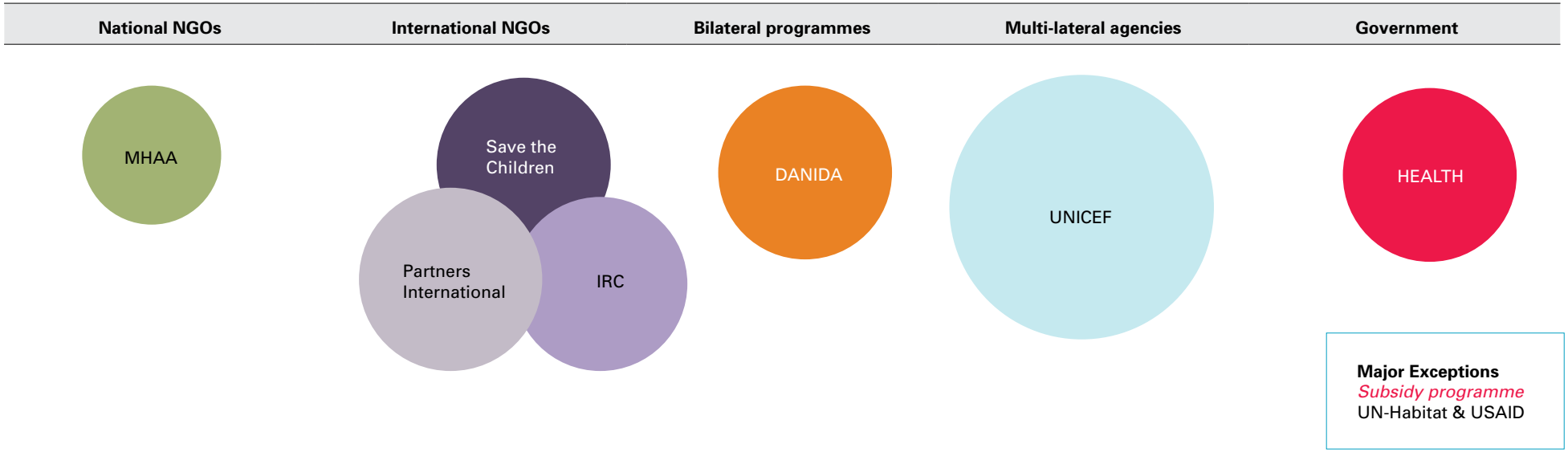
Only 0.05 per cent of the rural population in Myanmar, about 16,600 people, are reported to live in ODF villages. More than 220 villages have been triggered using the CLTS approach, but so far only 12 villages have been reported as ODF.



CLTS impact on national sanitation coverage

Insufficient data were available to determine the impact of CLTS on national sanitation coverage.

CLTS institutional coverage



Major exceptions

UN-Habitat is planning a five-year US$ 12 million WASH programme to be supported by USAID that will subsidize latrine construction.

CLTS variations and practice

None to date.

CLTS enabling environment

Policy *CLTS in government policy*	**Planned**	National Sanitation Campaign	Ministry of Health's 2012 National Sanitation Campaign will promote the CLTS approach.
Strategy *CLTS targets in government strategies or development plans*	**No**	No WASH strategy or plan	No CLTS targets in the current government strategies or national development plans, but the government is planning to develop a new strategy once CLTS effectiveness and sustainability has been evaluated.
Finance *CLTS financed by government*	**Indirect**	Indirect government support	Government provides staff to support CLTS implementation programmes, but there is no co-financing of programmes.
Integration *CLTS integrated with other approaches*	**No**	Subsidy approaches	CLTS has not yet been combined with any other approaches, but the continuation of latrine subsidy programmes is likely to undermine CLTS implementation in nearby areas.
Monitoring *Sustainable M&E of CLTS*	**No**	Few progress data	No national monitoring system. The government has been monitoring CLTS progress in 10 township programme, but has not yet developed or implemented a national M&E system.

CTS weaknesses and bottlenecks

What's not working?	
1. Children's participation	1. Children's participation in CLTS is limited when they go to school in the next village.
Context issues?	
1. Expectations of subsidy 2. Rocky and flooded areas 3. Weather 4. Harvest and transplanting	1. Previous latrine subsidy programmes mean that communities often expect financial assistance from projects for sanitation improvement. 2. Technical and economic challenges faced in flood-prone communities and communities with rocky soils. 3. Progress is difficult in the rainy season (six months of the year). 4. Timing of interventions needs to recognize time constraints during periods of harvest and transplanting.
Constraints and bottlenecks?	
1. Poverty perception 2. Transport	1. Greatest challenge is the widely held view that some people are too poor to build their own latrine. 2. Transport constraints affect CLTS implementation and follow-up.
Lessons learned	
1. Water supply development	1. Water supply development should follow CLTS, and not take place before or during the sanitation improvement process.

Sources: Personal communication with UNICEF Myanmar; Kar (2011) CLTS in Myanmar: report of the first hands-on training of trainers workshop, CLTS Foundation; www.communityledtotalsanitation.org (accessed 30 July 2012).

CLTS strengths and opportunities

What's working?	
1. Community pride and empowerment 2. CLTS triggering	1. Communities are happy with the approach once ODF success is achieved, which suggests that sustainability is more likely. Communities are empowered by realization that they can solve problems and issues by themselves, and recognition that the solutions result from their own ideas. 2. CLTS triggering is more effective than Health Education.
Success factors?	
1. Outdoor triggering process	1. Outdoor areas are more effective places to conduct the triggering process than inside a building.
Opportunities?	
1. National Sanitation Campaign	1. The Ministry of Health has been holding National Sanitation Weeks for 14 years, but has decided that from 2012 the sanitation week will be replaced by a National Sanitation Campaign. The campaign will include the CLTS approach, and provides a major opportunity for mainstreaming and scaling up CLTS implementation.
Lessons learned	
1. ODF villages encourage spread 2. Health staff are key 3. Two-way communication	1. Once a few villages in an area reach ODF status, it becomes easier to advocate for a no-subsidy approach. 2. Basic health staff are central to the success of the CLTS process. 3. Two-way communication is more appropriate and effective than traditional teaching methods.

Sources: Personal communication with UNICEF Myanmar; Kar (2011) CLTS in Myanmar: report of the first hands-on training of trainers workshop, CLTS Foundation; www.communityledtotalsanitation.org (accessed 30 July 2012).

Papua New Guinea

CLTS Summary

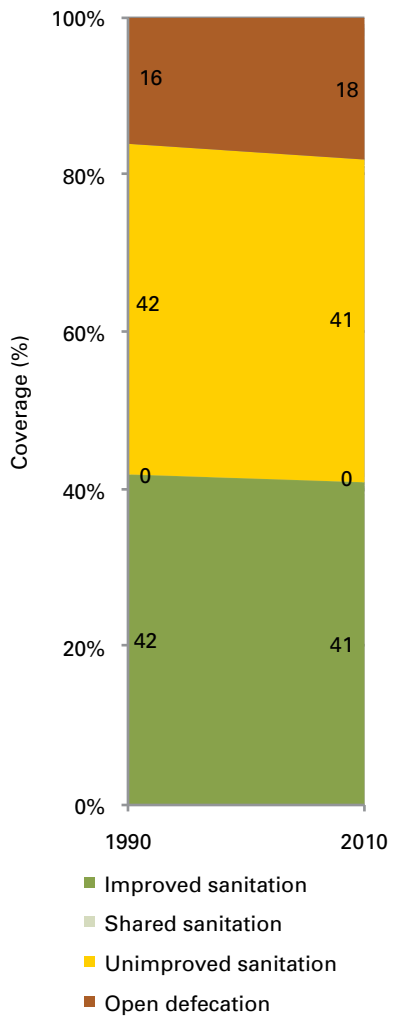
			Regional Ranking (14 countries)
Status	CLTS date of introduction	2008	5=
	CLTS introduced: % of country	95%	3
	CLTS coverage: major organizations	8	6
Scale	OD population *(2010, millions)*	1.1m	7
	Communities triggered *(number)*	477	5
	ODF communities *(number)*	21	7
	Capacity developed *(trained facilitators)*	310	4
Enabling	CLTS in government policy	No	9=
	CLTS targets in government plans	No	8=
	CLTS financed by government	Indirect	5=
	CLTS integrated with other approaches	No	9=
	CLTS sustainable monitoring	No	8=
Effectiveness	ODF success rate	1%	9
	Triggered communities per facilitator	1.5	4
Summary	**CLTS potential maximized?**	**Maybe**	**6**

Performance

- High
- Middle
- Indirect*
- Low

* Indirect finance

JMP estimate: Rural sanitation



Scale of rural sanitation challenge

Category	Rural sanitation coverage		
	Percent	Households	Population
Open defecation	18%	196,300	1,079,800
Unimproved sanitation facilities	41%	447,200	2,459,600
Shared sanitation facilities	0%	-	-
Total without improved sanitation	**59%**	**643,500**	**3,539,400**

Source: 2012 JMP estimate; UN population forecast.

Rural: improved sanitation coverage

The JMP estimate for Papua New Guinea is based on only two household surveys (1996 DHS and 2006 DHS) thus provides a limited estimate of sanitation progress. Based on these two surveys, rural sanitation coverage and open defecation rates have hardly changed between 1996 and 2006. Rapid population growth in rural areas, estimated at 31 per cent during the 10 year period 1996-2006, is likely to be a significant factor in the stagnation of rural sanitation coverage.

The DHS survey categories used in Papua New Guinea include 'traditional pit latrines', which is not one of the JMP sanitation categories. Given the risk that some traditional pit latrines do not 'hygienically separate human excreta from human contact', the JMP estimate counts only half of the 'traditional pit latrines' surveyed as improved sanitation facilities, with the other half assumed to be unimproved sanitation facilities. The DHS06 reported the following sanitation practices for rural households in Papua New Guinea:

- 73.7 per cent used traditional pit latrines
- 17.7 per cent practiced OD (no facility/bush/seashore)
- 3.5 per cent used hanging latrines over water bodies (closet over sea/river)
- 2.9 per cent used an improved latrine
- 1.1 per cent used a flush toilet
- 0.7 per cent used a shared flush toilet

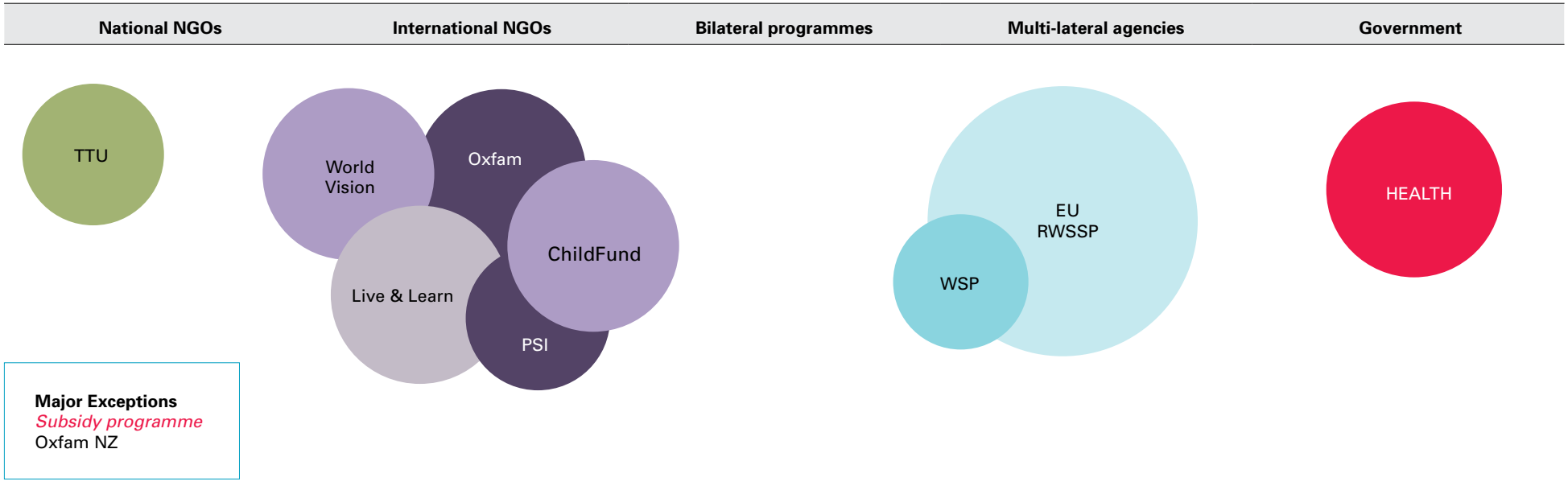
CLTS status

Introduced by Oxfam in 2008, with implementation expanded by ChildFund and Live & Learn in 2009. CLTS has since spread to 19 out of the 20 provinces in Papua New Guinea (95 per cent geographical coverage).

Major exceptions

Oxfam NZ in Bougainville: using CLTS to generate demand but alongside provision of subsidized latrine slabs and vent pipes for VIP latrines.

CLTS institutional coverage



CLTS variations and practice

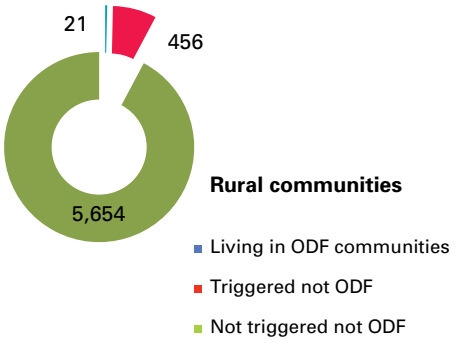
CLTS implementers in Papua New Guinea require that latrines meet two minimum technical criteria: provision of a sealed pit and a vent pipe.

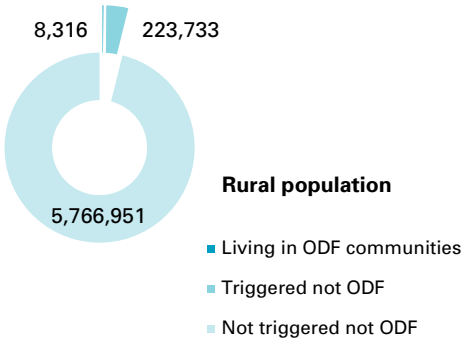
1. **CLTS and Healthy Islands concept**
   The Healthy Islands concept was incorporated into the Papua New Guinea 1996-200 National Health Plan, and encourages health promotion in sub-settings such as healthy homes, schools, villages and markets; and covers safe motherhood, child health, immunization, protection against communicable diseases, and quality of life. Implementation of the concept previously lacked finance and support, but a framework of action for revitalising implementation of the concept was agreed in 2011, and there is now evidence that CLTS fits well with many of the activities and principles of this Pacific-specific approach.

2. **TTU: CLTS and health training**
   TTU is a national NGO that has built CLTS into all of its village health worker, village birth attendant and community health worker training workshops. This approach is estimated to have resulted in 5,000 new latrines within the last two years.

CLTS scale

Only 0.1 per cent of the rural population in Papua New Guinea, about 8,300 people, are reported to live in ODF villages. More than 470 villages have been triggered using the CLTS approach, but so far only 21 villages have been reported as ODF. In total, 16,000 new latrines are reported as a direct result of CLTS interventions, but few data were available on the proportion of these that are found in ODF communities.





CLTS capacity

A total of 310 CLTS facilitators have been trained in Papua New Guinea, although it is uncertain how many of these facilitators are currently active.

CLTS impact on national sanitation coverage

Insufficient data were available to determine the impact of CLTS on national sanitation coverage.

CLTS enabling environment

Policy *CLTS in government policy*	**No**	National Policy on Water Supply and Sanitation Services (draft)	A draft national policy was developed in 2005, but was never approved. No further WASH policies have been developed.
Strategy *CLTS targets in government strategies or development plans*	**No**	Medium-Term Development Strategy (MTDS) 2011-2015	MTDS 2011-2015 includes ambitious WASH investment and coverage targets, but is largely reliant on external donors to fund WASH programmes. No specific targets were included for ODF communities. However, a national NGO (TTU) has agreed the target of achieving the first 100% ODF district in Papua New Guinea by 2014 with the provincial department of health (66,000 district population).
Finance *CLTS financed by government*	**Indirect**	Indirect government support	Government provides staff to support CLTS implementation programmes. Eastern Highlands Government financed a CLTS training workshop that trained 40 volunteers, one of whom has since triggered 5,000 new latrines. Newly formed national WASH team has been given the role of training staff from the UN and provincial health offices in the CLTS approach (due to start in August and September 2012).
Integration *CLTS integrated with other approaches*	**No**	1. Subsidy approaches 2. CLTS and PHAST and sanitation marketing	1. Most implementers are now reported to be replacing previous subsidy-based approaches with CLTS. 2. Live & Learn is piloting an approach that will combine CLTS with PHAST and sanitation marketing. The Information, Education and Communication (IEC) materials have been well received, but the approach has not yet been fully implemented.
Monitoring *Sustainable M&E of CLTS*	**No**	1. No national monitoring system 2. No ODF verification process	1. Reliable CLTS progress data were hard to obtain. 2. No formal ODF verification process has been agreed.

CLTS weaknesses and bottlenecks

What's not working?	
1. Subsidies undermine CLTS	1. Subsidies undermine CLTS self-help and spontaneity.
Context issues?	
1. Rural and inaccessible 2. Traditional, patriarchal communities 3. Demographics and geography 4. 2009-2011 cholera outbreaks	1. 85% rural population, with many living in remote and difficult to access settlements. 2. Traditional and usually patriarchal communities many of which are isolated from basic services such as health centres, electricity and transport networks. 3. Large island with scattered population and rapid population growth. Widely differing province sizes, topography, climate, accessibility, natural resources, culture, language and population density. 4. Cholera outbreaks in nine provinces in the 2009-2011 period.
Constraints and bottlenecks?	
1. History of handouts 2. Difficult ground conditions 3. Communities close to roads and towns	1. Difficult to motivate rural households to finance and build their own toilets in communities in Central Province that have a long history of handouts because of their proximity to the capital. 2. Additional toilet costs in areas with a high water table or poor soils (collapsible or rocky). 3. Communities located close to main roads and towns are the most difficult to influence. Their priorities are around earning income, leaving little time or interest in participating in CLTS activities.
Lessons learned	
1. Involve local government 2. Improved monitoring needed	1. NGOs noted that support for CLTS from provincial DOH and other government staff leads to smoother implementation and local reinforcement of behaviour changes. Local government staff have been involved in triggering, joint inspections, ODF verification and attending ODF ceremonies. However, local government responses remain variable because there has been no national policy or guidance on the use of CLTS. 2. Improved monitoring and evaluation of CLTS is needed, including better information on health status, use of latrines and critical hygiene practices such as HWWS.

Sources: Dutton (2011) PNG scoping mission for WSP support to water supply, sanitation and hygiene, WSP report; Dutton (2011) Could Papua New Guinea meet its MDG for rural sanitation, WSP; ISF (2011) Papua New Guinea: WASH sector brief; personal communication with Stuart Jordan, EU-RWSSP.

CLTS strengths and opportunities

What's working?	
1. CLTS can work quickly 2. Spread through facilitators 3. Internal subsidies (community support) 4. CLTS has resulted in animal pens 5. Reduction in fly nuisance	1. When implemented well, CLTS can quickly transform sanitation practices – within two to eight weeks from OD to latrine use in some villages in the Eastern Highlands and Simbu provinces. Typically it takes about three months from triggering and training to 100% ODF status. 2. CLTS facilitators have been reported to trigger sanitation improvement in their home villages, and there is some evidence of copycat triggering by others. 3. The most effective subsidy is community provision of labour, materials and assistance to those that are unable to build their own toilet. 4. CLTS in Papua New Guinea promotes elimination of all forms of OD, which has encouraged the penning of animals to prevent the spread of animal excreta. 5. Villagers report a significant reduction in fly nuisance in successful CLTS villages.
Success factors?	
1. Remote rural communities 2. Natural and formal leaders 3. Integration with other popular hygiene promotion approaches	1. Remote rural communities without a history of handouts and latrine subsidies are quicker to change their sanitation practices. Remote communities tend to be more self-reliant and used to building with local materials, and are often more willing to participate in the triggering process. 2. The enthusiasm of natural leaders to motivate others, and the support of formal community leaders, are key factors in the success of CLTS interventions. 3. Implementers report that CLTS works best when integrated with other popular approaches to hygiene promotion, including PHAST, Healthy Islands, and *Mipela Yet* Community Health Evangelism. The effectiveness of single or combined implementation has not been properly tested.
Opportunities?	
1. Provincial governments becoming interested in the CLTS approach	1. Provincial governments are becoming interested in the potential of CLTS to improve health and social conditions in rural communities. The provincial government in Eastern Highlands has already financed the training of 40 CLTS facilitators and integrated CLTS into the Healthy Islands and *Mipela Yet* Community Health Evangelism health promotion approaches being implemented in 120 villages in the province.
Lessons learned	
1. Water development comes last	1. NGOs find that it is more effective to promote hygiene and sanitation first, and finish with water supply development. Sanitation and hygiene remain low priorities, but experiencing the benefits of improved sanitation and hygiene before water supply improvement means that communities are more likely to sustain these behaviours when the water supply arrives. The collective action required is also beneficial to the water supply development process, providing an indicator of communities that are willing and able to work together to improve their conditions and basic services.

Sources: Dutton (2011) PNG scoping mission, WSP report; Dutton (2011) Could Papua New Guinea meet its MDG for rural sanitation, WSP; ISF (2011) Papua New Guinea: WASH sector brief; personal communication with Stuart Jordan, EU-RWSSP.

Philippines

CLTS summary

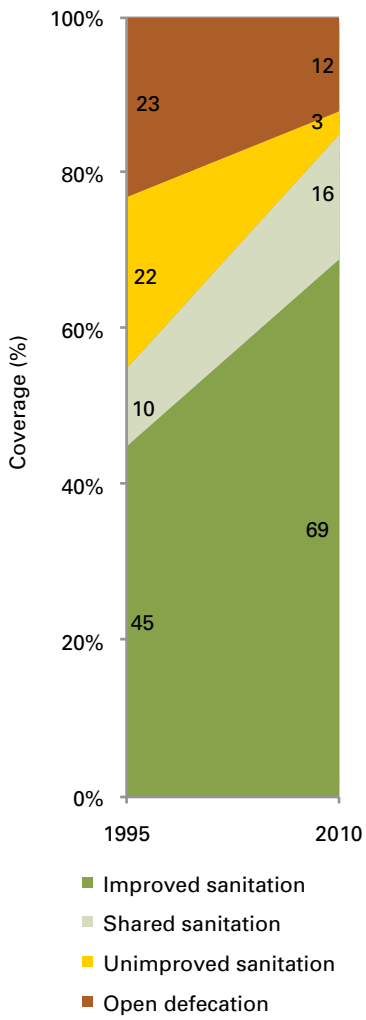
			Regional Ranking
Status	CLTS date of introduction	2008	5=
	CLTS introduced: % of country	10%	9
	CLTS coverage: major organizations	10	3
Scale	OD population *(2010, millions)*	5.7m	11
	Communities triggered *(number)*	211	8
	ODF communities *(number)*	36	5=
	Capacity developed *(trained facilitators)*	377	3
Enabling	CLTS in government policy	No	9=
	CLTS targets in government plans	Yes	1=
	CLTS financed by government	Indirect	5=
	CLTS integrated with other approaches	No	9=
	CLTS sustainable monitoring	No	8=
Effectiveness	ODF success rate	17%	5
	Triggered communities per facilitator	0.6	9
Summary	**CLTS potential maximized?**	**Maybe**	7

Performance

- High
- Middle
- Indirect*
- Low

* Indirect finance

JMP estimate: Rural sanitation



Scale of rural sanitation challenge

Category	Rural sanitation coverage		
	Percent	Households	Population
Open defecation	12%	1,191,200	5,718,300
Unimproved sanitation facilities	3%	297,800	1,429,600
Shared sanitation facilities	16%	1,588,400	7,624,500
Total without improved sanitation	**31%**	**3,077,400**	**14,772,400**

Source: 2012 JMP estimate; UN population forecast.

Rural: improved sanitation coverage

The JMP estimate suggests a steady increase in improved sanitation coverage in rural areas from 45 per cent in 1990 to 69 per cent in 2010, with a dramatic reduction in the use of unimproved sanitation facilities during this period.

The 2012 JMP estimate assumes a straight-line best fit of the household survey data points. However, a closer examination suggests that rural sanitation progress has slowed significantly in the Philippines since 2000. Between 1990 and 2000, the household surveys indicate that rural access to improved sanitation facilities increased by 17 per cent, whereas in the following eight years coverage increased by only 3 per cent. This analysis suggests that, due to the lower trend over the last 10 years, the current JMP estimate may be 5 per cent too high, which implies that the 2015 MDG rural sanitation target of 73 per cent improved coverage will not be reached without a substantial acceleration in rural sanitation improvement.

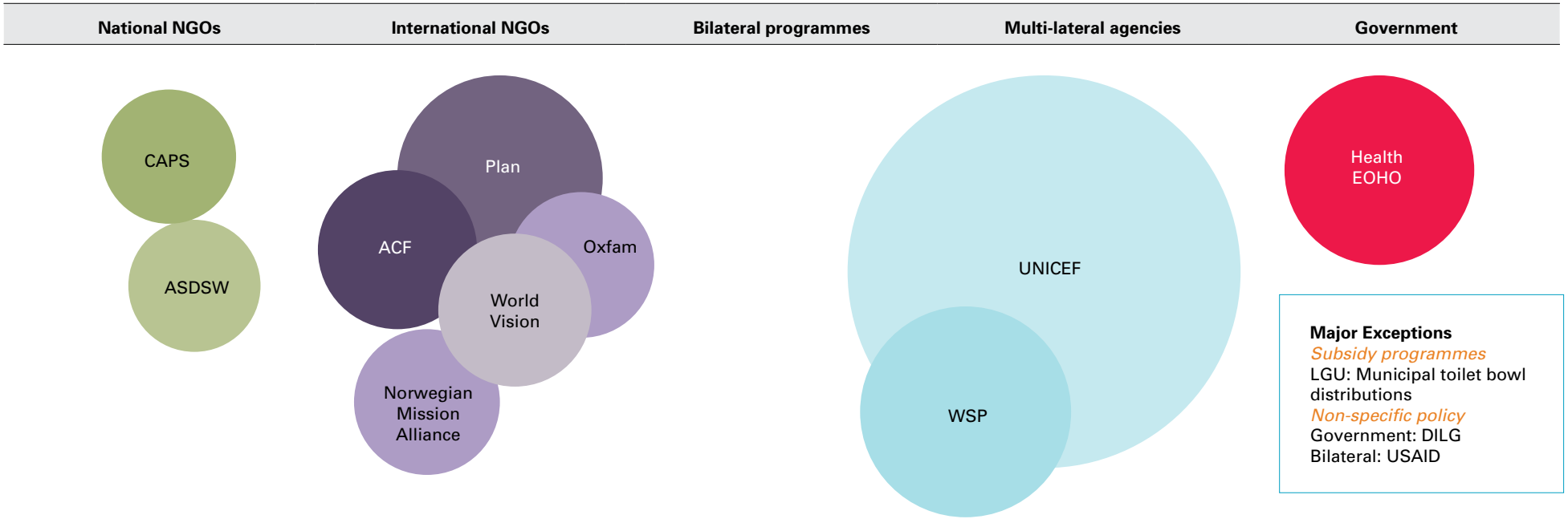
CLTS status

CLTS was introduced by WSP in Eastern Samar in 2008. Since then, CLTS has spread to eight out of 80 provinces in the Philippines (10 per cent geographical coverage). However, CLTS progress has been concentrated in a few provinces with active CLTS programmes, with more than half of the triggered communities found in Northern Samar (Plan) and Sarangani (WSP) provinces, and very limited activities outside these main programme areas.

CLTS scale

About 0.5 per cent of the rural population, 50,000 people, in the Philippines live in the 211 communities (*purok* or *sitios*) that have been triggered by CLTS, with 0.1 per cent, 8,500 people, estimated to live in ODF communities. The relatively large rural population and the limited spread or scale of CLTS in the Philippines mean that it is yet to have any discernible effect on national or regional sanitation coverage. Nonetheless, the national ODF percentage is ranked sixth in the region (behind Timor-Leste, Indonesia, Lao PDR, Cambodia and Viet Nam).

CLTS institutional coverage



There is growing institutional support for the CLTS approach, but this support is not yet reflected in large-scale investments or programmes. UNICEF recently started a new five-year WASH programme in collaboration with WSP, which will implement CATS in at least 27 *barangays* in poor, disaster-prone municipalities with low water and sanitation coverage in 2012-13 through partner organizations including ACF, Oxfam and A Single Drop of Safe Water (ASDSW).

Major exceptions

Local Government Units (LGUs), including municipalities and provinces, continue to finance the distribution of free 'toilet bowls' in rural communities. A recent rapid assessment for UNICEF found that in-kind latrine subsidies continue to be distributed by LGUs even where CLTS has been introduced, as many stakeholders remain unconvinced that a non-subsidized approach can provide the level of sustainable service that is demanded by rural households and expected by local governments.

The Department of the Interior and Local Government (DILG) is a key actor in the WASH sector in the Philippines, responsible for training and supporting decentralized LGUs in the development of water and sanitation services. To date, the DILG has favoured an integrated approach to WASH planning and implementation, in contrast to the CLTS-based ZOD approach promoted by the Department of Health (DOH) and WSP through the National Sustainable Sanitation Plan 2010-2016.

Another major exception is the USAID, which has been a major supporter of innovation and progress in urban sanitation development, but has no specific policy or programming based on demand creation or CLTS.

CLTS variations and practice

1. **CLTS and toilet bowl distributions**
   CLTS has been adopted by LGUs that in the past found it difficult to persuade rural households to make the contributions required to construct functional latrines using the free pour-flush latrine pans (toilet bowls) provided. The rural sanitary inspectors responsible for carrying out LGU toilet bowl distributions noted that significant demand, and even competition, for the free latrine pans emerged when the CLTS approach was used. Unfortunately, the subsidized pans are usually rationed by the LGUs according to the budget allocated to the toilet bowl distribution each year, and a recent assessment found that those unable to obtain a subsidized facility were more likely to wait for the next tranche of subsidies than follow the CLTS philosophy and build their own simple sanitation facilities.

CLTS capacity

Sustained efforts by the Environmental and Occupational Health Office (EOHO) of the DOH have developed significant CLTS capacity. Recent estimates suggest that there are 377 trained CLTS facilitators in the Philippines as a result of 11 different CLTS training courses run since 2008. While further checks are required to determine the proportion of the trained facilitators that remains active, the data suggest that the Philippines has the second largest CLTS capacity in the region.

ODF success rate

The Philippines has a mid-ranking ODF success rate: 17 per cent of triggered communities have been declared ODF. However, the ODF success rate was much higher in the WSP-LGU interventions in Sarangani province: 29 out of 71 triggered communities were ODF (41 per cent ODF success rate).

CLTS impact on national sanitation coverage

Insufficient data were available to assess CLTS impact on national sanitation coverage.

CLTS enabling environment

Policy *CLTS in government policy*	**No**	1975 Sanitation Code 2004 Clean Water Act	The 1975 Sanitation Code, in need of updating, focused on technical standards. The 2004 Clean Water Act focused on water resource management, and is biased towards conventional centralized sewerage and septage treatment plants rather than policy relevant to rural sanitation and hygiene improvement.
Strategy *CLTS targets in government strategies or development plans*	**Yes**	1. National Sustainable Sanitation Plan (NSSP) 2010-2016 2. 2010 Philippine Sanitation Roadmap	NSSP produced by the Department of Health includes the following objectives to have been achieved by June 2016: • All LGUs have declared sustainable sanitation as a policy • 60% of *barangays* declared ZOD The Philippines Sanitation Roadmap, which preceded the NSSP, does not mention either OD targets or CLTS approaches.
Finance *CLTS financed by government*	**Indirect**	Government support to programmes	No direct finance of CLTS implementation, but national and local government support of CLTS planning, training and implementation.
Integration *CLTS integrated with other approaches*	**No**	1. Sanitation marketing 2. Toilet bowl distributions	1. Sanitation marketing will be implemented through the UNICEF-WSP programme, following the completion of recent sanitation supply and demand studies. No integrated implementation has yet been attempted. 2. Distribution of free toilet bowls in parallel to CLTS implementation has undermined the effectiveness and sustainability of CLTS interventions.
Monitoring *Sustainable M&E of CLTS*	**No**	1. Community-Based Monitoring System (CBMS)	CBMS has been adopted by the DILG as the local poverty and MDG progress monitoring system, and efforts are underway to scale up its implementation and use. However, there is currently no formal tracking of the ODF targets in the NSSP, and few other sanitation progress data were available.

CLTS strengths and opportunities

What's working?	
1. Small-scale success in remote, rural communities.	1. CLTS has been successful in achieving ODF communities in the Philippines, but generally in remote, tribal communities that are more willing to accept low-cost sanitation facilities.
Success factors?	
1. Exchange visits to ODF communities	1. Visits to ODF communities encourage other communities that ODF is an achievable and realistic goal.
Opportunities?	
1. NSSP 2. *Pantawid Pamilyang Pilipino Program* (PPPP) conditional cash transfer programme	1. The NSSP requires each LGU to achieve 60 per cent ODF *barangays* by mid-2016. As the plan is rolled out across the country, significant demand for CLTS training and support is likely to develop. 2. The PPPP conditional cash transfer program focuses on improving health and education outcomes but there is increasing recognition of the link between sanitation, hygiene status and nutrition. The PPPP programme provides several options for improving sanitation through the future inclusion of sanitation components in parallel to the PPPP and National Household Targeting System, and the promotion of CLTS-based approaches through its family development sessions.
Lessons learned	
1. CLTS gaining institutional support despite limited evidence of success 2. NGO involvement helps diffusion of innovation	1. Despite significant problems with CLTS implementation in the Philippines, the approach has proved effective in generating demand for sanitation in rural areas, and is gaining institutional support and spreading as the National Sustainable Sanitation Plan (which includes 60% ODF target for each LGU by 2016) is disseminated and socialized. 2. Experiences from La Union (CAPS), Sarangani (multiple local NGOs supporting CLTS after training provided by the province) and Marinduque (municipalities funded by the Norwegian Mission Alliance) suggest that NGO involvement encourages the diffusion of innovation.

Sources: Robinson A (2012) Enabling environment for scaling up sustainable sanitation and hygiene in the Philippines – UNICEF report; personal communications with the CLTS review team.

CLTS weaknesses and bottlenecks

What's not working?	
1. *Ad hoc* CLTS training 2. No follow-up after CLTS training	1. Current CLTS training is based on sporadic requests for training from LGUs. There is a need to develop a more strategic programme for capacity development. 2. No follow-up by LGUs after CLTS training. This role is currently allocated to regional DOH offices, but they have limited capacity or motivation to carry out this follow-up.
Context issues?	
1. High expectations 2. History of free 'toilet bowls'	1. Most rural households aspire to have ceramic flush toilets, but believe they are expensive and unaffordable. Demand for basic pit latrines is limited outside remote locations and tribal communities. 2. The long history of the distribution of free toilet bowls by LGUs and DOH has resulted in a reluctance by rural households to invest in household latrines.
Constraints and bottlenecks?	
1. Subsidy dominated process 2. CLTS reliant on sanitary inspectors 3. Lack of progress data 4. No ODF verification process 5. Lack of large-scale incentive system 6. Supply of sanitation services	1. Most CLTS interventions in the Philippines are affected by the distribution of subsidized latrines. Even where genuine demand is ignited, those unable to obtain a subsidized facility are more likely to wait for the next tranche of subsidies than to build their own simple sanitation facilities. 2. The burden on rural sanitary inspectors will become significant as CLTS scales up, with few incentives or support for the challenging fieldwork required. 3. No formal systems exist to collect CLTS progress and performance data at national or provincial levels. Few programmes can provide up to date progress or performance data. 4. The lack of common criteria for ODF/ZOD, or for an ODF verification process, constrains progress. 5. Best *Barangay* Award does not relate to ODF or CLTS. Need a large-scale incentive system that encourages sustainable sanitation improvement. 6. Need to link supply strengthening activities to demand creation activities.
Lessons learned	
1. Inadequate documentation of lessons learned. 2. Reliable M&E system required 3. CLTS success is context dependent 4. Evidence of implementation success is important to scaling up.	1. Lessons need to be shared with the sector and with LGUs in order to accelerate progress and scale up progressive interventions. 2. Need for a formal M&E system, possibly in the form of local scorecards. 3. More strategic use of CLTS should recognize that other approaches may be more effective in some contexts. CLTS is more effective in communities not covered by latrine subsidy programmes. 4. The lack of compelling evidence of implementation success, which reflects both weak monitoring systems and limited implementation progress, make it hard to convince decision-makers to increase resource or capacity allocations, or to adopt more progressive policies and approaches.

Sources: Robinson A (2012) Enabling environment for scaling up sustainable sanitation and hygiene in the Philippines – UNICEF report; personal communications with the CLTS review team.

Solomon Islands

CLTS Summary

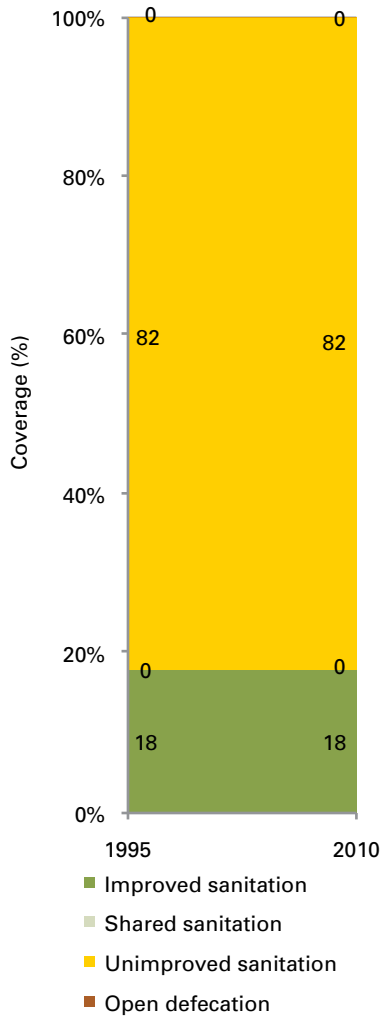
			Regional Ranking (14 countries)
Status	CLTS date of introduction	2012	11
	CLTS coverage: % of country	10%	9
	CLTS coverage: major organizations	2	10=
Scale	OD population *(2010, millions)*	0.14m	4
	Communities triggered *(number)*	2	10
	ODF communities *(number)*	0	10=
	Capacity developed *(trained facilitators)*	40	10
Enabling	CLTS in government policy	No	9=
	CLTS targets in government plans	No	8=
	CLTS financed by government	Indirect	5=
	CLTS integrated with other approaches	No	9=
	CLTS sustainable monitoring	No	8=
Effectiveness	ODF success rate	0%	10=
	Triggered communities per facilitator	0.1	10
Summary	**CLTS potential maximized?**	**No**	**9**

Performance

- High
- Middle
- Indirect*
- Low

* Indirect finance

JMP estimate: Rural sanitation



Scale of rural sanitation challenge

Category	Rural sanitation coverage		
	Percent	Households	Population
Open defecation	33%	22,800	143,700
Unimproved sanitation facilities	24%	17,000	107,000
Shared sanitation facilities	14%	9,700	61,100
Total without improved sanitation	**71%**	**49,500**	**311,800**

Source: 2009 Population and Housing Census.

Rural: improved sanitation coverage

The JMP estimate for the Solomon Islands is based on only one household survey from 1999, thus is not likely to be a representative or recent estimate. More recent and detailed data from the 2009 Population and Housing Census, which was not included in the 2012 JMP estimate, indicate that improved sanitation coverage in rural areas has increased to 29 per cent, and that the open defecation rate is 33 per cent:

- 10 per cent used flush toilets (improved)
- 7 per cent used pour-flush latrines (improved)
- 12 per cent used pit latrines (improved)
- 4 per cent share use of flush or pour-flush latrines (shared)
- 9 per cent share use of pit latrines (shared)
- 24 per cent use "other facilities" (unimproved)
- 33 per cent do not use sanitation facilities (OD)

The 2006 Demographic and Health Survey (DHS06) reported a much higher rate of OD: 74 per cent OD in rural areas, and 66 per cent nationally. It is unclear why the survey findings are so different from the 2009 Census, although perhaps the use of "other facilities" recorded in the Census data should be categorized as OD, which would increase the OD rate to 57 per cent. Anecdotal reports from the Solomon Islands confirm that the majority of households in rural communities practice OD.

CLTS status

Introduced by an Australian Volunteer for International Development (AVID) with support from the Government's Environmental Health Division (Rural Water Supply and Sanitation Program) in May 2012. Initial triggering was in two villages.

CLTS variations and practice

Live & Learn has developed an approach that combines PHAST, CLTS and sanitation marketing, and plans to implement this approach in its Pacific programmes.

CLTS scale

The population of the two villages triggered is not known.

CLTS capacity

A total of 40 CLTS facilitators have been trained in the Solomon Islands, although it is uncertain how many of these facilitators are active.

CLTS impact on national sanitation coverage

Insufficient data were available to determine the impact of CLTS on national sanitation coverage.

CLTS institutional coverage

National NGOs	International NGOs	Bilateral programmes	Multi-lateral agencies	Government
Major Exceptions *Subsidy programmes* World Vision Red Cross ADRA Rotary Club	Live & Learn	AVID		EHD RWSS

CLTS enabling environment

Policy *CLTS in government policy*	**No**	National Water Policy (draft)	Policy is intended to cover water resource management, water supply and sanitation. Policy objective of "increased access to basic sanitation and wastewater disposal" and a related implementing strategy to "strengthen community awareness on sanitation issues" but few other references to rural sanitation.
Strategy *CLTS targets in government strategies or development plans*	**No**	2011-2015 National Health Strategic Plan	Includes RWSS activities as part of its strategic focus on public health programmes within its Health Sector Wide Approach. No ODF goals in government strategies or plans.
Finance *CLTS financed by government*	**Indirect**	Indirect support to pilots	EHD-RWSS supported CLTS facilitator training and pilot implementation in two communities. However, most rural sanitation finance is provided by development partners. AusAID Health Sector Support Program (2008-2012) included some Water and Sanitation Initiative (WSI) finance for water and sanitation development in the Solomon Islands.
Integration *CLTS integrated with other approaches*	**No**	PHAST and subsidy programmes No formal CLTS programme	Most rural sanitation interventions in the Solomon Islands use the PHAST approach alongside the provision of subsidized latrines.
Monitoring *Sustainable M&E of CLTS*	**No**	No formal monitoring system	No data available on progress.

CLTS weaknesses and bottlenecks

What's not working?	
Insufficient CLTS experience to date	
Context issues?	
1. Remote island communities 2. Vulnerable to natural disasters and climate change 3. Many abandoned latrines 4. Cultural beliefs and norms	1. Remote communities scattered across more than 1,000 islands make government interventions difficult and expensive. Community management approaches as well suited to remote communities, although supply chain limitations threaten the sustainability of technology-dependent services. 2. Flash floods, king tides and prolonged drought identified as increasing risks. Protracted recovery continues from the 2009 tsunami. 3. More than two-thirds of subsidized latrines are reported to be non-functional after three years. Little value or ownership is attached to the 'free' latrines, thus users rarely clean, maintain or repair them. 4. As in many countries, government officials expressed concerns that the CLTS approach was not either culturally appropriate, or likely to be effective in changing behaviour. However, previous health education approaches have not been effective, in part due to sanitation being a 'taboo topic' and local beliefs that illnesses such as diarrhoea are caused by bad spirits or by the devil.
Constraints and bottlenecks?	
1. Lead sanitation agency 2. Sanitation needs water 3. Coordination with other projects	1. No formal recognition of EHD-RWSS (Ministry of Health and Medical Services) as the lead agency for rural sanitation, although the government allocates this department any related budget and staff. 2. Local understanding is that sanitation requires water, probably related to the provision of pour-flush latrines by most previous projects. Pour-flush latrines are perceived by many as 'proper sanitation'. 3. Lack of coordination can lessen the impact of triggering as other project activities and requirements distract communities from the immediate focus of improving their sanitation.
Lessons learned	
1. Cultural setting is important 2. Prompt follow-up is important	1. In one of the pilot villages, it was found to be culturally inappropriate for men and women to discuss sanitation openly, which led to poor participation and limited discussion during initial triggering efforts. 2. Slow follow-up revealed that the initial disgust with sanitation practices lessened considerably with time, but that latrines were being dug prior to follow-up visits to avoid the embarrassment of not responding to the triggering.

Sources: ISF (2011) Solomon Islands: WASH sector brief; Rankin (2012) CLTS trials in the Solomon Islands: starting to spread the word, not the SHIT!

CLTS strengths and opportunities

What's working?	
1. Triggering costs low	1. In the pilots, the cost of a community triggering session was found to be less than the cost of the below-ground latrine materials for a single VIP latrine (approx. US$ 50).
Success factors?	
1. 'More gentle' CLTS approach 2. CLTS and PHAST	1. A modified CLTS approach has been trialled more gently in the Solomon Islands, with sensitivity towards Pacific culture but without losing the power of the approach through being too passive. 2. Some implementers reported that CLTS and PHAST are a good combination in the Pacific. PHAST alone is popular but has proved 'too gentle', raising awareness but not triggering much action. The combination with CLTS provides more bite, while retaining the patient approach required when working with Pacific communities.
Opportunities?	
1. Child participation	1. Children proved to be fast learners, and their involvement helped to promote more discussion in households.
Lessons learned	
1. Initial results suggest that CLTS has potential in the Solomon Islands	1. Despite the limited experience and resources of the CLTS pilot team, the power of the CLTS approach was apparent, as was its cultural suitability for triggering behaviour change.

Sources: ISF (2011) Solomon Islands: WASH sector brief; Rankin (2012) CLTS trials in the Solomon Islands: starting to spread the word, not the SHIT!

Timor-Leste

CLTS Summary

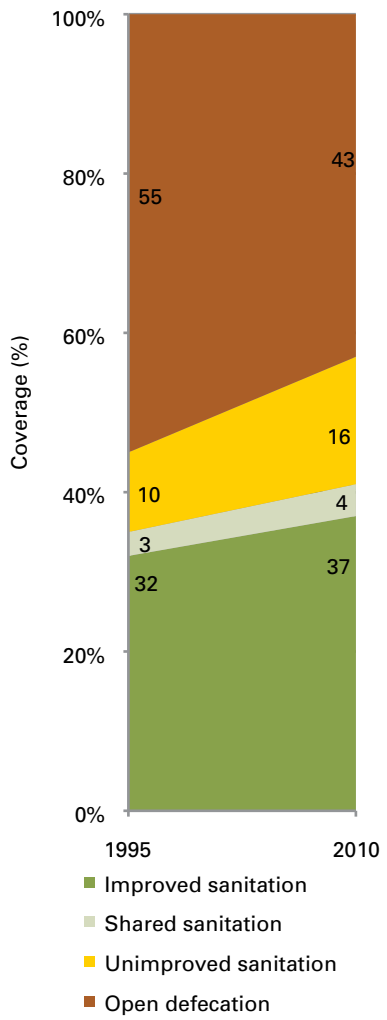
			Regional Ranking
Status	CLTS date of introduction	2007	4
	CLTS introduced: % of country	100%	1
	CLTS coverage: major organizations	10	3
Scale	OD population *(2010, millions)*	0.3m	5
	Communities triggered *(number)*	761	4
	ODF communities *(number)*	262	3
	Capacity developed *(trained facilitators)*	85	8
Enabling	CLTS in government policy	Yes	1=
	CLTS targets in government plans	Draft	3=
	CLTS financed by government	Indirect	5=
	CLTS integrated with other approaches	Maybe	3=
	CLTS sustainable monitoring	Yes	1=
Effectiveness	ODF success rate	34%	2
	Triggered communities per facilitator	9.0	3
Summary	**CLTS potential maximized?**	**Yes**	**2**

Performance

- High
- Middle
- Indirect*
- Low

* Indirect finance

JMP estimate: Rural sanitation



Scale of Rural Sanitation Challenge

Category	Rural sanitation coverage		
	Percent	Households	Population
Open defecation	36%	49,200	269,400
Unimproved sanitation facilities	39%	53,900	295,500
Shared sanitation facilities	7%	9,200	50,400
Total without improved sanitation	**82%**	**112,300**	**615,300**

Source: 2010 Population and Housing Census.

Rural: improved sanitation coverage

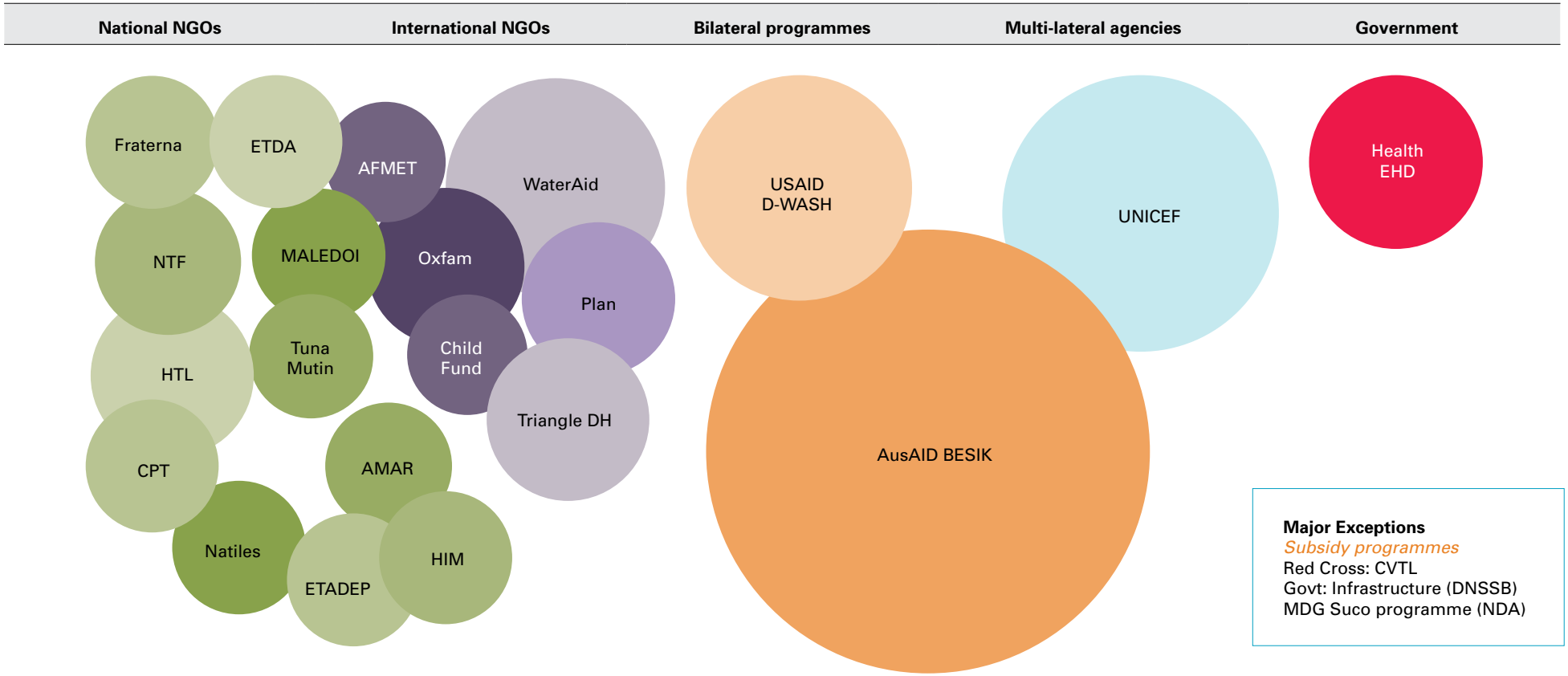
The JMP estimate suggests steady increase in improved sanitation coverage in rural areas from 32 per cent in 1995 to 37 per cent in 2010, with a much faster decrease in open defecation due to greater use of shared and unimproved sanitation facilities during this period. However, the 2012 JMP estimate did not include significantly different coverage data from the recently published *2010 Population and Housing Census.*

2010 Population and Housing Census reported much lower use of improved sanitation coverage in rural areas, at only 18 per cent. OD was found to be 36 per cent, some 7 per cent lower than the JMP estimate, which suggests that more people are using latrines than anticipated. The lower improved sanitation coverage derives from a different categorization for improved sanitation facilities in the Census survey, which resulted in more latrines being categorized as unimproved sanitation facilities than in the previous DHS and Living Standards Survey (LSS) household surveys.

CLTS status

Introduced by WaterAid Australia in 2007. Since then, CLTS has spread to all 13 districts in Timor-Leste (100 per cent geographical spread), and to 39 out of 65 sub-districts (CLTS introduced in 60 per cent of sub-districts).

CLTS Institutional Coverage



Major exceptions

The Ministry of Infrastructure's National Directorate for Basic Sanitation Services (DNSSB) was established in early 2012, through division of the previous National Directorate for Water Supply and Sanitation (DNSAS) into two directorates – one for water supply (DNAS) and the other for sanitation (DNSSB). While the Ministry of Health's Environmental Health Department has the main responsibility for sanitation and hygiene demand creation and behaviour change, the national and district offices of the former DNSAS have supported several CLTS interventions in Timor-Leste, and some staff have been trained as CLTS facilitators. Implementation and support capacity will be further strengthened once the DNSSB recruits the additional district sanitation officers that have been sanctioned as part of the creation of the new directorate.

However, neither the former DNSAS nor the new DNSSB has yet allocated any funds to demand creation or behaviour change in its rural sanitation programmes. The DNSSB budget for rural sanitation, which was substantially increased to around US$ 2 million in 2012, has been allocated exclusively to the provision of latrine subsidies to vulnerable households, latterly though the construction of subsidized latrines by engineering contractors. An evaluation of the provision of vulnerable household latrine subsidies in 2011 found that:

- many of the latrine subsidies went to households that did not meet the vulnerability criteria or already had a functioning latrine;
- 40 per cent of the subsidized household latrines visited had not been used; and
- 98 per cent of the subsidized latrines were pour-flush, even in areas where water was scarce.

The National Development Agency (NDA) is responsible for building 55,000 houses for vulnerable households by 2015 under the MDG Suco Program, with five houses planned in each of the 2,228 communities (*aldeias)* every year for five years. The housing will include solar energy, and basic water and sanitation facilities. Unfortunately, the construction cost has proved to be much higher than anticipated; considerable problems have been reported in finding suitable housing sites, external services and willing beneficiaries in so many different locations; and progress has been slow.

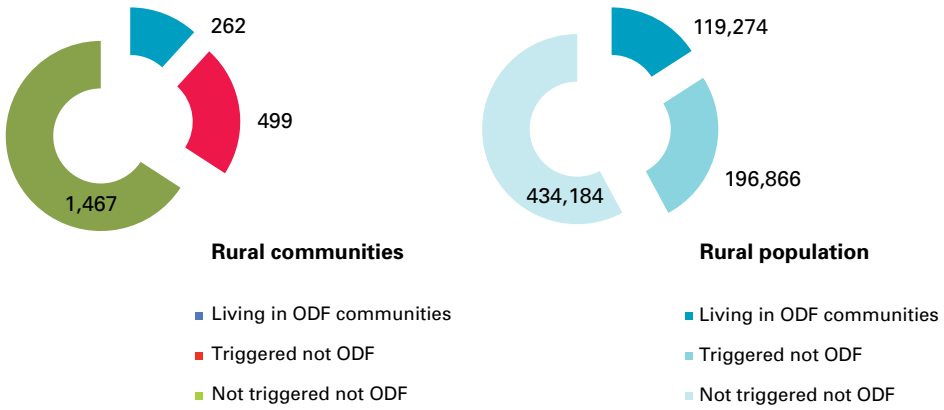
CVTL is the national branch of the Red Cross, which receives substantial WASH finance through the international Red Cross network, and is an influential stakeholder in both the emergency relief and development sectors in Timor-Leste. CVTL has favoured a subsidy-based approach to sanitation improvement, and remains one of the key stakeholders not implementing CLTS.

CLTS variations and practice

The AusAID Rural Water Supply and Sanitation Program (known by its Timorese acronym: BESIK) has implemented several CLTS variants:

1. **Total Sanitation Campaign (2010)**
   A three-pronged campaign that used CLTS to trigger demand for sanitation improvement and encourage households to build their own toilets; a mason training programme to strengthen the local supply of latrine products and services, and encourage non-poor households to upgrade and improve their toilets; and a vulnerable household latrine subsidy component (based on the National Basic Sanitation Policy) that was designed to identify vulnerable households and provide them with either subsidized latrine materials or free construction of a basic latrine. As noted above, the vulnerable household latrine component was financed and supported by DNSAS, but was found to have problems with targeting, cost-effectiveness and latrine sustainability. In addition, an evaluation found that insufficient attention was given to the CLTS and supply strengthening components, which were financed by the BESIK programme, and that poor targeting of the vulnerable household latrine subsidies undermined the CLTS activities.

2. **CLTS and incentive programme (2011)**
   Another CLTS variant was initiated in 2011, through the addition of financial awards as incentives to *sucos* (villages) that were verified as ODF, and improved supply of sanitation products and services. This approach was found to be successful in generating local government interest and leveraging resources for sanitation improvement, resulting in 57 ODF communities, an 88 per cent ODF success rate, and high rates of latrine construction and use in a relatively short period. However, the programme was relatively expensive, and the initial failure to publicize ODF achievements and incentive awards led to some discontent among local leaders and communities.



3. **PAKSI (2012)**
   The Community Action Plan for Sanitation and Hygiene (PAKSI) approach is being trialled. PAKSI evolved from the lessons of the early CLTS experiences in Timor-Leste; the phased sanitation approach in the National Basic Sanitation Policy; the success of the BESIK community action planning approach to water supply development; and the decision that the MoH district offices should lead the process. The PAKSI approach is a participatory process for community-based ignition, planning and action to stop OD and promote HWWS. PAKSI includes a form of CLTS modified to suit Timorese conditions and cultural sensitivities, notably by focusing on disgust rather than shame as the main trigger for behaviour change, and is a structured approach designed to be easier for field workers and communities to understand and support. While still a new approach, initial reports are that PAKSI is performing well and is well supported by key stakeholders.

CLTS Scale

About 42 per cent of the rural population, 316,000 people, in Timor-Leste live in the 761 communities (*aldeia*) that have been triggered by CLTS; with 16 per cent, 120,000 people, estimated to live in ODF communities. Rapid CLTS progress and a small rural population have combined to produce by far the highest ODF proportion of any country in the region – the next highest is Indonesia with 2 per cent ODF rural population. Data from the Sector Planning Tool (see chart) suggest that the CLTS progress is accelerating, with roughly a tripling of the number of communities triggered in each of the last three years.

CLTS Capacity

Despite the large number of CLTS implementers and supporters in Timor-Leste, a relatively small amount of capacity has been developed (according to the sanitation working group report) with 85 CLTS facilitators trained to date. Further research will be required to verify this figure.

Both the Ministry of Health (Environmental Health Department) and the Ministry of Infrastructure (National Directorate of Basic Sanitation Services) are involved in the planning, design and support of CLTS programmes. However, no formal CLTS capacity development programme is in place, and external implementation agencies (bilateral programmes, multilateral agencies and international NGOs) remain the main programme managers and the main drivers of capacity development.

ODF Success Rate

Timor-Leste has one of the highest ODF success rates in the region: 34 per cent of all communities triggered have been declared ODF. However, this

total includes more than 130 communities triggered in 2012, of which only four have yet been declared ODF. The average ODF success rate between 2008-2011 was 41 per cent.

CLTS impact on national sanitation coverage

Data from the Sector Planning Tool suggest that around 25,700 new sanitation facilities have been built through CLTS-based programmes in the last five years, which means new latrines in 19 per cent of all rural households. However, the 2009 Joint Sanitation Evaluation found that 15 per cent of new facilities in CLTS communities were 'hygienic improved toilets', defined as clean, fly proof latrines with covered pits, and would suggest that the CLTS interventions have added about 3 per cent to improved sanitation coverage in rural Timor-Leste. While this estimate does not allow for sustainability losses (latrines that are no longer in use), it corresponds reasonably well with recent household survey data (2009 DHS and 2010 Census) which suggest rapid decreases in OD rates, but fairly slow progress in improved sanitation coverage.

CLTS Enabling Environment

Policy *CLTS in government policy*	**Yes**	National Basic Sanitation Policy	Policy outcome: "an open defecation free environment" However, the policy allows that household sanitation facilities can be subsidized where households are disadvantaged (according to national vulnerability criteria that are yet to be set).
Strategy *CLTS targets in government strategies or development plans*	**Draft**	National Strategic Sanitation Plan (draft, July 2012)	Under preparation: draft sets targets for each of four categories in the M&E framework of the *National Basic Sanitation Policy*: • ODF *sucos* • Hygienic *sucos* (100% latrine and handwashing coverage) • Litter free *sucos* (free of indiscriminate solid waste) • Foul water free *sucos* (free of indiscriminate wastewater run-off and stagnant water bodies)
Finance *CLTS financed by government*	**Indirect**	Government programme support	No direct finance of CLTS implementation, but significant national and local government support of CLTS planning, implementation and monitoring.
Integration *CLTS integrated with other approaches*	**Maybe**	1. Sanitation marketing 2. Vulnerable household latrine subsidy programme 3. PAKSI	1. CLTS interventions are being linked with supply strengthening activities, although little large-scale progress has been achieved. 2. The vulnerable household latrine subsidies directed by the *National Basic Sanitation Policy* were to be provided through latrine vouchers that complemented CLTS and supply strengthening efforts. In practice, the subsidies have been transferred through free latrine materials and construction services, which undermines CLTS activities in the locality. 3. PAKSI integrates hygiene promotion and community action planning into a localised CLTS approach.
Monitoring *Sustainable M&E of CLTS*	**Yes**	1. SPT: Sector Planning and Reporting Tool 2. SIBs: Rural Sanitation Information System 3. ODF verification process	1. SPT is intended for use by 12 agencies, including the government, to report on progress towards National Priority 1 WASH targets and global sector indicators. Regular updating of the SPT remains a challenge. 2. SIBs provides data on sanitation coverage (improved, basic and shared) and gaps with the aim of improving resource allocation decisions. SIBs has only recently been established. 3. An ODF verification process has been finalized by the sector working group, including three steps (stated-verified-declared with celebration) and is now being implemented nationally.

CLTS weaknesses and bottlenecks

What's not working?	
1. Low durability of CLTS latrines 2. Mixed messages (on subsidy) 3. Short-term NGO projects rather than sustainable long-term programmes	1. Latrines built under non-subsidized approaches are considered "generally of lower quality, unhygienic, and have lasted less than a year". Significant slippage or reversion to OD reported. 2. Community members are often confused about the various programmes and approaches being implemented, leading to distrust of projects and reticence to participate in unsubsidized programmes. 3. CLTS process often implemented as a short-term NGO project, which limited the involvement of potential field workers (e.g. health centre and community health workers, other district staff).
Context issues?	
1. Dependency: history of government and donor subsidy programmes 2. Limited experience with community facilitation and mobilization 3. Low priority for sanitation 4. Pig pen latrines	1. Majority of CLTS communities evaluated (by BESIK) reported that they had complied by building a latrine, and now expected the programme to provide them with materials to upgrade their latrines. 2. Most sector stakeholders lacked staff that had experience, skills and confidence in community facilitation. 3. Lack of awareness by communities and government on benefits of improved sanitation and hygiene. 4. Common rural practice of allowing pigs to eat excreta discharged directly from hanging latrines.
Constraints and bottlenecks?	
1. Political support for latrine subsidies 2. Insufficient resources allocated to triggering and follow up 3. High unit costs of CLTS in Timor-Leste 4. Lack of community follow-up	1. Political resistance to simple CLTS latrines (which are seen as a return to primitive ways), resulting in increased support for subsidized construction of pour-flush latrines with concrete components. 2. Most programmes contract partner NGOs to undertake triggering, with good local NGOs implementing multiple programmes simultaneously, but these partners feel that they have insufficient capacity or resources to conduct the triggering, follow-up and monitoring adequately. 3. 2009 Joint Sanitation Evaluation found that CLTS project costs averaged US$ 60-160 per toilet. While CLTS remains less costly than other approaches, the average project costs in Timor-Leste are substantially higher than in other countries in the region. 4. Significant reversion to OD reported. Monitoring and follow up required to sustain CLTS gains.
Lessons learned	
1. Repackage and contextualise CLTS 2. Clear CLTS guidelines required	1. Senior officials concerned about an approach that made communities feel ashamed or embarrassed about their sanitation practices. Efforts were made to tackle this issue by raising awareness of CLTS benefits, but it proved more productive to contextualize and repackage the approach (as PAKSI), increase focus on the disgust trigger (rather than shame). 2. Each implementer developed its own CLTS methodology and messaging, which resulted in confusion and reduced understanding of the approach. Detailed, step-by-step guidance encourages consistent results, building confidence and understanding before going to scale.

Sources: BESIK (2012) Case study of PAKSI training Timor-Leste; Grumbley A (2012) Lessons learned from CLTS; Shapiro et al (2010) Timor-Leste Joint Sanitation Evaluation: a study of sanitation program outcomes.

CLTS strengths and opportunities

What's working?	
1. CLTS and incentive scheme 2. CLTS communities have better sanitation outcomes than latrine subsidy communities 3. CLTS programs result in equitable sanitation outcomes	1. BESIK reports that the addition of the incentive scheme "raised awareness amongst local leaders and galvanized them to leverage available resources towards sanitation and hygiene improvement". Where there was a lack of engagement, communities did not participate well in the interventions. 2. The 2009 Joint Sanitation Evaluation found that "a greater proportion of subsidy households practiced OD than was the case with CLTS households"; "the CLTS sample showed slightly higher increase in coverage than subsidy programmes"; and resulted in similar rates of clean improved latrines. 3. Disadvantaged households in 'subsidy communities' were four times more likely than those in CLTS communities to practice OD.
Success factors?	
1. Availability of sanitation products and services 2. CLTS substantially more cost-effective than existing approaches	1. Higher density of providers selling sanitation products and building latrines in some CLTS areas (e.g. Liquica) provided community members with affordable options to build and improve latrines. 2. CLTS programme costs were 10% of total programme costs in latrine subsidy programmes, with software costs also found to be more cost-effective in CLTS programmes than in comparable subsidy programmes.
Opportunities?	
1. PAKSI: more programmatic and structured approach that will improve government (MoH) engagement	1. District Health Services prefer an approach that provides greater structure to the follow up process to ensure sustained monitoring of ODF status and phased sanitation development (as per the National Basic Sanitation Policy) including HWWS, and safe disposal of child and infant faeces. PAKSI provides more structure and guidance on facilitation skills in order to manage and control facilitation quality when going to scale; and is also more explicitly linked to supply strengthening measures to respond to different household needs and preferences. It built on the community action planning approach used in water supply developed, therefore integrates well with other sector programmes and activities.
Lessons learned	
1. Improve program design to allow resources for follow-up 2. Better communication of government policy and strategy required 3. Engagement of local leaders is critical to community participation 4. Improve access to affordable sanitation options	1. Ensure that programme implementers (and partners) have sufficient staffing and resources to trigger communities and provide follow-up (both technical and motivational). 2. Communities need to understand that PAKSI is provided and managed by the government; be aware of the subsidy eligibility rules; and be informed of incentive rewards and objectives. 3. Local leaders are influential, thus critical to community engagement with sanitation interventions. 4. Sanitation marketing and supply strengthening efforts need to be better linked to CLTS-based interventions in order to provide community members with easy access to affordable sanitation options and services, and encourage upgrading to more durable and sustainable facilities.

Sources: BESIK (2012) Case study of PAKSI training Timor-Leste; Grumbley A (2012) Lessons learned from CLTS; Shapiro et al (2010) Timor-Leste Joint Sanitation Evaluation: a study of sanitation program outcomes.

Vanuatu

CLTS Summary

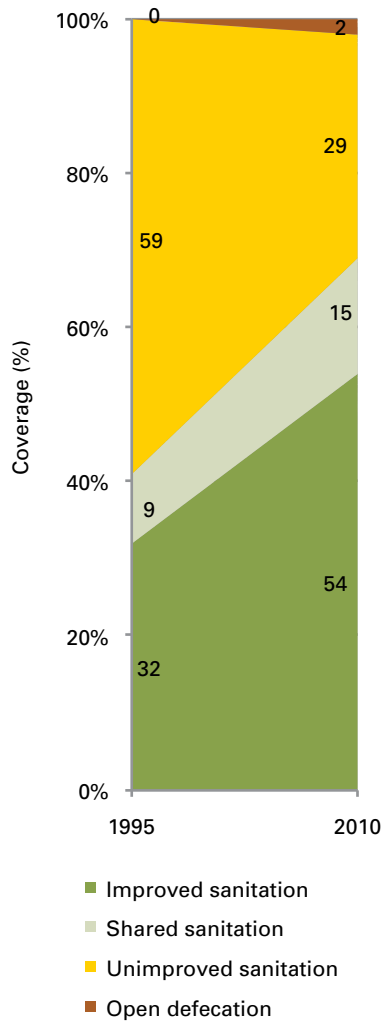
Status	CLTS date of introduction	Not yet	13
	CLTS coverage: % of country		13
	CLTS coverage: major organizations		13
Scale	OD population *(2010, millions)*	0.003m	2
	Communities triggered *(number)*		13
	ODF communities *(number)*		13
	Capacity developed *(trained facilitators)*		13
Enabling	CLTS in government policy		13
	CLTS targets in government plans		13
	CLTS financed by government		13
	CLTS integrated with other approaches		13
	CLTS sustainable monitoring		13
Effectiveness	ODF success rate		13
	Triggered communities per facilitator		13
Summary	**CLTS potential maximized?**	**No**	13

Regional Ranking (14 countries)

Performance

- High
- Middle
- Low

JMP estimate: Rural sanitation



Scale of rural sanitation challenge

Category	Rural sanitation coverage		
	Percent	Households	Population
Open defecation	2%	737	3,560
Unimproved sanitation facilities	29%	10,700	51,600
Shared sanitation facilities	15%	5,500	26,700
Total without improved sanitation	**46%**	**16,937**	**81,860**

Source: 2012 JMP estimate; UN population forecast.

Rural: improved sanitation coverage

The JMP estimate suggests a recent increase in improved sanitation coverage in rural areas of Vanuatu from a baseline of 32 per cent in 1995 to 54 per cent in 2010. A further 44 per cent of the rural population use either shared sanitation facilities or unimproved facilities. The OD rate was estimated to be only 2 per cent, which suggests that fewer than 750 rural households (3,500 people) do not use any form of sanitation facility.

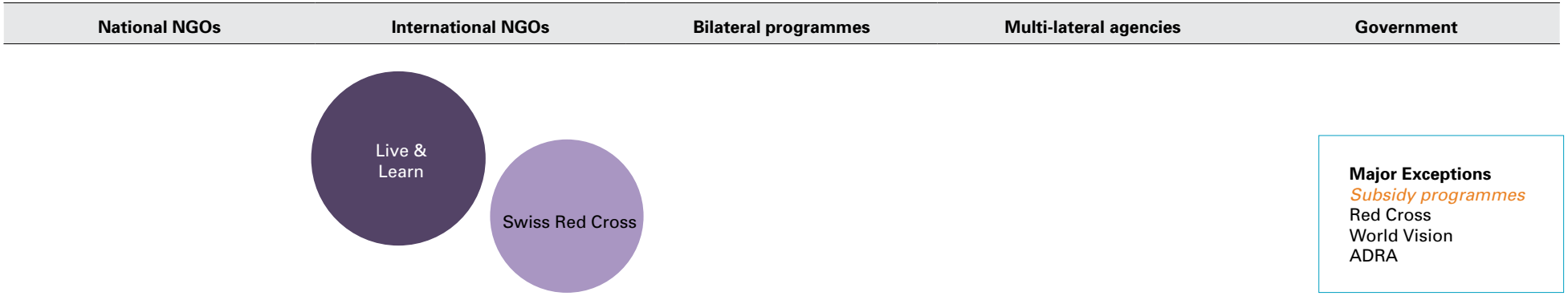
CLTS status

CLTS has not yet been introduced. However, Live & Learn has developed an approach that combines PHAST, CLTS and sanitation marketing, and plans to implement this approach in its Pacific programmes.

Major exceptions

1. **PHAST and latrine subsidy approach**
   Most development partners in Vanuatu are reported to be using a combined PHAST and latrine subsidy approach, with the key implementers being Red Cross, World Vision, and ADRA.

CLTS institutional coverage



CLTS enabling environment

Policy *CLTS in government policy*	**No**	No sanitation policy	
Strategy *CLTS targets in government strategies or plans*	**No**	National Water Strategy for Vanuatu 2008-2018	Follows the principles of integrated water resource management (IWRM), but few references to sanitation. The national water strategy has not yet been approved by the Council of Ministers.
Finance *CLTS financed by government*	**No**	No CLTS programmes	Little WASH finance. WASH is not mentioned in the 2011 Budget Priorities, and most investments are made by external development partners.
CLTS integration *Integrated with other approaches*	**No**	No CLTS implementation	Live & Learn approach will integrate CLTS, PHAST and sanitation marketing, but has not yet been fully implemented in Vanuatu.
Monitoring *Sustainable M&E of CLTS*	**No**	No CLTS implementation	No data available on rural sanitation progress.

CLTS weaknesses and bottlenecks

What's not working?	
CLTS not yet implemented	
Context issues?	
1. Natural disasters	1. Six natural disasters affecting Pacific Islands in 2008-2010 period: hurricanes, tsunami, floods and volcanic eruptions, all of which have damaged WASH facilities.
Constraints and bottlenecks?	
1. No lead agency for sanitation	1. No designated lead agency for rural sanitation. Municipal and Provincial councils have responsibilities for local health and sanitation, and the Rural Water Supply Section of the Department of Geology, Mines and Water Resources (DGMWR) is now reported to include a sanitation components in all rural water supply projects. A Department of Water (DoW) is planned, which will also have responsibility for sanitation, but these reforms await approval of the national water strategy.
Lessons learned	
1. Low willingness to trial CLTS	1. Live & Learn has developed a set of CLTS and PHAST and sanitation marketing IEC materials designed for use in Pacific island states, but faced significant obstacles from decision makers and community workers that were concerned about the suitability of the CLTS approach in Vanuatu.

Sources: ISF (2011) Vanuatu: WASH Sector Brief; personal communications with Paul Lewthwaite & Christian Nielsen, Live & Learn.

CLTS strengths and opportunities

What's working?	
CLTS not yet implemented	
Success factors?	
CLTS not yet implemented	
Opportunities?	
1. Live & Learn IEC materials 2. Recognition that latrine subsidies have not worked well	1. The Live & Learn CLTS and PHAST and sanitation marketing IEC materials have received positive and encouraging responses from all of the main WASH stakeholders in Vanuatu. The next stage will be to run some training using these materials to address barriers to these new approaches in the mindsets of local leaders and community workers, and to start to build some local success stories. 2. There is widespread recognition that expensive latrine subsidy programmes in Pacific island states have not worked well, with the majority of subsidized latrines falling into disuse and disrepair after only a few years. As a result, there is now an increased appetite for behaviour change focused approaches like CLTS, providing that they can be shown to work in the Pacific context.
Lessons learned	
1. Slow and sensitive approaches work better	1. Experienced Pacific practitioners suggest that CLTS has great potential in Vanuatu but, as in other Pacific island states, that the approach will require some adaptation to recognize the patient approach that seems to work, without losing its strengths or making it too passive.

Sources: ISF (2011) Vanuatu: WASH Sector Brief; personal communications with Paul Lewthwaite & Christian Nielsen, Live & Learn.

Viet Nam

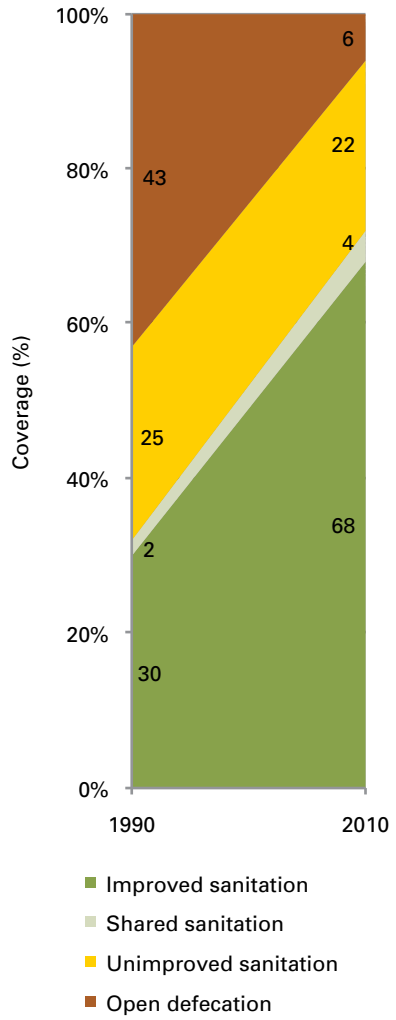
CLTS Summary

			Regional Ranking (14 countries)
Status	CLTS date of introduction	2008	5
	CLTS introduced: % of country	29%	6
	CLTS coverage: major organizations	11	2
Scale	OD population *(2010, millions)*	3.7m	10
	Communities triggered *(number)*	829	3
	ODF communities *(number)*	145	4
	Capacity developed *(trained facilitators)*	1,132	1
Enabling	CLTS in government policy	Maybe	5=
	CLTS targets in government plans	No	8=
	CLTS financed by government	Maybe	5=
	CLTS integrated with other approaches	Maybe	3=
	CLTS sustainable monitoring	No	8=
Effectiveness	ODF success rate	17%	3
	Triggered communities per facilitator	0.7	7
Summary	**CLTS potential maximized?**	**Maybe**	**4**

Performance

- High
- Middle
- Low

JMP estimate: Rural sanitation



Scale of rural sanitation challenge

Category	Rural sanitation coverage		
	Percent	Households	Population
Open defecation	6%	940,900	3,669,700
Unimproved sanitation facilities	22%	3,450,100	13,455,400
Shared sanitation facilities	4%	627,300	2,446,400
Total without improved sanitation	**32%**	**5,018,300**	**19,571,500**

Source: 2012 JMP estimate; UN population forecast.

Rural: improved sanitation coverage

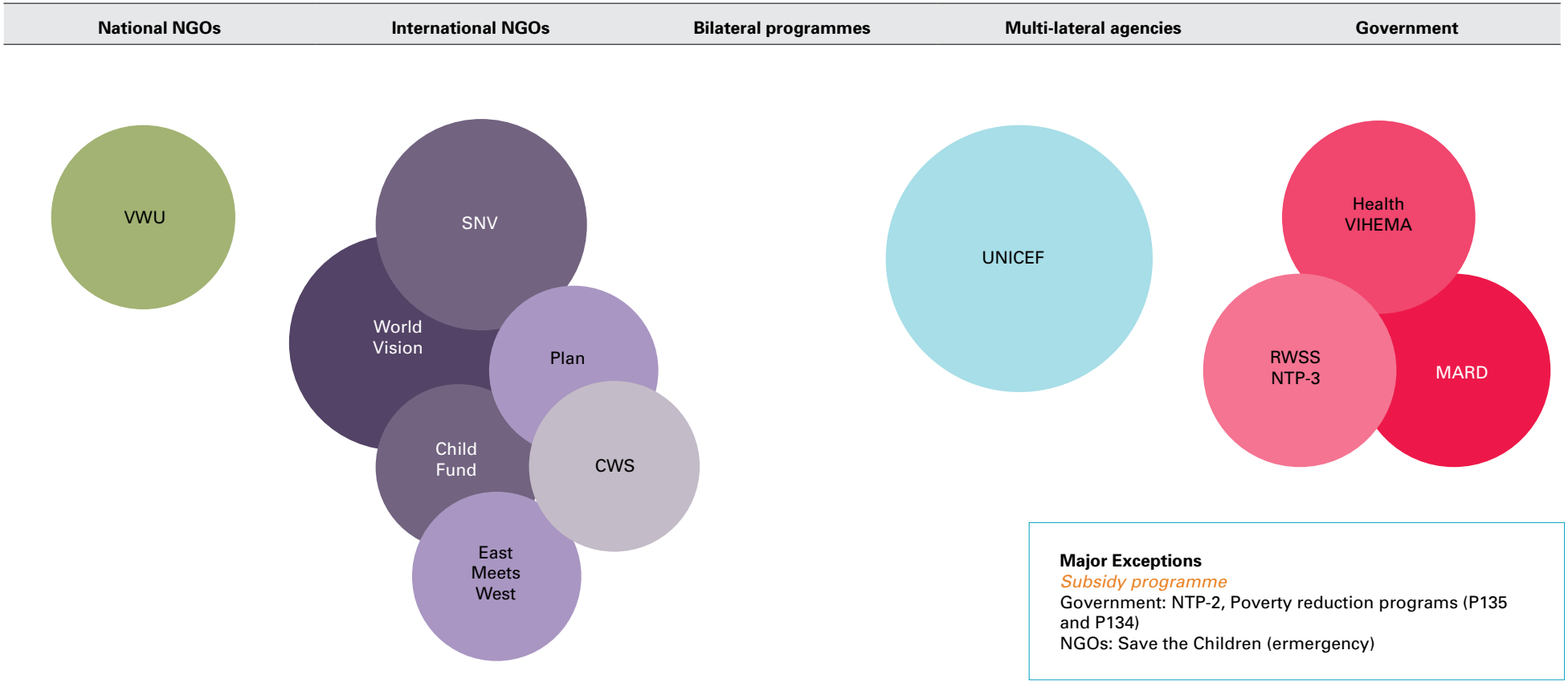
The JMP estimate suggests a rapid increase in improved sanitation coverage in rural areas from a baseline of 30 per cent in 1990 to 68 per cent in 2010. OD was estimated to be only 6 per cent, which suggests that 940,000 rural households (3.7 million people) do not use sanitation facilities.

The Government of Viet Nam has now adopted the Rural Water Supply and Sanitation (RWSS) monitoring and evaluation framework utilized by the Ministry of Agriculture and Rural Development (MARD), which reported that improved sanitation coverage had reached 55 per cent in rural areas by the end of 2011. The government's rural sanitation progress data, which are important as they form the basis for the planning of the RWSS Third Phase National Target Program, suggest that improved sanitation coverage in 2010 was significantly lower than 68 per cent rural sanitation coverage estimated by the JMP. The government's lower coverage estimate probably reflects the higher criteria required for hygienic latrines.

CLTS status

Introduced by SNV in 2008. CLTS has since spread to 17 out of 58 provinces in Viet Nam (29 per cent nationally).

CLTS institutional coverage



Major Exceptions
Subsidy programme
Government: NTP-2, Poverty reduction programs (P135 and P134)
NGOs: Save the Children (ermergency)

The Viet Nam Health & Environment Management Agency (VIHEMA) is currently developing a national communication action plan and national rural sanitation action plan as part of the Third RWSS National Target Program (NTP-3) with CLTS recognized as a key community-based approach to be adopted by the provincial authorities.

Major exceptions

CLTS is gaining support and momentum in Viet Nam, but several large programmes continue to provide latrine subsidies. The government's major poverty reduction programmes (P135 and P134) have used latrine subsidies to promote rural sanitation and, among other NGOs, Save the Children has been implementing an emergency programme in the Mekong Delta that subsidises sealed flush toilets for rural households in flooded and high water table areas. Like the RWSS NTP-3, the next phase of the government's poverty reduction programmes is under development, and it remains uncertain whether these programmes will continue to finance household sanitation using a hardware subsidy approach.

CLTS variations and practice

1. **ChildFund: CLTS and PHAST**
   ChildFund implements a combined CLTS and PHAST approach in Viet Nam. The aim of this combined approach is to move beyond the knowledge gained through PHAST to take action, help, activate and motivate people to take the first step, and then support improvements to the latrines built in order to make them hygienic and durable.

2. **CWS: CLTS and hardware subsidy**
   Church World Service (CWS) has used CLTS in tandem with partial financial support for the construction of double vault latrines.

3. **SNV: SSH4A**
   SNV is implementing the SSH4A programme in five countries (Viet Nam, Lao PDR, Cambodia, Nepal and Bhutan). In Viet Nam, the SSH4A programme targets poor, ethnically diverse villages in the Northwest, using CLTS with additional components to provide information on sanitation options, promote behaviour change communication, increase access to low-cost sanitation goods and services, and improve WASH governance.

4. **MoH and UNICEF: CATS**
   In Viet Nam, CATS is being implemented using interventions on CLTS, SLTS, sanitation marketing and HWWS. Supply chains and sanitation markets in the project areas are strengthened to meet and maintain the sanitation demand triggered by CLTS, and HWWS is included to ensure that this critical faecal-oral disease transmission route is blocked.

CLTS capacity

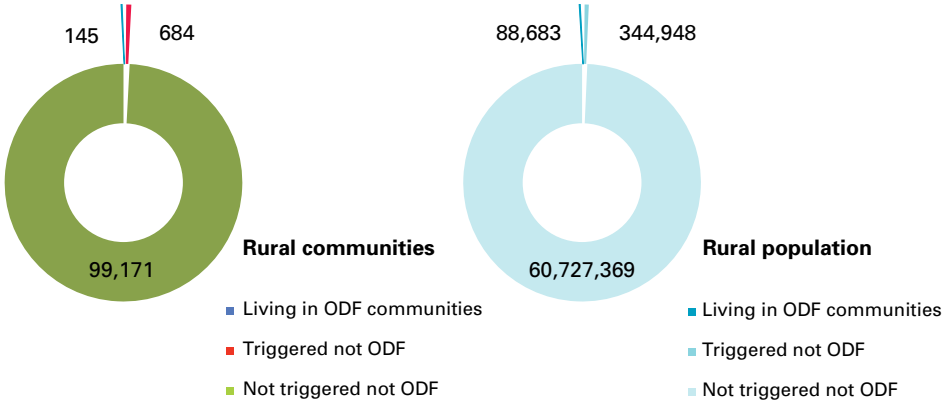
Large numbers of CLTS facilitators have been trained in Viet Nam. Plan International reports that 732 CLTS facilitators, including teachers, have been trained under its programmes. The MoH and UNICEF have also supported the training of another 400 CLTS facilitators. However, no data were available on the number of active CLTS facilitators that have resulted from these capacity development efforts, and the large number of trained facilitators means that the facilitator effectiveness (number of triggered communities per facilitator is 0.7) remains low.

CLTS scale

Only 0.15 per cent of the rural population in Viet Nam, 89,000 people, are reported to live in ODF villages. More than 829 villages have now been triggered using the CLTS approach, but to date only 145 villages have been reported to achieve ODF status. While currently reaching a small proportion of the rural population, the recent uptake and spread of CLTS in Viet Nam and its future promotion through the NTP-3 suggest that triggering and ODF progress may scale up rapidly over the next five years.

ODF success rate

Viet Nam has a moderate ODF success rate: 17 per cent of triggered villages have been declared ODF (according to data provided by the RWSS Partnership). However, in the programmes where ODF villages have been achieved, the average ODF success rate was higher at 29 per cent.



CLTS impact on national sanitation coverage

Insufficient data were available to determine the impact of CLTS on national sanitation coverage.

CLTS enabling environment

Policy *CLTS in government policy*	**Maybe**	1. 2011 National technical regulation on hygienic conditions for latrines (QCVN 01: 2011/BYT) 2. Draft MoH CLTS implementation guidelines	1. Revised Ministry of Health technical regulations issued in 2011 provide a supportive policy environment for CLTS implementation. The technical regulations state the key principles required for hygienic latrines, including fly and animal protection, odour control, lids on dry latrines, water seals in flush and pour-flush latrines, roofs for rain protection, and so on. However, no higher level policy or guidelines exist to promote the achievement of OD free jurisdictions. 2. Draft guidelines for CLTS implementation have been developed by the Ministry of Health and circulated for appraisal.
Strategy *CLTS targets in government strategies or development plans*	**No**	1. National Target Program RWSS III Phase 2012-2015	1. NTP-3 will focus on increasing household latrine coverage rather than ODF targets, but assumes that users are responsible for capital investment for the construction of household latrines. However, NTP-3 may finance a small number of demonstration latrines in each programme commune.
Finance *CLTS financed by government*	**Maybe**	National Target Program RWSS III Phase 2012-2015	NTP-3 contains no explicit budget lines to finance CLTS or other forms of sanitation demand creation, although VIHEMA has developed a national rural sanitation action plan that will promote CLTS. To date, few provinces have allocated finance to sanitation promotion.
Integration *CLTS integrated with other approaches*	**Maybe**	1. Subsidy programs 2. CLTS and sanitation marketing and hygiene promotion	1. Most latrine subsidy programs in Viet Nam are conventional programmes that make little allowance for their impact on other approaches such as CLTS or sanitation marketing. 2. Both UNICEF's CATS and SNV's SSH4A approaches combine CLTS (demand creation), supply chain development and other components including HWWS and WASH governance. Sanitation marketing predates CLTS in Viet Nam, and extensive work has been done on the promotion of HWWS, thus the acceptability of CLTS is generally more of a challenge than the other components.
Monitoring *Sustainable M&E of CLTS*	**No**	RWSS Partnership	The RWSS Partnership provided partial data on CLTS progress, but it appears that there is no formal national system for tracking CLTS progress or performance.

CLTS weaknesses and bottlenecks

What's not working?	
1. Demonstration latrines 2. Durability of CLTS latrines 3. Variations in ODF criteria	1. Demonstration latrines were found to build little sanitation demand among the poor, perhaps because the latrines were expensive, and implementers did not utilize effective IEC approaches. 2. The durability of simple CLTS latrines has been questioned. 3. ODF criteria and verification processes vary significantly by implementing agency. There is need to develop and harmonise a national ODF verification process.
Context issues?	
1. Excreta use in north Viet Nam 2. Fishpond latrines in Mekong Delta 3. CLTS difficult in steep locations 4. Widespread latrine subsidies	1. There is a long history of excreta use for agriculture in northern Viet Nam, often with little or no composting before handling and application to fields and crops. 2. More challenging to make communities ODF where a large percentage of the population is using fishpond latrines associated with livelihoods. 3. CLTS was reported to be challenging when few flat areas exist to build latrines. 4. Transition to self-provision of household latrines will be affected by history of latrine subsidies.
Constraints and bottlenecks?	
1. Expensive sanitation products 2. Latrine counting 3. High standards for hygienic latrines 4. Little systematic CLTS evaluation	1. A review of local sanitation markets found that available sanitation products are expensive for the poor, and that latrine building services are not easily available in ethnic minority group communities. 2. Main indicator for sanitation progress remains the number of latrines built, thus limiting the focus on behaviour change or on the sustainability of sanitation improvements. 3. Plan KAP study found that only 5% households were using 'improved hygienic facilities' that had walls, roof and door, met the MoH technical standards, and included a handwashing place with water and hand cleaning agents. Another 47% households were using toilets that did not meet the criteria. 4. After four years of pilots, there has still been little systematic or comprehensive evaluation of CLTS effectiveness and sustainability.
Lessons learned	
1. Limited demand for low-cost latrines 2. Importance of follow-up	1. Low-cost models such as the VIP latrine are often perceived to be 'temporary and unhygienic'. Further efforts will be required to convince both rural households and local governments that low-cost latrines can be permanent and hygienic. 2. Continuous follow up is required during the 6-12 months after triggering to promote sustainability and strengthen monitoring systems. In early pilots, slow follow up after triggering limited the impact.

Sources: SNV Vietnam (2010) Sanitation demand creation: strengths-based review; Jensen, Hang & Anh (2011) Gender and pro-poor targeting in RWSS-NTP – final report; Kamal Kar (2011) Sanitation profile of Vietnam and possibilities for scaling up of CLTS.

CLTS strengths and opportunities

What's working?	
1. CLTS effective in creating demand 2. Better at reaching the poor 3. Low-cost easy to build latrine models	1. CLTS was found to be more effective in creating demand for sanitation than other approaches. 2. CLTS was better at reaching the poor than other approaches, although some marginalized and vulnerable households were reported to struggle with the labour requirements of latrine construction. 3. CLTS encouraged the construction of low-cost easy to build latrine models; neighbours shared construction and design knowledge; and demonstration models were provided for improved toilets.
Success factors?	
1. Good leadership 2. Regular monitoring 3. Effective explanation of benefits 4. Village sanitation rules established	1. Government participation from provincial to village level resulted in an enthusiastic and proactive process, with good mobilization of village resource persons. 2. Regular monitoring and regular communication by commune, district and province aided progress. 3. CLTS was effective in explaining the costs of OD, thus created a new awareness of the links between sanitation, disease and good health. 4. Village regulations on building and using latrines were key factors in progress.
Opportunities?	
1. Knowledge management 2. Support fund for facilitators 3. Integrate CLTS into NTP	1. Important to share experiences and lessons learned. 2. Provision of a support fund for community facilitators will encourage sustainability and scaling up. 3. Integration of CLTS into the NTP will encourage rapid spread and scaling up.
Lessons learned	
1. Mutual support works 2. Adapt CLTS to different contexts 3. Take advantage of demand created	1. Mutual support between households to build toilets, good community spirit, and effective training resulted in a commitment to tackle sanitation problems. 2. CLTS needs to be adapted to fit the diverse contexts and conditions found in Viet Nam. 3. Further efforts are required to ensure timely and effective use of the sanitation demand created by CLTS, including complementary interventions such as supply chain strengthening.

Sources: SNV Vietnam (2010) Sanitation demand creation: strengths-based review; Jensen, Hang & Anh (2011) Gender and pro-poor targeting in RWSS-NTP – final report; Kamal Kar (2011) Sanitation profile of Vietnam and possibilities for scaling up of CLTS.

ANNEX 1: Country Review Teams

List of the key stakeholders involved or consulted in the preparation of the country CLTS overviews.

Cambodia

	Name	Organization
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4	Chreay Pom	MRD, Deputy Director RHC
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6	Syvibola Oun	Plan, GSF programme manager
7	Davith Nong	World Vision

China

	Name	Organization
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2	Dr. Kamal Kar	CLTS Foundation

Indonesia

	Name	Organization
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3	Kristin Darundyah	Ministry of Health, Environmental Health
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5	Amin Robiarto	WSP Indonesia

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DPR Korea

	Name	Organization
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Lao PDR

	Name	Organization
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Philippines

	Name	Organization
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2	Dr. Mike Gnilo	UNICEF, WASH specialist
3	Karl Galing	WSP Philippines
4	Rolando Santiago	Ministry of Health, EOHO

Papua New Guinea

	Name	Organization
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2	Stuart Jordan	EU-RWSSP
3	Esther Silas	Touching the Untouchables (NGO)
4	Penny Dutton	WASH consultant

Solomon Islands

	Name	Organization
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2	Paul Lewthwaite	Live & Learn
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4	Bruce Bailey	AusAID BESIK, M&E adviser
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Vanuatu

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Viet Nam

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6	Nguyen Bich Thuy	Ministry of Health
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Regional stakeholders

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7	Dr. Robert Chambers	IDS
8	Petra Bongartz	IDS
9	Hilda Winartasaputra	Plan International, Regional WASH Specialist
10	James Wicken	WaterAID, Head of Policy and Campaigns
11	Chander Badloe	UNICEF, East Asia and Pacific Regional Office, Regional WASH Adviser

ANNEX 2: Data from regional CLTS review

Table A2.1 Key indicators from country CLTS overviews

Country	Intro date	% coverage	Orgs	OD popn	Triggered	ODF	Capacity
Cambodia	2004	48	16	8,132,400	1,998	717	214
China	2012	15	2	13,483,000	0	0	53
Indonesia	2005	97	9	48,115,400	7,325	1,279	530
Kiribati	2012	0	2	11,900	0	0	0
Lao PDR	2008	47	7	1,698,600	217	36	143
Mongolia	2011	0	3	272,200	10	1	15
Myanmar	2010	12	7	2,546,000	224	12	158
Papua New Guinea	2008	95	8	1,079,800	477	21	310
Philippines	2008	10	10	5,718,300	211	36	377
Solomon Islands	2012	10	2	143,700	2	0	40
Timor-Leste	2007	100	10	269,400	761	262	85
Viet Nam	2008	29	11	3,669,700	829	145	1,132

Table A2.2 Key indicators from country CLTS overviews

Country	Policy	Plans	Finance	Integration	Monitoring	ODF success	Triggered/fac
Cambodia	Yes	No	Indirect	Maybe	Maybe	35.9%	9.3
China	No	No	No	No	No	0.0%	-
Indonesia	Yes	Yes	Yes	Yes	Yes	17.5%	13.8
Kiribati	No	No	No	No	No	0.0%	-
Lao PDR	Maybe	Yes	Indirect	Maybe	Planned	16.6%	1.5
Mongolia	No	No	No	No	No	10.0%	0.7
Myanmar	Maybe	No	Indirect	No	No	5.4%	1.4
Papua New Guinea	No	No	Indirect	No	No	4.4%	1.5
Philippines	No	Yes	Indirect	No	No	17.1%	0.6
Solomon Islands	No	No	Indirect	No	No	0.0%	0.1
Timor-Leste	Yes	Draft	Indirect	Maybe	Yes	34.4%	9.0
Viet Nam	Maybe	No	Planned	Maybe	No	17.5%	0.7

ANNEX 3: Evidence: ODF Sustainability

This annex provides a summary of evidence on the sustainability of open defecation free (ODF) outcomes in rural communities both inside and outside of the East Asia and Pacific region. This summary has been compiled from research and evaluation materials that were readily available to the review consultant and were thought to provide some insight into the topic in question. The summary is not intended to provide an exhaustive or definitive record of this topic. The main intention is to demonstrate the significant variation in ODF outcomes and sustainability found across the projects and programmes for which reliable evaluation material was available.

The information is provided three sections based on outcomes:

A. High performing cases

1. Bangladesh: multiple implementation approaches (including CLTS)
2. Hamachal Pradesh, India: Total Sanitation Campaign programme (with support from WSP TSSM
3. Africa: Plan Pan African CLTS programme in Ethiopia, Kenya, Uganda and Sierra Leone

B. Medium performing cases

1. Nigeria: WaterAid CLTS programme
2. Indonesia: WSP TSSM East Java
3. Lao PDR: Concern Worldwide CLTS programme

C. Low performing case

1. Cambodia: DPRD-UNICEF CLTS evaluation

The author contends that the variation in performance, from high performing programmes, in which 90 per cent of households in ODF communities were found still to be using hygienic latrines, to low performing projects, in which less than half of the households were still using hygienic latrines, demonstrates that ODF **sustainability is possible** – that CLTS interventions can produce effective and sustainable sanitation outcomes, and that the abandonment of non-durable latrines and reversion to OD is not an inevitable consequence of the CLTS approach.

However, the finding highlight the risk that less effective CLTS interventions can result in disappointing outcomes – widespread revision to OD, unused or abandoned latrines, and the use of unhygienic latrines. Evaluators and analysts should attempt to distinguish between the effects of poorly executed or ineffective implementation and the weaknesses of the approach, which influence results in even well executed and effective CLTS interventions.

The reasons for the wide variation in CLTS outcomes are complex. This review hints that high-quality facilitation, a comprehensive CLTS process, supportive contexts, and an enabling policy and programme environment are all important factors in successful CLTS interventions. The absence of these factors is likely to result in less sustainable and effective interventions. However, further research is required to understand better the factors that influence CLTS outcomes.

A. HIGH PERFORMING CASES

1. Bangladesh: multiple implementation approaches (including CLTS)

Country	Bangladesh
Date	2011
Programme scale	481 Union Councils[53] declared ODF before June 2005
Study scale	53 randomly sampled ODF Union Councils (3,000 households surveyed across 50 ODF Union Councils)
Study objective	Determine the sustainability of sanitation behaviours and facilities in communities declared ODF at least 4.5 years ago
Key findings	89.5% used a latrine 'that safely confines faeces' 7.9% households used an unimproved (hanging or open pit) latrine 2.6% practiced OD

Source: Hanchett et al (2011) *Long term sustainability of improved sanitation in rural Bangladesh,* Washington DC: The World Bank, Water and Sanitation Program, technical paper.

Study overview

The WSP Bangladesh sustainability study examined current sanitation status in villages declared ODF before June 2005 (at least 4.5 years ago). The study was well designed, large-scale and comprehensive, with the intention of providing definitive information on the sustainability of the low-cost approaches to sanitation improvement that had been implemented in Bangladesh. Four different implementation approaches were used in the areas studied, including CLTS and non-CLTS approaches. Hardware subsidies were provided to 'hardcore poor; households by several of the local government programmes in line with central government policy.

Main findings

Four and a half years after ODF declaration, all four implementation approaches were found to result in high rates of sustained latrine use and low rates of OD. Sample households were found to have the following sanitation practices:

- 52.9 per cent own a latrine that safely confines faeces
- 36.6 per cent share a latrine that safely confines faeces
- 5.5 per cent use a hanging latrine or one that discharges into environment
- 2.5 per cent use an open pit without a slab
- 2.5 per cent do not have any latrine

OD rates did not vary much across the four programme approaches, between 2.1-4.3 per cent, but were lowest in the CLTS (DISHARI & WaterAid) and Government of Bangladesh (Total Sanitation) programmes.

More than 70 per cent of households had owned their current latrine for at least three years, suggesting that the majority of latrines were fairly durable despite low expenditures on latrines – median latrine costs were below US$ 22 in all but the highest wealth quintile, with 96 per cent of latrines financed by households themselves or through informal borrowing from immediate family and friends.

Latrine technology

While about 90 per cent of households were using or sharing latrines considered to safely confine faeces (latrine with squatting slabs, lined pits but no drop-hole cover; latrines with squatting slabs, lined pits and drop-hole covers; or latrines with water sealed pans and non-leaking pits), the household survey found that more than half (56 per cent) of these latrines were found either to have faeces visible on the latrine floor or pan, or – in fewer cases – to have badly leaking latrine pits. It was also noted that 65 per cent of shared latrines were found to be 'unclean', compared to 49 per cent among private latrines.

Key factors that contributed to reversion to OD were:

- lack of space for new pits or disposal of pit contents
- lack of a roof (affecting durability of slab and pit)
- house and land rental
- poorly installed latrines (including tilted, cracked and broken slabs)
- large numbers sharing a single latrine, which results in cleanliness problems
- negative attitudes to local leaders or wealthier households (social rebellion)
- natural disasters damaging latrines (flooding, cyclones, landslides)

[53] There are 4,451 Union Councils in Bangladesh. Each Union is made up of nine wards, with one village is usually designated as a ward.

Subsidy policy

Local governments provided some form of hardware subsidy – either free latrine parts or latrine parts at subsidized prices – to 11 per cent of the households surveyed. In general the standard subsidy amount, Tk. 450 (US$ 6.50), was utilized to produce low-cost latrine slabs and concrete rings intended for 'hardcore' poor households in line with the central government policy, but the study found that the subsidized latrine parts often went to non-poor households.

2. Himachal Pradesh, India: Total Sanitation Campaign programme (with support from WSP TSSM)

Country	India
Date	2010
Programme scale	State: Himachal Pradesh (5.5 million rural population)
Study scale	30 *Gram Panchayats* (15 NGP and 15 non-NGP) (600 households surveyed across 30 GPs)
Study objective	Analyse usage and construction quality of recently constructed toilets to understand NGP sustainability and intervention effectiveness
Key findings	80% households in NGP villages owned functional toilets 10% households in NGP villages shared use of functional toilets 10% households in NGP villages practiced OD 97% functional toilets in NGP villages were in use

Source: Wilbur Smith Associates (2010) *Rapid Assessment of Total Sanitation and Sanitation Marketing (TSSM) Project: Madhya Pradesh and Himachal Pradesh,* The World Bank, Water and Sanitation Program, main report; Robinson A (2012) *Enabling environment endline assessment: Himachal Pradesh and Madhya Pradesh, India* The World Bank, Water and Sanitation Program, working paper.

Study overview

In early 2010, the lack of reliable or regular data on sanitation outcomes led WSP to contract an independent rapid assessment of the latrine usage rates and construction quality in Himachal Pradesh and Madhya Pradesh. At the time, the Total Sanitation Campaign (TSC) in Himachal Pradesh had been successful in achieving 2,754 ODF communities, which meant that 85 per cent of the entire State – a rural population of 4.6 million people – had been declared ODF.

TSC was initiated to develop sanitation facilities in rural areas, with the goal of eradicating OD. To support this goal, an incentive scheme, *'Nirmal Gram Puraskar'* (NGP) was introduced to reward ODF blocks and districts (*gram panchayats*). The assessment methodology involved randomly selecting 15 NGP winning *gram panchayats* and 15 non-NGP *gram panchayats* in each state, with 20 randomly selected households surveyed in each *gram panchayat*.

Main findings

In the NGP winning villages in Himachal Pradesh, which had been previously verified as having 100 per cent latrine usage, the assessment found that:

- 80 per cent of households owned a functional latrine;
- 10 per cent of households shared a functional latrine owned by others; and
- 10 per cent of households practiced OD.

In total, 97 per cent of these latrines were in use – which meant that 87 per cent of households were using or sharing functional, hygienic latrines.
In the non-NGP villages:

- 54 per cent of households owned a functional latrine;
- 5 per cent of households shared a functional latrine owned by others; and
- 41 per cent of households practiced OD.

Latrine technology

The Government of India TSC guidelines originally required that all dry latrines were converted to pour-flush latrines, but these guidelines were updated in 2007 to recognize the utility of dry latrines in cold and water-scarce areas. However, most district TSC projects continue to promote pour-flush latrines as the standard level of service.

The rapid assessment in 30 villages found that:

- 100 per cent toilets were pour-flush latrines with water-sealed pans
- 80 per cent toilets were *'pucca'* (made from bricks, blocks, stone, concrete)
- 76 per cent toilets had vent pipes
- 91 per cent toilets in NGP villages were clean (80 per cent in non-NGP villages)

The assessment also found an association between the proportion of households that practiced OD and the proportion that reported inadequate access to water supply in the dry season.

Subsidy policy

In 2010, the national TSC guidelines allowed for the provision of a Rs 2,200 (US$ 48) incentive to below poverty line (BPL) households on completion and use of a sanitary latrine including a superstructure. The intention was that this post-construction incentive would encourage poor households to build sanitary latrines.

However, in 2005 the State Government of Himachal Pradesh issued a *Strategy for Rural Sanitation in HP* which stated that no latrine subsidies would be paid to BPL households, thus that the TSC incentives for BPL households would not be utilized.

The Government of Himachal Pradesh continued to practice this 'no hardware subsidy' policy at the time of the assessment, thus none of the households surveyed had received any hardware subsidy or other form of financial assistance to build their latrines.

3. Africa: Plan Pan African CLTS programme

Country	Ethiopia, Kenya, Uganda and Sierra Leone
Date	2012
Programme scale	2.3 million people targeted across eight African countries (Ethiopia, Uganda, Kenya, Zambia, Malawi, Ghana, Sierra Leone and Niger)
Study scale	Re-verification of ODF villages in four countries: 116 villages (first phase of detailed ODF sustainability study)
Study objective	Determine: i) proportion of households that are still ODF; ii) primary causes of households reverting to OD; iii) what motivates people to remain ODF.
Key findings	After initial ODF re-verification phase: Ethiopia: 90% latrine coverage; 9% OD reported Uganda: 81% latrine coverage; 1% OD reported Sierra Leone: 81% latrine coverage; 1% OD reported Kenya: 78% latrine coverage; 8% OD reported

Source: personal communication with FH Designs study team in August 2012.

Study overview

The Plan Australia ODF sustainability study was designed to examine the sustainability of ODF outcomes in project villages from four of the countries involved in the Plan Pan African CLTS programme: Ethiopia, Kenya, Uganda and Sierra Leone.

The study has two phases – the ODF re-verification phase has already been completed in 116 villages; and the detailed research phase is currently on-going in 40 villages (10 villages per country), which were selected based on the data from the re-verification phase (three strongly ODF villages, four medium ODF villages and three weakly ODF villages). The study will be completed before the end of 2012.

Main findings

Fewer people had reverted to OD than anticipated:

- Ethiopia (1,851 households in 57 villages): 90 per cent latrine coverage; 9 per cent OD
- Uganda (1,860 households in 19 villlages): 81 per cent latrine coverage; 1 per cent OD
- Sierra Leone (512 households in 20 villages): 81 per cent latrine coverage, 1 per cent OD
- Kenya (821 households in 20 villages): 78 per cent latrine coverage, 8 per cent OD

The latrine coverage data were based on household observations, with OD rates based on household responses. The second phase research will investigate the veracity of the claimed OD rates and the reasons for people either reverting to OD or maintaining the use of hygienic latrines.

Latrine technology

No data were available.

Subsidy policy

The programme did not provide latrine hardware subsidies.

B. MEDIUM PERFORMING CASES

1. Nigeria: WaterAid CLTS programme

Country	Nigeria
Date	2008
Programme scale	98 communities in four States (Benue, Enugu, Ekiti and Jigawa)
Study scale	Eight communities (three high performers, two median performers, three low performers)
Study objective	Examine the sustainability and equity of total sanitation programmes supported by WaterAid in Nigeria (part of a wider study that also examined WaterAid programs in Bangladesh and Nepal).
Key findings	Mixed outcomes in ODF communities: • 0%-18% OD found in three previously ODF communities • Fulani exclusion in one ODF community (76% OD) Latrines were cleaner in communities with low OD rates. No difference in quality and hygiene of shared latrines.

Source: Robinson A (2009) *Sustainability and equity aspects of total sanitation programmes: a study of recent WaterAid-supported programmes in Nigeria,* WaterAid UK, report.

Study overview

WaterAid introduced CLTS into its sanitation programmes in Nigeria in 2005, and had implemented it in 98 rural communities at the time of the research in 2008. The sample frame for the 2008 study was the 44 project communities where CLTS had been implemented during the 2005-2007 period. Eight of these communities were randomly selected for the study, with three selected from the high performing strata (defined as latrine coverage greater than 95 per cent), two from the median performers (latrine coverage between 30 and 95 per cent), and another three from the low performing communities (latrine coverage below 30 per cent).

Main findings

Prior to the CLTS interventions, latrine coverage was less than 20 per cent in all but one of the communities. After the interventions, three of the communities were declared ODF, and latrine coverage in the other five communities ranged from 11-86 per cent.

Little reversion to OD was found in two of the ODF communities:

- 0 per cent OD in Igba, Benue State (100 per cent latrine use)
- 1 per cent OD in Duhuwa, Jigawa State (excluding *Fulani* households – see below)

However, 18 per cent OD was found in the third ODF community, due largely to the presence of temporary tenants that had not built toilets, and had not been counted during the CLTS process. In addition, the study discovered that 71 semi-nomadic *Fulani* households had been excluded from the CLTS process in Duhuwa. ODF status had been declared among the *Hausa* households, despite 76 per cent of the *Fulani* households continuing to practice OD.

Latrine technology

All of the latrines observed were pit latrines:

- 5 per cent pour-flush pit latrines
- 95 per cent dry pit latrines

The majority of the dry pit latrines had mud-covered timber slabs; a few concrete slabs were observed where WaterAid sani-centres had been established. In the five communities with low OD rates, only three latrines (3 per cent) were found to be dirty; in the three communities with higher OD rates, 47 per cent of latrines were found to be dirty but more than half of these 'dirty' latrines had been constructed prior to the CLTS interventions (thus CLTS latrines were at least as clean and well-maintained as existing latrines). In general, there was little difference in the quality and hygiene of shared latrines, probably because the sharing households were usually part of an extended family.

Subsidy policy

WaterAid Nigeria has promoted the establishment of a sani-centre in each project community. The sani-centre approach was developed to tackle transport and market access problems faced by remote rural communities, largely through the provision of seed money to buy and transport construction

materials, and the establishment of a production centre selling concrete latrine slabs. The cost of establishing a sani-centre was estimated at US$ 450.

In practice, the sani-centre seed money provided a hardware subsidy to the few people that received concrete latrine slabs, as few households repaid the cost of the slabs. Only 30 sani-centre latrine slabs were found to be in use across the eight communities, with only three communities where more than one slab was in use. As a result, the sani-centres proved to be an expensive feature of the programme – the study found that US$ 300 was spent for each sani-centre latrine slab in use – and had little impact on either sanitation coverage or the sustainability of outcomes.

2. Indonesia: WSP TSSM East Java

Country	Indonesia – East Java province
Date	2011
Programme scale	All 29 districts in East Java province (target: improved sanitation for 1.4 million people in four years)
Study scale	80 rural communities across 20 districts
Study objective	Determine: i) Principal factors influencing achievement and sustainability of collective behaviour change to become ODF; ii) Links between influencing factors (to prioritize actions); iii) Recommendations to accelerate achievement and improve sustainability.
Key findings	• 95% 'quickly ODF' communities remained ODF • 20% OD in 'late ODF' communities (despite 100% improved latrine coverage)

Source: Mukherjee N (2012) *Achieving and sustaining open defecation free communities: learning from East Java* The World Bank, Water and Sanitation Program, action research report.

Study overview

After three years of the TSSM project in East Java, 2,000 communities had been triggered with the CLTS approach, 700,000 people had gained access to improved sanitation, and about 35 per cent of these communities had become ODF. However, ODF success rates varied from 10-95 per cent across different districts. This research was designed to examine the factors that influence the achievement and sustainability of ODF outcomes. Action research was conducted in 80 communities that had received CLTS triggering to understand better the triggering processes, their consequences and the factors that influence these outcomes. The study communities were randomly selected from four strata:

- 'Quickly ODF' communities (self-declared ODF within two months);
- 'Late ODF' communities (self-declared ODF after 7-12 months);
- 'Not ODF high coverage' communities (failed to become ODF but achieved high sanitation coverage); and
- 'Not ODF low coverage' (failed to become ODF and had low sanitation coverage).

Main findings

The action research found that the 20 'quickly ODF' communities performed well:

- 18 'quickly ODF' communities had 100 per cent use of individual improved latrines
- 1 'quickly ODF' community had 60 per cent latrine coverage but remained ODF due to sharing by the other 40 per cent of households (in groups of three to four households)
- 1 'quickly ODF' community was no longer ODF (80 per cent improved latrine use with broken pit covers responsible for abandonment in 20 per cent of the latrines)
- 97 per cent use of improved latrines across the 20 'quickly ODF' communities

The action research found that the 20 'late ODF' communities also performed well:

- 20 'late ODF' communities had 100 per cent improved latrine coverage
- 20 per cent of the households practiced OD when washing at the river (despite having improved latrines at home)
- 20 per cent river OD was present but not recognized when ODF status was verified (i.e. no slippage since ODF declaration)

In all 20 districts, communities located on riverbanks, beaches or lake shores tended to have low sanitation coverage rates and were significantly less likely to achieve ODF status. The study suggested that this finding is

due to a strong preference for defecation into water bodies among these communities – a practice recalled in focus group discussions as "clean, hygienic, pleasant, convenient and free of cost".

Latrine technology

The STBM strategy and ODF verification criteria in Indonesia require that all latrines are fly proof, thus latrines without lids or water seals do not meet the ODF criteria. As a result, 76 per cent of households were found to be using pour-flush latrines and few unhygienic latrines were observed. The main sanitation technologies found (based on 574 latrine observations across the 80 study communities):

- 280 pour-flush latrines with septic tank and bathroom (49 per cent)
- 147 dry pit latrines with cover and direct pit (26 per cent)
- 106 pour-flush pit latrines with ceramic pan and one to two leach pits (18 per cent)
- 49 pour-flush pit latrines with cement pan and leach pit (9 per cent)
- 29 dry pit latrines with cement slab, cover and offset pit (5 per cent)
- 6 dry pit latrines with direct pit and no cover (1 per cent)
- 3 hanging latrines (0.5 per cent)

Even poor households spent about IDR 300,000 (US$ 33) to build the cheapest improved pit latrine. In 9 per cent of the study communities, producers were offering simple upgradable pour-flush latrines for US$ 33, or basic pour-flush latrines with a single leach pit for US$ 82.

Subsidy policy

Subsidies for household sanitation facilities have not been provided by the Ministry of Health since the STBM policy was approved in September 2008. However, other government programmes continue to provide latrine subsidies, and around 15-20 per cent of the 'not ODF' communities had received some form of hardware subsidy from the PNPM programme, Public Works Department or CSR funds provided by private companies. However, internal subsidies – from community leaders or members to other households – were found to be a factor contributing to ODF achievement.

3. Lao PDR: Concern Worldwide CLTS programme

Country	Lao PDR
Date	2009
Programme scale	Pilot CLTS project: 24 villages in Houaphan province
Study scale	12 villages (470 household surveys)
Study objective	1. Review CLTS pilot performance 2. Understand better whether CLTS is appropriate in the culturally diverse context of Lao PDR
Key findings	• 2 villages sustained 100% latrine coverage and ODF status • 19% OD reversion in other previously ODF village • 2-7% OD reversion in 3 other villages • 17-25% OD reversion in 3 other villages

Source: SNV (2009) *Community-Led Total Sanitation: Pilot programme review,* SNV and CONCERN Worldwide, report.

Study overview

CONCERN Worldwide introduced CLTS into its Houaphan Health Development Project in 2008, piloting the approach in 24 villages out of the 162 villages covered by the project. Field surveys were undertaken in 12 of the CLTS pilot villages, selected in clusters that were close to the road and easy to access in the rainy season.[54] More than two-thirds (69 per cent) of households were surveyed in the 12 villages.

Seven of the 12 villages were reported to have 100 per cent latrine coverage at the end of the CLTS interventions, with latrine coverage in the other five non-ODF villages ranging from 38-95 per cent.

Main findings

The study found that CLTS had achieved a significant reduction in OD, from a situation where 87 per cent of households practiced OD prior to the intervention to 21 per cent OD when the review was undertaken more than a year later.

[54] The selection criteria are likely to have influenced the findings, as the more remote villages were excluded from the study.

The CLTS outcomes were found to be well sustained since the interventions were completed, with only 8 per cent of the households surveyed reverting to open defecation (from 86 per cent latrine use after triggering to 79 per cent latrine use found by the review):

- 100 per cent latrine use in two villages (previously ODF had 0 per cent reversion)
- 81-90 per cent latrine use in four villages (one ex-ODF, 3-6 per cent reversion in others)
- 68-74 per cent latrine use in four villages
- 47-55 per cent latrine use in two villages

Other findings:

- CLTS appears to be cost-effective
- CLTS working within government and local authority structures
- CLTS effective in creating initial demand and uptake of sanitation facilities
- Post-triggering follow-up influences sustainability

Latrine technology

Almost no innovation from the conventional latrine design. New latrines constructed after CLTS triggering were:

- 88 per cent dry pit latrines built with locally available materials
- 12 per cent pour flush latrines with imported ceramic pans and cement

Some concerns were raised about the hygienic condition and durability of the latrines:

- 22 per cent latrines did not adequately separate faeces from human or animal contact
- 59 per cent latrines were not fly proof (53 per cent dry latrines lacked hole covers)
- 80 per cent latrines were reported to smell
- Some latrines already showed signs of 'structural and material fatigue'

Subsidy policy

One of the 12 study villages had received some hardware subsidies prior to the CLTS interventions. No hardware subsidies were utilized in the interventions.

C. LOW PERFORMING CASES

1. Cambodia: DPRD-UNICEF CLTS evaluation

Country	Cambodia
Date	2009
Programme scale	490 villages in nine provinces (150 declared ODF)
Study scale	20 villages (10 ODF and 10 non-ODF) (160 households surveyed)
Study objective	Assess CLTS performance by sustainability, equity, effectiveness and efficiency.
Key findings	Low latrine coverage in 'ODF' villages: • 43% functional latrine coverage in ODF villages • 29% practicing 'dig and bury' during rainy season • 28% OD or shared latrine use

Source: Kunthy S and Catalla R (2009) *Community-Led Total Sanitation (CLTS) in Cambodia: a formative evaluation report,* UNICEF & Ministry of Rural Development, Department of Rural Health Care, report.

Study overview

Twenty CLTS villages were purposively sampled (10 ODF villages and 10 non-ODF villages) from the 61 village interventions initiated in 2006. In each village, six households were randomly selected, and a further two poor households were selected – in total, 160 households were surveyed.

Main findings

The household surveys found that only 43 per cent of households in the previously ODF villages owned functional latrines, and that only 35 per cent of households used latrines at all times (19 per cent of latrine owners in ODF villages practiced OD sometimes).

No detailed baseline monitoring data were available, but the CLTS records suggested that latrine coverage had been around 84 per cent at ODF declaration, with 16 per cent assumed to be sharing other latrines. The focus group discussions confirmed that coverage had dropped to around 46 per cent by the time the study was undertaken, which corresponds reasonably well with the household survey findings.

The study fieldwork was completed in the rainy season, when many of the villages in the areas studied experience flooding. Some low-cost and badly located latrines become unusable in the rainy season, which results in some reversion to OD. However, a significant proportion – 29 per cent of households in ODF villages – reported that they practice *chhik korb* (dig and bury) when their latrines are unavailable, and the majority of these households reported that they would rebuild and reuse their latrines when the rainy season finished.

The sanitation data for the non-ODF villages highlighted some discrepancies in the study: the CLTS data and focus group discussions found that latrine coverage had been around 50 per cent in 2006 following the CLTS interventions, but had dropped to 19 per cent when the study was undertaken; whereas the household survey data collected by the study suggested 52 per cent latrine coverage. This discrepancy suggests that sampling errors may have had a significant effect on the household survey results.

The household survey results suggested that latrine coverage was lower among poor households, at only 20 per cent in the ODF villages and 30 per cent in the non-ODF, which implies that reversion to OD was higher among poor households.

Latrine technology

The majority of the latrines built in ODF villages had simple wooden slabs, unlined latrine pits and superstructures made from local materials:

- 85 per cent unlined latrine pits (15 per cent concrete rings)
- 69 per cent wooden latrine platforms (12 per cent ceramic pans)
- 66 per cent thatch or bamboo walls (16 per cent brick walls)
- 52 per cent thatch roof (24 per cent GI sheet roof)

Subsidy policy

The CLTS interventions did not involve any hardware subsidies for latrine construction. However, a small proportion of households in the ODF villages benefitted from latrine subsidies provided by NGOs either prior to the CLTS intervention or after the CLTS intervention:

- 4 per cent households surveyed received concrete rings
- 8 per cent households surveyed received latrine pans

Interestingly, the proportion of latrine subsidies was found to be higher in the non-ODF villages:

- 26 per cent households surveyed received concrete rings
- 30 per cent households surveyed received latrine pans
- 15 per cent households surveyed received wall materials
- 10 per cent households surveyed received roof materials

The higher proportion of latrine subsidy among the households surveyed in the non-ODF villages may explain the higher than expected latrine coverage rates reported by the household survey in non-ODF villages.

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