

Concern Worldwide

Houaphan Health Development Project

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# Community-Led Total Sanitation Pilot Programme Review

September 2009



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Concern Lao PDR commenced operations in 1992. For the past ten years Concern has assisted villagers, in partnership with government departments at national, provincial and district levels to improve their livelihoods through participatory development programmes.

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## Table of Contents

<b>Acknowledgements</b> .....	<b>iii</b>
<b>1. Introduction</b> .....	<b>1</b>
1.1 About Concern Worldwide’s CLTS programme .....	1
1.2 Rationale and objectives of the review .....	3
1.3 General approach and methodology .....	3
<b>2. Analysis and findings</b> .....	<b>7</b>
2.1 Brief description of CLTS villages .....	7
2.2 Key programme interventions .....	8
2.3 Open defecation free (ODF) status in the villages .....	11
2.4 Latrines constructed prior to CLTS triggering .....	14
2.5 Latrines constructed after CLTS triggering .....	16
2.6 Use and sustainability .....	18
2.7 Summary of review findings and community responses to triggering .....	20
<b>3. Conclusions and recommendations</b> .....	<b>23</b>
3.1 Conclusions .....	23
3.2 Recommendations .....	24
3.3 Suggestions for future reviews .....	26
<b>Annexes</b>	
Annex 1: Overview of Concern Worldwide CLTS villages .....	29
Annex 2: Selected villages and field research sample size .....	30
Annex 3: Information on ethnicity in CLTS villages included in review .....	31
Annex 4: Information on household size in CLTS villages included in review .....	32
Annex 5: CLTS villages included in review .....	33
Annex 6: Latrine coverage in CLTS villages included in review .....	34
Annex 7: ODF status in CLTS villages included in review .....	35
Annex 8: Existence of latrines prior to CLTS triggering .....	36
Annex 9: Latrines constructed after CLTS triggering .....	37
Annex 10: Investment details for latrines constructed after CLTS triggering .....	38
Annex 11: Summary of review findings by ethnic group .....	39
Annex 12: Summary of review findings by district .....	40
<b>References</b> .....	<b>41</b>

## Abbreviations and definitions used

Abbreviations		Definitions
CLTS	Community-Led Total Sanitation	<b>CLTS</b> is an approach to achieve and sustain open defecation free (ODF) status. CLTS entails the facilitation of a community's analysis of their sanitation situation, their defecation practices and the consequences of these, leading to collective action to become ODF. CLTS processes can precede and lead on to, or occur simultaneously with, improvement of latrine design; the adoption and improvement of hygienic practices; solid waste management; waste water disposal; protection and maintenance of drinking water sources; and other environmental measures.
CWW	Concern Worldwide	
DoPH	Department of Public Health	
GoL	Government of Lao PDR	
HHDP	Houaphan Health Development Project	
Lao PDR	Lao People's Democratic Republic	
MRD	Ministry of Rural Development, Cambodia	
Nam Saat	The National Centre for Environmental Health and Water Supply of the Ministry of Public Health	<b>Nam Saat</b> is the colloquial name of the <i>National Centre for Environmental Health and Water Supply</i> , an institutional centre under the Ministry of Public Health. Provincial and district sections of Nam Saat are part of the provincial Departments of Public Health and their subordinate units.
OD	Open Defecation	<b>OD</b> means open defecation – defecating in the open and leaving the stuff exposed or shallowly buried where animals can expose it once again posing a significant risk to the health and welfare of communities.
ODF	Open Defecation Free	<b>ODF</b> means open defecation free, that is, when no faeces are openly exposed to pose a risk to the community and its residents. A direct pit latrine with no cover or lid is a form of open defecation (fixed point open defecation), while with a fly-proof cover or lid (with or without the use of ash to cover the faeces after defecation) qualifies as ODF. Defecating into a trench and properly covering the faeces can be part of the transition from OD to ODF.
SNV	Netherlands Development Organisation	
VERC	Village Education Resource Center	A Bangladeshi NGO and one of the pioneering organisations of the CLTS concept and approaches.
	Village and community	In Lao PDR, the Ban (Village) is the lowest public entity. An extensive process of village amalgamation has been ongoing throughout the country which has seen the number of villages in Houaphan decrease from 785 to 744 (2008). In this review the term village is generally used to be correct.
WASH	Water (supply), Sanitation and Hygiene	

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SNV has implemented this review in partnership with Concern Worldwide, however, opinions expressed in this report are those of the authors only.

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### Photos used in this report:

- Concern Worldwide: CLTS facilitators training and pilot program in Hua Meuang and Viengthong districts, Houaphan province (November 2008)
- Erick Baetings (SNV): Visit to Concern Worldwide CLTS pilot villages in Hua Meuang district, Houaphan province (April and September 2009)



# 1. Introduction

## 1.1 About Concern Worldwide's CLTS programme

Improving access to drinking water and basic sanitation is an integral part of the Houaphan Health Development Project (HHDP). The five-year project is being implemented by Concern Worldwide (CWW) in partnership with the Houaphan Provincial Department of Public Health and the Hua Meuang and Viengthong District Health Offices. The HHDP targets all the 162 villages in the two districts out of a total of 744 villages in the province. The overall goal of the HHDP is the "sustainable improvement in the health status of villages in Houaphan province".

Houaphan Province is located in the north east corner of Lao PDR, sharing its north, east, and southeast border with Viet Nam. Houaphan province is ranked as one of the poorest provinces in Lao PDR based upon the government's National Growth and Poverty Eradication Strategy (NGPES) of 2004. All of the province's districts (outside of the provincial capital) and 91% of the villages are classified as 'poor'. The NGPES also shows that Hua Meuang and Viengthong districts are the poorest in the province and rank as the 6th and 14th poorest districts in the country respectively out of 72 identified as poor.

Sanitation coverage in Laos continues to be very low: with less than half of the population (48%) having access to improved sanitation facilities, leaving 52% (roughly three million people) having no access at all to sanitation facilities! Open defecation is a common practice, particularly in rural villages including Houaphan. The 2005 Housing and Population Census indicated that the situation in Houaphan province was only slightly better than the national rural average. While the National Health Survey (NHS) 2001 reported that the number of households using a latrine<sup>1</sup> varied greatly between urban and rural families, 67% compared to 19%, respectively. In both target districts, household latrines are limited to households in a relatively small number of villages which have benefited from external development projects over the years.

CWW's water and sanitation activities primarily focus on providing access to clean drinking water and sanitation facilities. The HHDP log frame specifies the following water and sanitation activities under output # 1.4 'Sustained district capacity to support community managed safe water and sanitation improvements':

- Provide safe water points and mobilise villagers to build HH latrines in 50 villages by year 2; and
- Provide safe water points and mobilise villagers to build HH latrines in 80% of the remaining villages between years 3 to 5.

The approach<sup>i</sup> currently applied by most agencies in Lao PDR, involved in supporting or implementing sanitation programmes, is predominantly by providing (full or partial) subsidies<sup>ii</sup> in cash and/or kind (hardware) to individual households. CWW concerned with what has often been found to be unsustainable and expensive subsidy approaches, was the first actor in Lao PDR to adapt and pilot the Community-Led Total Sanitation (CLTS) approach.

In June 2008, CWW organised an exposure visit for its project staff and Department of Health personnel to learn from the CLTS programmes being implemented by (i) the Ministry of Rural Development (MRD) and its partner (UNICEF), (ii) and other organisations in Cambodia. In November 2008, CWW invited two trainers from MRD Cambodia to conduct a CLTS facilitators training course for Department of Public Health staff in Xam Neua, the provincial capital of Houaphan.

During the week long training course a total of 17 facilitators were trained. As part of the practical hands-on field training, CLTS triggering was carried out in two villages in Viengthong district. The CLTS approach was later extended to cover an additional 7 villages in Hua Meuang district and 15 villages in Viengthong district. During the CLTS pilot, CLTS triggering took place in a total of 24 villages.

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<sup>1</sup> Latrine and toilet: A latrine is typically a direct pit, and a toilet is typically an arrangement with a water seal. In this report latrine is sometimes used to include both. Toilet is used where a water seal is likely to be more common than a direct pit.

### CLTS – A brief introduction<sup>iii</sup>

Community-Led Total Sanitation (CLTS) is an approach for mobilising villages to completely eliminate open defecation. CLTS is characterised by participatory facilitation, community analysis and self-action. Often in a matter of just weeks, villages mobilise themselves to construct latrines and achieve total sanitation.

CLTS is a community empowerment approach to achieve 100% open defecation free (ODF) villages. 100% ODF is essential as the cost in terms of inconvenience and embarrassment of not having a latrine in or nearby the household is high, and the financial costs in terms of negative health impacts is even higher<sup>2</sup>. The CLTS approach fosters commitment and innovation within the community and motivates people to build their own sanitation facilities, without depending on outside hardware subsidies. CLTS strives to promote community dialogue, analysis, and social action that can lead to improved sanitation and hygiene practices using locally available resources, tapping the skills and creativity of the people themselves.

The CLTS approach is based on the assumption that a community can resolve its own problems if motivated and supported. The approach recognises that outsiders may be necessary to help a community understand their current situation and to realise the need for improvement, but that as long as support is given a community that wants to change can plan and implement solutions that meet their own needs.

CLTS, initially known as 'People Initiated 100% Sanitation Approach', was piloted by a local NGO (VERC) collaborating with WaterAid in Bangladesh on a WATSAN program during 2000 and 2001. The CLTS approach demonstrated the success of social mobilisation and community engagement as the prime mover for behaviour change and adoption of safe sanitation practices, as opposed to technically orientated project approaches of just latrine construction. It is now being replicated across many other countries.

Summarising the above CLTS differs from traditional approaches in that:

- CLTS focuses on stopping open defecation rather than just building latrines
- CLTS harnesses collective community actions to stimulate hygiene behaviour changes
- CLTS provides no external individual household hardware subsidies for installing latrines
- CLTS encourages people to decide for themselves on the type of sanitation technologies. It does not prescribe standardised top-down designs.

CWW has since been monitoring and supporting the CLTS pilot by facilitating regular monitoring visits to the CLTS villages by district staff of the Department of Public Health. However, support to CLTS villages in Viengthong district will cease as CWW has terminated its project activities in that district as from the middle of August 2009 as part of its withdrawal from Lao PDR.



CWW organised CLTS facilitators training in November 2008

<sup>2</sup> The World Bank's Water and Sanitation Programme (WSP 2009) states that in 2006, Lao PDR lost an estimated USD 193 million due to poor sanitation and hygiene. The sum is equivalent to 5.6% of GDP in 2006, amounting to approximately USD 34.4 per person per year. Approximately USD 130 million can be averted through universal improved sanitation and hygiene.

## 1.2 Rationale and objectives of the review

Building on the “Research on Innovative Policies, Practices and Approaches for Improved Basic Sanitation and Hygiene in Laos PDR” completed in early 2009, SNV is exploring different appropriate sanitation approaches that can be adapted and applied in the diverse Lao context. CLTS has been identified as one potential approach for accelerating much needed rural sanitation improvements in Laos, and is thus an interesting study object for its potential for adaptation and scaling-up to other parts of Laos.

To further the understanding of what approaches might be appropriate, SNV advisors visited different programs in Bangladesh, Cambodia and Nepal over the past year. Additionally as part of SNV’s overall support to the National Centre for Environmental Health and Water Supply (Nam Saat) at central level and two provincial units in Houaphan and Savannakhet, a CLTS exposure visit was organised to Cambodia in December 2008. During 2009, SNV’s capacity development support to Nam Saat Houaphan has focused on adapting and testing CLTS-like approaches and on developing materials and tools for its application.

SNV and CWW have been in regular contact over the past year to explore possibilities to collaborate and support the work of Nam Saat Houaphan and during the initial stages of establishing a Lao PDR WASH Technical Working Group to support and enhance overall sector performance. In July 2009 CWW expressed their intention to evaluate their CLTS pilot, SNV asked to be involved in the evaluation as this appeared to be an opportunity to enrich their CLTS material with local practical experiences. The initial meeting with CWW took place on July 28 2009, with the field survey commencing one week later on August 5 2009.

The agreed purpose of the review was two-fold with different audiences in mind, namely:

1. To review the performance of the CLTS pilot and to assess whether the results have contributed to meeting the overall project (HHDP) objectives.
2. To contribute to a better understanding of whether community-led open defecation free approaches can be applied in the culturally diverse Lao context.

The overall objective of the review was “to evaluate the implementation of the CLTS approach, processes and outcomes”. The following are the specific objectives:

- To review and document the current experiences of the CLTS approach in terms of achievements (initial outcomes/impacts) and opportunities for further strengthening and scaling up.
- To document and share the lessons learnt from the CLTS pilot.
- To come up with a set of recommendations for adapting, improving and localising the CLTS approach that will allow for scaling up and replication of the CLTS approach in other areas in Laos.

## 1.3 General approach and methodology

This review primarily focuses on the results achieved to date and to a lesser extent on the implementation process. However, as the process is equally important to draw lessons from, an attempt was made to obtain a fair picture of how the pilot programme was implemented. Furthermore, the review was not designed to test any pre-specified research hypotheses. At most it aimed to generate another perspective on the adaptation of CLTS approaches in a country context in order to learn from and help in designing future implementation strategies.

This review is based on primary and secondary sources of information and consisted of three components:

1. A preparatory component during which the methodology and tools were developed, villages to be included in the review were selected, interviewers were trained and relevant records and information on the CLTS pilot was obtained.
2. A field research component during which interviewers carried out data collection activities in selected villages.
3. An analysis component which included data tabulation and data analysis as well as the writing up of the review findings.

**Survey tools**

Most of the findings included in this report are based on primary information obtained from households in sampled villages where the CLTS pilot was implemented. The field surveys consisted of household interviews for which a standard questionnaire was developed by SNV WASH advisors. The questionnaire also contained a number of questions that could only be answered through personal observations by the interviewers. The observations focused on the existence and conditions of household latrines and evidence of their regular use. Prior to the field survey the interviewers (three<sup>3</sup> from the provincial Nam Saat supplemented by District Health Office staff) received an in-house training by the SNV WASH advisor based in Houaphan focusing on the purpose and use of the review tools. The questionnaire containing 24 questions was thereafter field tested in one of the selected CLTS villages with minor adjustments made afterwards.

**Selection of survey villages and survey respondents**

An overview of all the 24 CWW CLTS pilot villages is provided in Annex #1. Field surveys were conducted by the team of interviewers in a total of 12 CLTS villages: 3 in Hua Meuang district and 9 in Viengthong district. The 12 selected villages represent 50% of the total number of CWW CLTS villages and should provide sufficient information to allow for a qualification of the overall performance and impact of the CLTS pilot. The villages to be included in the field survey were selected by CWW staff using the following criteria:

- The field research should cover 50% of all the pilot villages per district
- Proximity of the pilot villages to access routes to minimise travelling time
- Accessibility during the rainy season
- Where possible select neighbouring villages to save time

During the field research a number of selected villages could not be reached due to poor road conditions due to the rainy season and these had to be replaced by other more easily accessible villages.

It was proposed that all households in the 12 selected villages be visited and interviewed, however, as a consequence of the timing of the field survey work during the farming season; some households could not be interviewed as its members were away working in their fields some distance from the villages. Except for Xontai and Phanlor, the household sampling sizes in the other villages exceeded 50% of the households. An overview of the sample size is provided in Annex #2, and summarised in Figure 1.

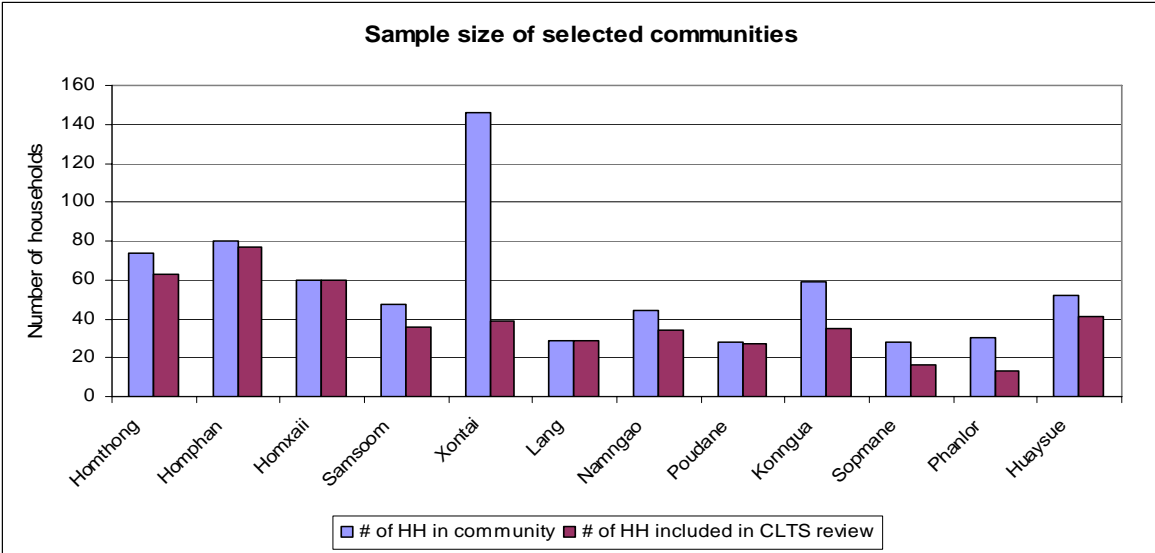


Figure 1: Selected villages and sample size

<sup>3</sup> Two of the three Nam Saat interviewers had prior experience in conducting CLTS related household interviews as they were involved in a CLTS baseline survey conducted by SNV in Xam Neua district.

### Actual field surveys

The field surveys were conducted in two phases: 6 to 11 August covering 6 villages; and 19 to 23 August covering the other 6 villages. Data entry on the basis of the completed questionnaires was undertaken in a specially developed data tabulation and analysis Microsoft Excel workbook. The workbook allowed for quick and easy tabulation and analysis of primary data collected from the 470 respondents.

The data collected by one of the interviewers in Viengthong district was not tabulated and included in the overall analysis as the data was found to be unreliable. Sadly as a result, data collected from 54 households was not included in the analysis. However, having 50% of the CLTS villages and 69% of the households in these villages in the field survey, it is expected that the findings from the review will effectively assess and qualify the situation.

**The review is based on the responses from 470 households (69%) out of a total of 677 households in the 12 villages visited during field work.**

### Limitations of the review

The review was designed and implemented to obtain an objective impression of the performance and success of the CLTS pilot. It was not meant to provide complete insight into all the supporting and hindering factors by carrying out a rigorous analysis of the CLTS approach applied in all the pilot villages. Therefore, certain limitations must be borne in mind.

- Firstly, the limited research experience of the field team members including interview skills, language skills, analytical skills, and the relationship of field interviewers to the respondents. For most of the research team members this review was a new experience.
- Secondly, the limited time available did not allow for rigorous testing and improvement of the field survey questionnaire, and for providing sufficient training, guidance and support to the interviewers. Time constraints also meant that data collection had to be limited to the bare necessity.
- Thirdly, the CLTS pilot is still ongoing in all the villages. Most of the triggering activities took place in the first quarter of 2009. Hence, the review can not provide definitive evidence of the sustainability of the latrines or of sustained behavioural changes.

And

- Finally, the review only looked at villages where CLTS had been piloted rather than comparing CLTS with non CLTS villages (control areas) as its primary aim was to review the achievements of the CLTS pilot.

Given these limitations of the review, this report is unlikely to provide the answers to the ongoing global debate on the effectiveness, sustainability and equity of CLTS-based approaches but will surely contribute to the growing body of evidence on the potential effectiveness of CLTS to trigger household and community interest in improving sanitary conditions by ending open defecation, reducing illness and the resulting economic impacts to families.



## 2. Analysis and findings

### 2.1 Brief description of CLTS villages

All twelve villages included in the review are currently still in the process of implementing CLTS, considering that the pilot only realistically started in February 2009. Some general features and review findings are provided below.

Villages	District	Village status	Main ethnic group	# of HH	Latrine coverage during review
Homthong	Hua Meuang	Poor	Kmu	74	94%
Homphan	Hua Meuang	Poor	Kmu	80	96%
Homxaii	Hua Meuang	Poor	Hmong	60	60%
Samsoom	Viengthong	Poor	Kmu	47	72%
Xontai	Viengthong	Poor	Majority Phong (85%)	146	100%
Lang	Viengthong	Poor	Phong	29	100%
Namngao	Viengthong	Poor	Kmu	44	94%
Poudane	Viengthong	Poor	Kmu	28	81%
Konngua	Viengthong	Poor	Kmu	59	91%
Sopmane	Viengthong	Poor	Lao Loum	28	100%
Phanlor	Viengthong	Poor	Lao Loum	30	92%
Huaysue	Viengthong	Poor	Hmong	52	71%
<b>Total/Average</b>				<b>677</b>	<b>88%</b>

The size of the villages varied from 28 (Sopmane) to 146 (Xontai) households. Each of the villages classified as 'poor'<sup>4</sup>. The households interviewed during the field survey represent the following ethnic groups: 63% Kmu, 15% Phong, 14% Hmong and 7% Lao Loum. A detailed overview of the ethnicity of the respondents is provided in Annex #3. The size of the households included in the review varies from a maximum of 20 household members to a minimum of 1 household member, with an average household size of 6.9 members. The average household size is slightly higher than that reported in the 2005 Housing and Population Census<sup>5</sup>. A detailed overview of household sizes is provided in Annex #4.



Typical topography and villages in Hua Meuang District

<sup>4</sup> Based on Prime Ministerial Instruction #010/ June 25, 2001; identifying poverty criteria for households, villages, districts, provincial and national levels.

<sup>5</sup> Chapter 3 of the Population and Housing Census 2005 gives the following details for Houaphan province: average size for the whole province is 6.5; for rural areas with roads this is 6.5; and for rural areas without road this is 6.8.

## 2.2 Key programme interventions

### Selection of pilot villages

All the 24 villages that were selected for the CLTS pilot are HHDP target villages. Selection was done jointly by CWW project staff and the provincial Nam Saat office. Villages of different socio-economic status and comprising different ethnic groups were selected to be able to possibly compare differences in behavioural change outcomes and subsequent health impacts. The selected villages were targeted in their entirety during CLTS triggering. The following selection criteria were used:

- Village size: > 30 households
- Relative easy access all year round
- Absence of household hardware subsidies
- Presence of village health volunteers
- Presence of faecal-oral transmission related diseases

In practice the above criteria were not always stringently followed. For example (i) a number of villages are slightly smaller than the prescribed minimum of 30 households, (ii) a number of villages are not accessible during the rainy season as most of the conveniently located villages had received support from other organisations in the past, and (iii) in one village hardware subsidies had been provided to a portion of the households.

CLTS advocates advise starting in more favourable places first. For example Kar & Chambers in their 2008 *Handbook on Community-led Total Sanitation*<sup>iv</sup> state 'that it makes sense to start a programme to initiate CLTS triggering in villages with favourable conditions'. This will allow the team to establish some success, gain experience and confidence. These teams can thereafter be used to move to more difficult places.

In general the selection of pilot villages was done quite well, considering the relative success of the pilot in trying to bring an end to open defecation practices. As expected, the triggering had the least success in the village that had previously received hardware subsidies<sup>6</sup>.

### CLTS triggering and ignition tools

The initial training of 17 CLTS facilitators<sup>7</sup>, including triggering in 2 villages in Viengthong district, was conducted by two trainers from the Department of Rural Health Care of the Cambodian Ministry of Rural Development. Consequently the approach and tools in use in Cambodia were applied. The Cambodian CLTS approach applied by CWW consists of the following 11 steps:

1. Introduction and rapport building
2. Village mapping
3. Marking of households and existing latrines on the village map
4. Marking of defecation areas on the village map
5. Calculating of faeces volume generated by the village
6. Analysing open defecation and disease transmission routes
7. Calculating medical treatment expenses
8. Conducting a transect walk to open defecation areas as well as to a number of households
9. Facilitating a discussion and consultation with community members on how to prevent diarrhoea and other water and sanitation related diseases, and how to stop open defecation
10. Facilitating a discussion and consultation on how to construct low-cost latrines
11. Developing a latrine construction action plan by community members

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<sup>6</sup> Homxai village in Hua Meuang District had received hardware subsidies from the GoL's Poverty Reduction Fund (PRF) programme.

<sup>7</sup> Composition of trainees: Provincial DoPH: 5 (Nam Saat: 3, health education section: 1 and technical office: 1); Viengthong District DoPH Nam Saat: 3; Hua Meuang District DoPH Nam Saat: 3; CWW HHDP: 3; CWW Bokeo: 2; and SNV: 1.

The 11 step CLTS approach applied by CWW is similar to the approach advocated by Kar and Chambers (2008), where they distinguish the following stages and sequence of steps:

Stages	Sequence of steps (Kar and Chambers 2008)
1. Pre-triggering	1. Selecting a community 2. Introduction and rapport building
2. Triggering	3. Defecation area transect walk 4. Village mapping or mapping of defecation areas 5. Calculating the amount of faeces 6. Calculating medical expenses
3. Post-triggering	7. Action planning by community 8. Follow up

Steps 2 to 4 of the Cambodian 11 step approach are grouped together in Kar and Chambers step 4. The major difference is the sequencing of the transect walk. According to Kar and Chambers, defecation area transect walks<sup>8</sup> are the single most important motivational tool, and they suggest doing this right at the beginning of community triggering as experience has shown that this often works well to motivate communities to engage more in CLTS processes. The above outline is intended as a guide only and according to Kar and Chambers there is no prescribed 'best' format. They continue by stating that one should feel free to modify and change the steps to fit local situations and conditions in which CLTS is being applied. The basic principle for any approach is the empowerment of local villages to do their own analysis and initiate their own actions to eliminate open defecation practices.

The CLTS triggering in the first two pilot villages was done as part of the CLTS facilitators training with the support and guidance of experienced external trainers/facilitators. The triggering in the remaining 22 pilot villages was done by a team of local facilitators consisting of provincial and district Nam Saat staff. The team usually consisted of two provincial Nam Saat facilitators augmented with one district Nam Saat facilitator. CWW staff were present during the triggering but their role was limited to that of an observer. Where necessary they contributed by commenting on what was happening or by providing advice or ideas to the team. The execution of the 11 step triggering process took some 5 hours per village. The role of CWW in the CLTS triggering focused primarily on supporting the teams in terms of planning and implementation, and in providing budget support, transport and triggering materials. Furthermore, CWW took the lead in advocating the CLTS approach with senior provincial and district authorities.

The timing of the CLTS triggering seems to have been appropriate with the triggering taking place between November 2008 and March 2009. This provided the villages with sufficient time to create an ODF environment before the onset of the rainy season, which corresponds with the main agricultural season.

### Project staff perceptions on village responses to triggering

HHDP staff informed us that they noticed some differences between villages in Hua Meuang and Viengthong districts in the manner in which they responded to CLTS triggering. The villages in Viengthong generally responded more actively and invested more time and resources in building pour-flush toilets, whereas the villages in Hua Meuang responded somewhat more subdued and primarily built dry pit latrines. It was also felt that the toilet usage rate in Viengthong was higher than that in Hua Meuang district.

Differences were also observed in the way different ethnic groups responded to CLTS triggering. In general they felt that Lao Loum have a better understanding and appreciation of sanitation and hygiene issues, and they are more creative in building toilets. The usage rates were also observed to be higher than the other ethnic groups. In Hmong villages, it was found that they have a limited understanding of sanitation and hygiene issues, they prefer pour-flush toilets, and it was observed that they often do not use the facilities as a consequence of unfamiliarity and because they feel "uncomfortable" using the latrines. Consequently

<sup>8</sup> The transect walk is also known as the 'walk of shame' or 'walk of disgust'. Transect walks are meant to generate a sense of disgust, embarrassment or shame by walking along with villagers through the village, observing sanitary conditions including open defecation areas.

they continue to defecate in the open. In predominately Kmu ethnic villages, people were found to have the least understanding of sanitation and hygiene issues, they prefer dry pit latrines but many still continue to defecate in the open.

Section 2.6 of the report indicates that the perceptions expressed (and held) by senior HHDP staff may not necessarily reflect the realities on the ground.



CLTS triggering activities in initial pilot training villages

**Monitoring**

After CLTS triggering had taken place, village action plans were developed in all the 24 villages as part of the triggering process. The existing Village Health Committees were encouraged to take an active role in implementing and monitoring the CLTS programme. The committees were expected to take a central role in devising rules and regulations and subsequently to mobilise the entire village to take action.

Once an action plan was formulated and agreed upon to make the village Open Defecation Free (ODF) and mobilise households to construct their own toilets, Nam Saat district staff made periodic monitoring visits to follow up and support the implementation of the action plans. The frequency of visits was not fixed but visits were intended to occur at least once a month. The information obtained during the field research shows that monitoring visits happened much less frequently than initially intended. On average villages were visited less than three times. The minimum time span between triggering and the first monitoring visit was 20 days, the maximum time span was 61 days, and the average time span was 33 days. In general this appears to be an extremely long gap between triggering and the first occasion in which the villages were visited. The two initial pilot villages were only visited again after two months! Details of this analysis are provided in Annex #5, and is summarised in the table below.

Summary of monitoring visits							
	In 1 <sup>st</sup> month after triggering	In 2 <sup>nd</sup> month after triggering	In 3 <sup>rd</sup> month after triggering	In 4 <sup>th</sup> month after triggering	In 5 <sup>th</sup> month after triggering	Thereafter	Total
# of 1 <sup>st</sup> village visits	5	6	1	-	-		12
Total # of village visits	5	12	8	5	1	3	34

Kar and Chambers (2008) state that the post-triggering phase (action planning and follow up) is very important as community dynamics can rapidly change and go in different directions. In this phase external encouragement and support can be crucial. Facilitators and others in support roles need to be alert to what is happening as timely interventions can make a big difference. **Triggering without proper follow up is bad practice and should be avoided by all means.** They (Kar and Chambers) recommend that villages where there has been a good response are revisited within a few days following actual triggering. The initial follow up visits are necessary to show interest and appreciation on what is being done, essential ingredients to motivate, raise spirits and reinforce actions.

The follow up visits should focus on encouraging and supporting the committee and the village as a whole to initiate their actions towards creating an open defecation free environment. The initial days and weeks are also important to discuss alternative latrine options and to provide advice to villagers on how to construct hygienic and durable latrines.

From observations and discussions it appears that follow up visits were neither timely nor effective. District Nam Saat staff<sup>9</sup> used the monitoring visits primarily to monitor (count) the number of latrines constructed. This was often done by interviewing just the village chief. Individual households were hardly visited and as a result advice on how to construct appropriate latrines was not provided. Neither was the actual use of the latrines monitored. It appears that the pilot focused mainly on the construction of latrines instead of encouraging villagers to stop open defecation practices. This is likely due to practices inherited from previous projects and activities, when quantity was seen as being more important than quality. An approach now globally found flawed yet still widely practiced.

The monitoring visits were unfortunately also not used to facilitate further learning on improved hygiene behaviours. Past experience has shown that programs that include changes in both hygiene behaviours and sanitation facilities are more effective in controlling diarrhoeal diseases than those that focus on sanitation facilities only. Since both the reduction in the incidences of diarrhoeal cases and an increase in hand washing practices are key success indicators of the HHDP, more could have been done to integrate these activities into the CLTS pilot.

The knowledge and attitude of the individuals responsible for monitoring and supporting the CLTS villages may have played a significant role. We were informed by senior CWW staff that the responsible individuals lacked an understanding on the purpose of the monitoring visits, compounded by a lack of clear guidelines and tools. The role of CWW in the follow up visits was limited to providing monitoring reports and bearing the costs of transportation and allowances for the Nam Saat staff to be able to visit the villages.

## 2.3 Open defecation free (ODF) status in the villages

### Initial ODF status

The initial sanitary status of a village is likely to influence the eventual results of the CLTS triggering. Experience with household latrines by a large enough segment of a village may accelerate the speed at which the village as a whole changes its defecation practices. The initial status may also influence the total investments that villages need to make. It is expected that those already with access to sanitation will have a positive influence on those households who need to change their defecation behaviours. The time and overall effort needed to build all the required latrines is therefore expected to be less.

Prior to the CLTS pilot, only 13% of all households in the villages included in the review had access to a latrine, with a high of 69% in Phanlor and a low of 0% in Xontai and Lang. Details are provided in Annex #8.

### ODF status at the time of the review

Only two out of the 12 villages covered in the review may have achieved 100% Open Defecation Free (ODF) status so far: Xontai<sup>10</sup> and Lang. In general latrine construction rates were high, and showed an enormous improvement over the pre-CLTS triggering figures: increasing from 13% to 86% of households across the 12 villages. The detailed findings of the latrine construction status of the villages included in the review are provided in Annex #6, and is summarised in Figure 2.

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<sup>9</sup> Note that there is only one Nam Saat staff member for each district, and as a consequence of staff shortages the same individual is often assigned to other District Health Office tasks.

<sup>10</sup> It is important to note that the information for Xontai is based on household interviews and observations that cover only 27% of the total number of households, whereas the information for Lang is based on a 100% sample size.

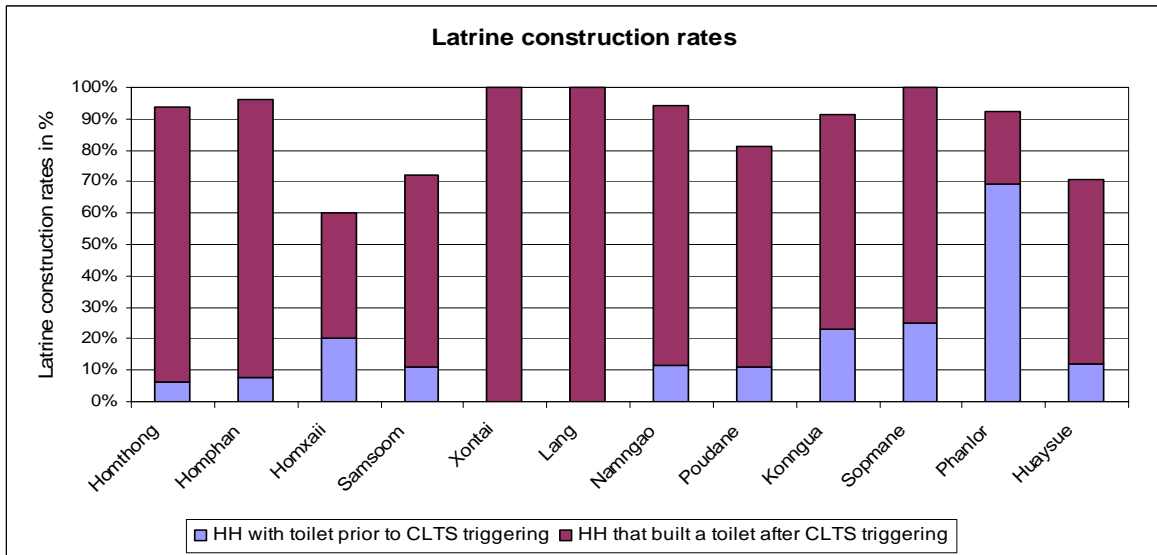


Figure 2: Latrine construction rates prior to and after CLTS triggering

The majority of villages included in the research reported a significant reduction in open defecation. The review shows that ODF practices in the twelve villages combined have currently reached an overall rate of 79%. The ODF status for the 12 pilot villages as observed during the review is provided in Annex #7, and is summarised in Figure 3.

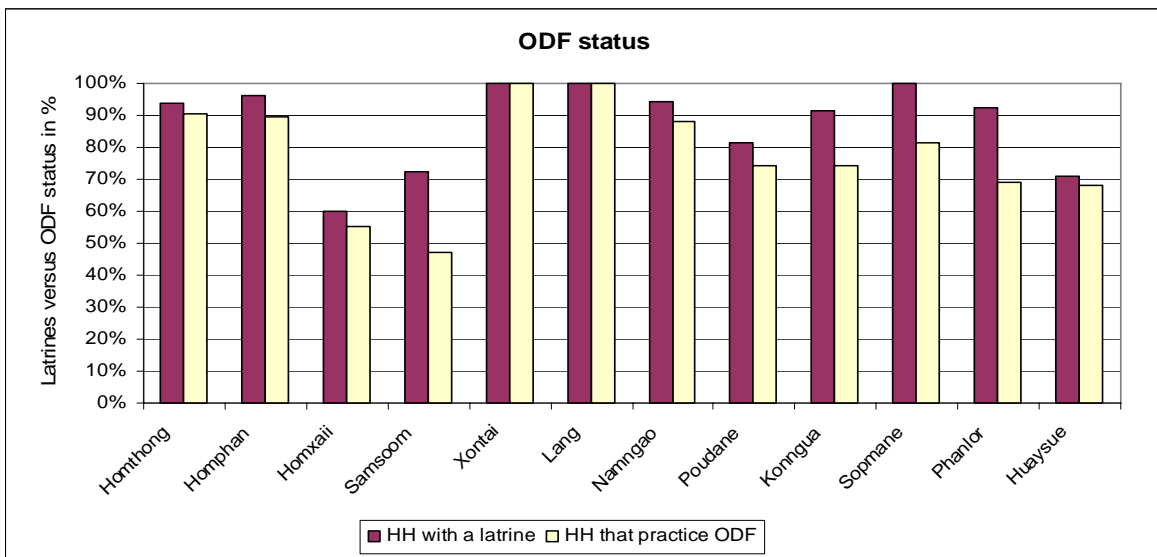


Figure 3: Village ODF status at the time of the field research

To date no village has been declared Open Defecation Free (ODF), and it remains unclear how (what process) and who should be objectively responsible for verifying and declaring ODF status. CWW staff explained that so far no process is in place to verify and certify whether a village has reached ODF status. Certification, however, is necessary to confirm ODF status and as an official recognition of the village's achievements. CWW is considering linking the ODF declaration to the Ministry of Health's "Model Health Village" concept, for which the currently available "*Design and Monitoring Framework*" requires that "average sanitation coverage in target (model) villages is at least 80%, with a minimum of 50%" as an outcome by 2013<sup>11</sup>.

<sup>11</sup> Asian Development Bank (April 2009) *Developing Model Healthy Villages in Northern Lao PDR - Draft Design and Monitoring Framework*; Project # 42143-01.

### Continuation of Open Defecation (OD) practices

Although not specifically included in the scope of the review, it is safe to assume that the majority of villagers were defecating in the open prior to CLTS because of a lack awareness of the benefits of latrines and the risks associated with diseases caused by human faeces, and because they felt no shame or guilt. 14% of the responding households without latrines often did not, or were not able to, provide a specific reason for not constructing a latrine after CLTS triggering. The following responses were provided by these 64 households:

- Use another household's latrine (sharing): 8%
- No time: 27%
- Not a priority: 2%
- No specific reason: 30%
- Other reasons: 33%

A lack of land or money was never mentioned as a reason for not constructing a toilet. Generally the poor who wanted, or who were coerced, to build toilets were able to do so, making use of locally available materials. The 24 households with no latrine in Homxaii village (corresponding to the 33% that gave another reason) were all waiting for external hardware subsidy support. Bear in mind that Homxaii was the only village where hardware subsidies had been provided in the recent past.

Households with a latrine - but where the interviewer on the basis of observations had doubts on whether it was being used regularly - did in most cases not accept that the latrine was not being used. In those cases where they did not agree with the interviewer's observations it was impossible to obtain a reason for why they were not using the latrine they had constructed. The household's reaction might be caused by a feeling of shame or guilt, but it does not explain why they choose to construct a latrine but opted to continue to defecate in the open. This is a constraining factor which negatively influences the success of CLTS programmes and warrants further research and may have been reduced by more frequent follow up or monitoring visits and direct engagements with households.

It is possible to speculate that households might have been 'pressured' to construct latrines by their peers but more likely by some of the village chiefs. During an earlier visit to a number of CLTS pilot villages in Hua Meuang district, some of the village chiefs met with explained that they personally made an effort to ensure that all households constructed a latrine. However, it appears that the pressure to construct latrines was not translated into enforcing non-OD practices which is more important.



Some of the latrines not (yet) in use

36 households (9%), out of the total of 406 households that did construct a latrine, acknowledged that they were not using their latrine. The following responses were provided by these 36 households:

- Use another household’s latrine (sharing): 8%
- Latrine is smelly: 3%
- Latrines are not healthy: 3%
- Like the open air: 9%
- No specific reason: 83%

Some, or a mix, of the following could be causes for non-use by households that constructed a toilet.

Possible reasons for continuing OD	Possible underlying causes
<ul style="list-style-type: none"> <li>• Lack of sufficient awareness of the benefits of latrines</li> </ul>	<ul style="list-style-type: none"> <li>• Household members did not participate in CLTS triggering</li> <li>• Insufficient quality of CLTS triggering or lack of intensity</li> <li>• Little or no follow up</li> </ul>
<ul style="list-style-type: none"> <li>• Latrines were constructed under too much peer pressure</li> </ul>	<ul style="list-style-type: none"> <li>• Too much focus on latrine construction instead of on creating an ODF environment</li> </ul>
<ul style="list-style-type: none"> <li>• No harm is seen in continuing open defecation</li> </ul>	<ul style="list-style-type: none"> <li>• Insufficient peer pressure to stop open defecation</li> <li>• Influential villagers did not enforce non-open defecation practices</li> </ul>
<ul style="list-style-type: none"> <li>• Access to easy alternatives for defecation</li> </ul>	<ul style="list-style-type: none"> <li>• Plenty of cover in surrounding areas (forests, bushes and fields) for open defecation</li> </ul>

### Alternative defecation places

Households with no latrine or those who did not use their latrine were asked where they usually go to defecate. The majority (89%) mentioned that they continue to defecate in the open, and a minority (11%) mentioned that they used (shared) the latrines of others. The 11% that mentioned they use the latrines of others does not correspond with the earlier reported 8%. It is therefore assumed that OD behaviour might actually be somewhat higher than what was reported. A feeling of shame or guilt may have influenced the way the households answered this particular question during the interviews.

## 2.4 Latrines constructed prior to CLTS triggering

### Existence of latrines prior to CLTS triggering

As reported earlier, 59 households (13%) included in the review had access to a latrine, with a high of 69% in Phanlor and a low of 0% in Xontai and Lang before the start of the CLTS pilot. The field study also revealed that in addition to these households, an additional 31 households in Homthong and Hompahn had constructed a latrine in the past. The field study did not reveal the reasons why they had abandoned these latrines or decided not to construct a new latrine prior to the CLTS triggering. An overview of pre-CLTS latrine construction is provided in Annex #8.

### Latrine characteristics

Of the 90 latrines reported to be constructed prior to CLTS triggering, the vast majority (78%) consisted of dry pit latrines and a fifth (22%) were pour-flush toilets. Of the 59 latrines still in use prior to CLTS triggering, 66% consisted of dry pit latrines and 34% consisted of pour-flush toilets. The twenty pour-flush toilets constructed prior to CLTS triggering were all still in use, whereas of the 70 dry pit latrines only 39 (56%) were still in use.

Annex #8 shows that the earliest latrines were constructed in 1997, some 12 years ago. The most recent latrines were constructed in early 2009, one or two months prior to CLTS triggering. 42 (47%) of the 90 households spent cash to construct their latrine. Cash spent on latrine construction ranged from a high of Kip 250,000 (~US\$ 30) to a low of Kip 20,000 (~US\$ 2.5) with an average of Kip 86,000 (~US\$ 10). Except for the 12 households in Homxaii, none of the other 78 households received any external support, neither in the form of material or financial support, to construct their household latrines.

58 (98%) of the 59 household latrines appeared to be in use at the time of the field research based on observations made by the interviewers.



Latrines constructed prior to CLTS triggering

### Hygienic conditions of latrines

The hygienic conditions of the existing latrines were observed by the interviewers during the field research. According to the interviewers 27 (46%) of the 59 latrines 'qualified' as a hygienic latrine<sup>12</sup> with the following observations made:

- 18 (90%) of the 20 pour-flush toilets qualified as hygienic. The two that did not qualify were found to be smelly. It is probable that this is due to poor cleaning or maintenance practices.
- Only 9 (23%) of the 39 dry pit latrines qualified as hygienic.

Furthermore:

- For 86% of the latrines, animals and humans were not able to come in contact with faeces;
- For 46% of the latrines, there was no bad smell;
- In 53% of the latrines, flies were not able to enter the pit; and
- 41% of the dry pit latrines had a proper lid that covered the squatting hole.

The same findings are summarised in Figure 4.

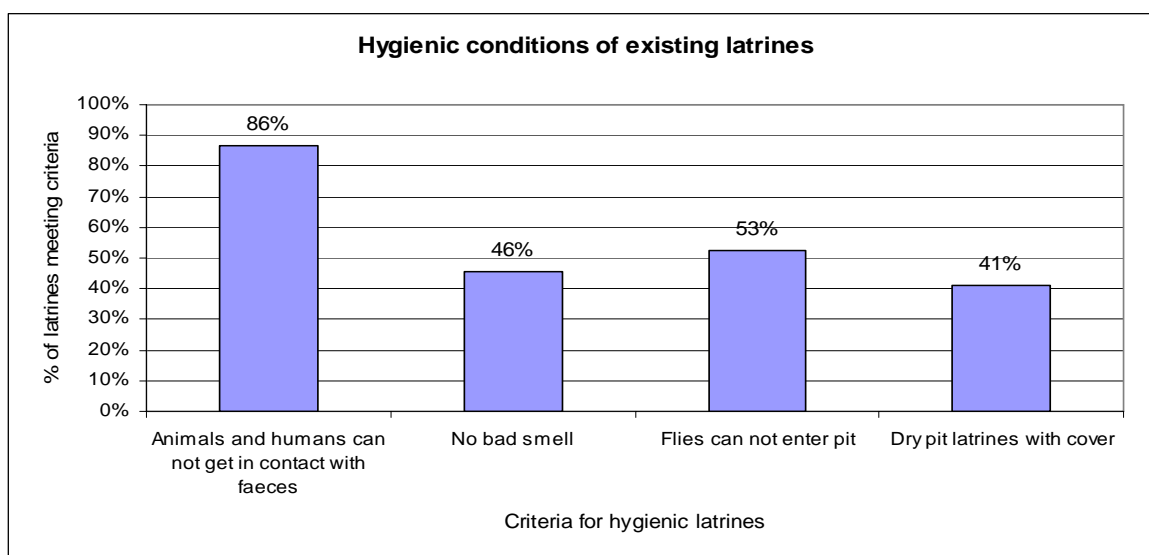


Figure 4: Hygienic conditions of latrines constructed prior to CLTS triggering

<sup>12</sup> Latrines qualify as hygienic if: 1) animals and humans cannot come in contact with faeces; 2) there is no foul smell; and 3) flies can not enter the pit. Therefore to meet the third criteria dry pit latrines must be fitted with a proper lid that covers the entire squatting hole.

## 2.5 Latrines constructed after CLTS triggering

### Existence of latrines after CLTS triggering

In the twelve villages covered by the review a total of 347 latrines were constructed as a result of CLTS triggering, equivalent to 84% of the households without access to sanitary facilities before the pilot. **100% post triggering latrine construction rates were achieved in Xontai, Lang and Sopmane.** Homxaii only achieved a post triggering latrine construction rate of 50%. An overview of post CLTS triggering latrine construction is provided in Annex #9.



Dry pit latrines constructed after CLTS triggering

### Latrine characteristics

There has been almost no innovation in conventional latrine design. The research shows that there is a clear preference for dry pit latrines as 304 (88%) of the 347 latrines constructed after CLTS triggering consists of this type, whereas only 43 (12%) pour-flush toilets were constructed.

A large number of households (60%) constructed their latrines within the first month following triggering, with a slowly declining rate in the following months as shown in the table below. The field research revealed that even in July and August - in the middle of the farming season - some households choose to construct their latrines. Phanlor village did extremely well as all the latrines were constructed in the first month. Sopmane followed closely with 92% of all latrines constructed in the first month and 100% within the first two months. Homxaii did very poorly with only 4% of all latrines constructed in the first month. Latrine construction rates there picked up somewhat in the fourth month.

Number of latrines constructed							
	In 1 <sup>st</sup> month after triggering	In 2 <sup>nd</sup> month after triggering	In 3 <sup>rd</sup> month after triggering	In 4 <sup>th</sup> month after triggering	In 5 <sup>th</sup> month after triggering	Remaining months	Total
# of latrines built	207	58	41	27	13	1	<b>347</b>
% of latrines built	60%	17%	12%	8%	4%	0%	100%

The above paragraph reinforces the earlier statement that villages where there has been a good response need to be revisited within a few days following actual triggering to encourage and support community initiatives and to advise individual households on hygienic latrine construction techniques.

The costs of latrine construction varied widely across the pilot villages. The data presented here is as reported by the households themselves. 294 households (85%) claim to have spent money on their latrines. Namngao was the only village where no money was spent by the households. The most expensive latrine required Kip 500,000 (~US\$ 59), whereas the cheapest latrine required only Kip 20,000 (~US\$ 2.5). On average Kip 63,000 (~US\$ 7.5) was spent. Details are provided in Annex #10.

Unfortunately the rapid research did not give insight into what the cash was spent on. It is obvious that for the pour-flush toilets ceramic pans, pipes and cement had to be purchased and probably skilled labour had to be hired. All dry pit latrines appeared to be constructed with locally available materials. It was suggested that cash was often required to purchase roofing material (e.g. thatch). None of the households received any external support, neither in the form of materials or financial support, to construct their latrines.

312 (90%) of the 347 household latrines appeared to be in use at the time of the field work.

### Hygienic conditions of latrines

The hygienic conditions of the latrines constructed after triggering were observed by the interviewers during the field research. According to the interviewers' opinions only 52 (15%) of the 347 latrines qualified as a hygienic latrine, compared to 46% hygienic latrines in use prior to CLTS triggering. The following specific observations were made:

- 22 (51%) of the 43 pour-flush toilets were considered to qualify as hygienic, but only
- 30 (10%) of the 304 dry pit latrines were considered to qualify as hygienic.

Furthermore, according to the interviewers' observations:

- In 22% of the latrines, animals and humans were likely to be able to come in contact with faeces;
- In 80% of the latrines, there was a perceived bad smell;
- In 59% of the latrines, flies were able to enter the pit; and
- 53% of the dry pit latrines did not have a proper lid that effectively covered the squatting hole.

The above findings, visualised in Figure 5, are an issue of concern as unhygienic latrines can often be considered as a form of 'fixed point open defecation' and could be a same source risk of unsanitary and unhealthy conditions as open defecation locations, but even closer to homes than traditional open defecation sites. There is also a greater risk of latrines and/or CLTS getting a very bad reputation. Furthermore, there is an increased probability of slippage eventually resulting in a resumption of open defecation practices!

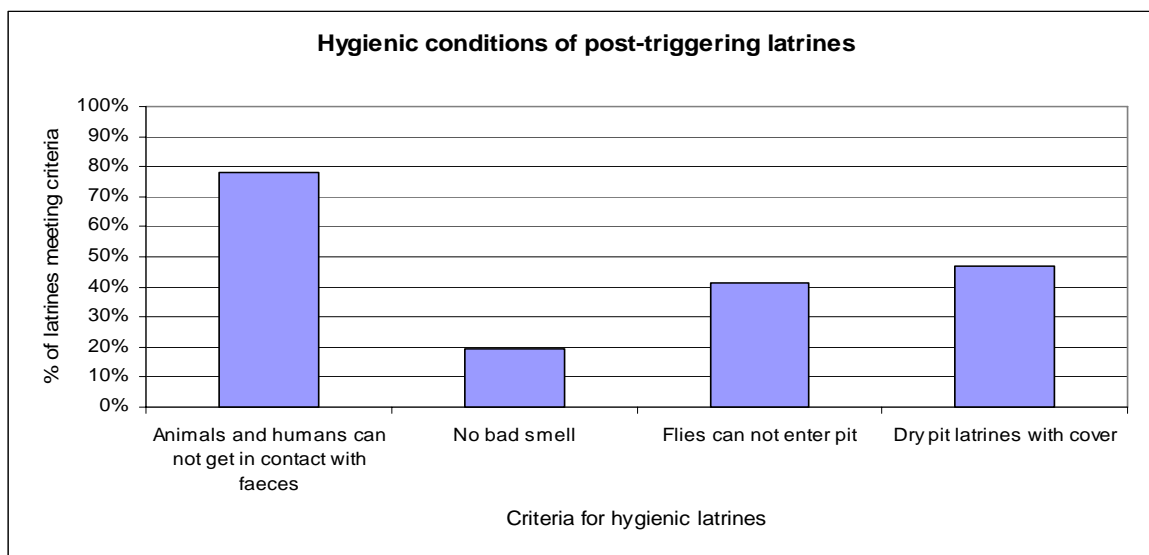


Figure 5: Hygienic conditions of latrines constructed after CLTS triggering

It is difficult to judge to what extent these findings were influenced by the inspections and perceptions of the field interviewers or to what extent it was due to 'poor' and limited access to construction information, knowledge, skills and techniques. During previous visits to some of the villages by the lead author it was observed that most of the dry pit latrines were at best of a temporary nature. Most of them had direct shallow pits (~1 meter or less in depth) with floors and superstructures constructed of non-durable local/natural materials (unseasoned wooden poles or bamboo). We did not observe any latrine fitted with a vent pipe so that it could possibly qualify as a ventilated improved pit (VIP) latrine. Often lids to cover the

squatting hole were missing, and where these were present they often did not fully cover the hole to prevent flies from entering the pit.

Only in a few cases were materials, necessary to limit bad odours from pit latrines, such as ash and dry leaves, found in or nearby the pit latrines. In most cases, similar technologies, materials and superstructures were used by all. After the first latrines were constructed, other households simply copied those prototypes with their possible deficiencies, and because no additional guidance was available which could have been provided by regular follow up visits.

It is unknown to what extent the personal beliefs, attitudes and perceptions of the interviewees played a role, however, considering the findings it is likely that these may have influenced their observations. In rural Laos the sanitation technology of choice that is almost uniformly promoted and adopted by both government and development agencies is for 'costly' pour-flush toilets; anything less than this is not really considered to be appropriate.

Similarly there appears to be a misconception among CLTS implementers that dry pit latrines are the technology of choice. During earlier visits this became evident as households, with well constructed permanent houses, who could have afforded permanent hygienic latrines, opted to go for minimum-cost temporary dry pit latrines. In general the amount of technical advice and support from the CLTS facilitators and CWW appears to have been insufficient in most pilot villages. Consequently many latrines are structurally weak and are at risk of possible collapse in a relatively short time span.



Conditions of some of the dry pit latrines

## 2.6 Use and sustainability

### Reasons for constructing latrines

Although this was an open question, only a limited number of reasons for constructing latrines were offered, possibly indicating bias by the interviewees. The majority of responses noted (95%) gave disease prevention and convenience, or a combination of both, as the main reasons. This suggests that the health-related aspects of the CLTS triggering process made the respondents aware of the negative health aspects of poor sanitation (though it should be noted that the interviewees were all associated with either the provincial or district Departments of Public Health). The issue of convenience could have been influenced by the timing of the field research which took place during the rainy season. 2% of the respondents were influenced by advice provided by their doctor or the CLTS facilitators, and 3% did not give any specific reason or were not able to answer the question. The same findings are summarised in Figure 6.

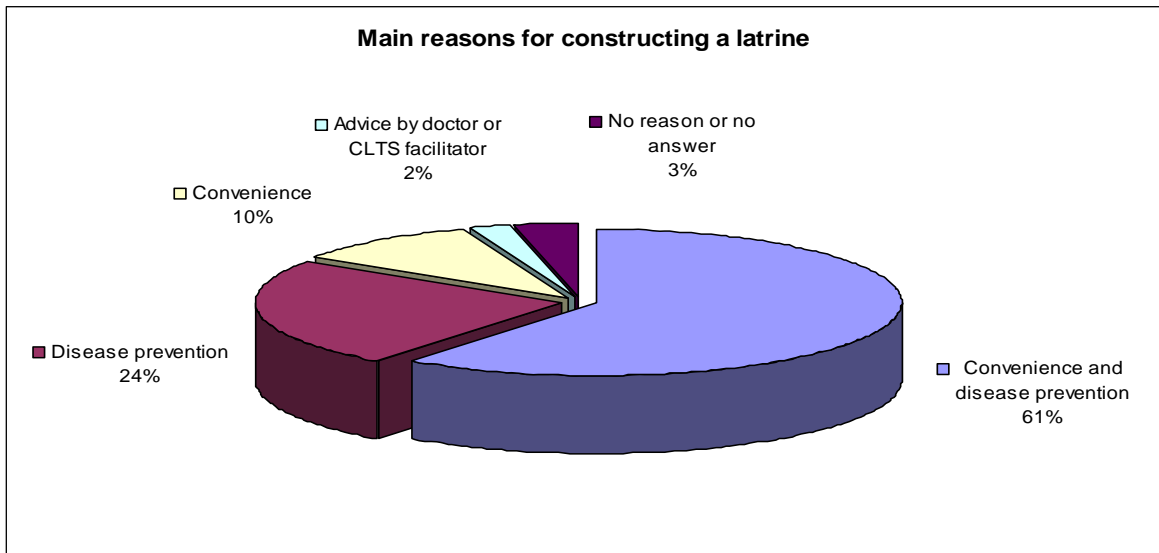


Figure 6: Reasons for constructing latrines

### Use and maintenance of latrines

As mentioned in section 2.3, the majority of the villages covered by the research reported a significant reduction in open defecation. The review shows that 91% of the household latrines are actually used, with latrine use highest in Xontai and Lang with both reporting 100% usage rates.

The majority of the latrines were recently constructed – with an average age of less than 5 months – the review therefore did not look at the operation and maintenance aspects as this would likely be an unreliable indicator in such a short time. However, considering that 80% of the observed latrines had problems with bad odours and flies for almost 60% of the latrines, questions could be raised about the quality of initial construction as well as current cleaning practices.

At the time of the review none of the households had upgraded their latrines as they were only a few months old and still functioning. It is expected that the existing predominantly temporary latrines will require rehabilitating, rebuilding or upgrading within a short timeframe as some of the latrines already showed signs of structural and material fatigue. In this respect both the limited depth of the pits and the temporary nature of the superstructures will more than likely require attention in the coming months.



Dry pit latrines showing serious signs of fatigue

## 2.7 Summary of review findings and community responses to triggering

Section 2.1 of this report includes the perceptions of the project staff towards community responses to triggering across different ethnic groups. As an afterthought and to verify these perceptions we have summarised the main findings of the review per ethnic group. The summary of the findings per ethnic group is provided in detail in Annex #11.

Except for the Kmu villages the sample size of the other ethnic groups (Hmong, Lao loum and Phong) are maybe too small to draw any definite conclusions. Even so a number of common conclusions can be drawn from Annex #11 regarding ethnic diversities:

- Hmong villages appear to have a preference for pour-flush toilets (60%) and the overall hygienic conditions of their latrines/toilets scored the highest (57%).
- Kmu villages have the highest percentage of dry pit latrines (99%), however, due to lack of information the review was not able to correlate this data with the wealth status of the communities. In other words, is a dry pit latrine the preferred option or the only affordable option? Considering the fact that dry pit latrines were constructed without proper advice, it may not be surprising to note that only 14% of the latrines are perceived as hygienic.
- Lao Loum villages scored relatively low (76%) on the actual usage of the latrines. Similarly to Kmu villages, the majority of the Lao Loum households (93%) opted for dry pit latrines.
- Phong villages reacted most actively to the CLTS triggering, moving from no latrines at all prior to triggering to 100% coverage after triggering. The hygienic condition of the latrines is however the lowest of all with only 3% of all latrines perceived as hygienic.

Although the HHDP staff noticed some differences between villages in Hua Meuang and Viengthong districts, the summary presented in Annex #12 doesn't show any substantial differences between the two districts. Most of the indicators for the two districts scored more or less the same staying within an error margin of +/- 5%.



Some properly constructed dry pit latrines



One of the fanciest pour-flush toilets constructed (including solar lighting)



## 3. Conclusions and recommendations

### 3.1 Conclusions

Considering that CLTS had never been applied in Lao PDR, CWW took a bold decision to adopt and pilot this approach in 2008. With no where in country to look for best practices and with no specific in-house expertise the decision was a brave one.

The review provides a range of evidence that CLTS has the potential to be a powerful approach for rapid sanitation behaviour change in rural areas in Lao PDR, by focusing on eradicating open defecation practices and establishing improved sanitation and hygiene practices. A summary of the main arguments supporting this statement:

- ☑ There has been a significant reduction in open defecation practices, from 87% at the start of the pilot to 21% at the time of the review.
- ☑ Overall, the proportion of households with access to latrines increased considerably from 13% to 86% in a matter of months. Three out of the 12 villages have virtually 100% latrine coverage.
- ☑ Dignity of, as well as safety for, women and girls is expected to have improved with the vast majority agreeing that latrines are very convenient.
- ☑ The villages owned the process.

There is no doubt that the pilot has contributed to the HHDP's specific output related to mobilising villagers to construct household latrines. However, the size of the pilot is only 50% of the targets set by the end of year 2. Substantial scaling up will be necessary to be able to achieve the overall project targets. It is not known whether the pilot contributed significantly to the project's overall goal of sustainable improvement in the health status of villages in the two districts as it is really too early to tell. Although it is expected that the achievements will have a positive effect on the health conditions of participating villagers, and in particular by reducing faecal-oral transmitted diseases, this was not credibly established during the review, apart from anecdotal responses given by household respondents.

Other arguments also support the potential for adopting the CLTS approach in Lao PDR:

- CLTS appears to be cost-effective. Whereby initial facilitation and monitoring<sup>13</sup> can be relatively cost-effective and modest amounts of cash are spent on most latrines as materials are predominantly sourced locally. Reported costs ranged from US\$ 0 for basic dry pit latrines to less than US\$ 60 for a properly constructed hygienic pour-flush toilet.
- CLTS appears to work within existing government and local authorities structures. There was no need to create a new structure. Working through government and community-based organisations also makes CLTS more cost-effective.
- CLTS has proven to be a very effective approach for creating initial demand (increased uptake) for sanitation facilities.

### Challenges

The CLTS process is evolutionary and takes time and ongoing commitment from the initiators, government and local authorities, village leaders and other actors. **For CLTS to be successful it needs to go beyond triggering. Post-triggering follow up is critically important.** Triggering without proper follow-up is bad practice and is likely to diminish the sustainability of CLTS and should be avoided by all means.

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<sup>13</sup> In this CLTS pilot the costs to the project for initial facilitation and regular monitoring visits was limited to providing transportation and daily subsistence allowances to staff members from the District Health Office. Direct costs of initial facilitation (transportation and daily allowances of CLTS facilitators) might have been as cheap as US\$50 per village, whereas monitoring visits are likely to have costs less than US\$10 per village visit.

The review showed that in general follow-up has been inadequate and that greater attention is and will be needed during the post-triggering phase to reinforce messages and local actions.

- ☒ Villages were revisited on average only 2.7 times.
- ☒ The average time span between triggering and the first follow up visits was 33 days. The first two villages were only revisited after two months (60 days). This is too long as the review showed that 60% of all the latrines were constructed within the first month following triggering, hence, no opportunity existed to provide advice or technical guidance.
- ☒ Follow up visits were only used to monitor progress regarding latrine construction. Individual households were rarely visited and advice on latrine construction techniques was not provided.

As a consequence of inadequate follow up, the quality of latrine construction is generally poor, resulting in a high percentage (85%) of unhygienic latrines. A large number of the current unhygienic latrines might be a risk being a source for faecal-oral contamination as they could become breeding grounds for flies and mosquitoes. Furthermore, as a consequence of the lack of design information and poor construction, latrines are expected to fill up rapidly or fall apart within a short time frame. Locally available cost effective input options for upgrading of latrines is badly needed and may provide an opportunity for local entrepreneurs and micro enterprises.

Another challenge is the limitations of the approach due to the quality of the facilitators. According to Kar and Chambers (2008), **the key to success is the attitude and approach of the facilitator**. They believe that not everyone can be a good facilitator. Facilitating CLTS is an aptitude. It can be learnt, but it will come more naturally to some than to others. Behaviour and attitudes are crucial and are more important than technical skills or competences. Except for the initial CLTS facilitators training, little else was done to enhance and upgrade the attitudes and skills of the facilitators.

### 3.2 Recommendations

Competing with conventional approaches to sanitation in Lao PDR - all too often providing substantial (hardware) subsidies to a limited number of households which is usually insufficient to contribute to universal sanitation - requires that we need to do CLTS right and to make it a credible alternative. To adopt a 'foreign' approach and for it to go to scale requires continuous learning, adaptation, innovation and above all quality.

On the basis of the findings, and earlier research and work carried out by SNV, there are a number of specific recommendations set out in this section. It is expected that these will form inputs for future work in evolving, applying and adapting the CLTS approach to the diverse Lao context.

It is therefore recommended:

1. To go back to the basics of CLTS by focusing on igniting a change in sanitation behaviour and practices rather than focusing only on latrine construction. The basic premise of CLTS is to start first with behaviour change with technology following!
2. To encourage more local innovation by drawing on local culture and conditions to strengthen triggering and follow up visits and to make them more successful. For example encouraging competitions within or between villages, developing songs and poems with a strong sanitation message to promote good behaviours, encouraging schools to get involved, identifying and encouraging natural leaders to take a stronger role, establishing saving groups so that members can invest in more durable latrines, etc.
3. To pay greater attention to the post-triggering phase to reinforce messages (e.g. safe disposal of infants' faeces, 'slippage' of adult behaviour) and local actions. The success of CLTS in part relates to the intensity of triggering and follow up visits. Continuous follow-up and intensive interaction is a proven requisite for the success of CLTS.

4. To invest more time and resources to advice and support individual households to construct hygienic latrines. This could start immediately after triggering by advising on alternative technologies for stopping open defecation practices so that villagers have more time to organise funds to construct more sanitary latrines. Options and information on latrine types should be provided to enhance the ‘informed choice’ principle. As soon as community members take steps to construct latrines, simple technical input needs to be provided to help make latrines more durable and therefore CLTS more sustainable. Replication of technology is very high, so if the first few latrines are built with due consideration to important technical aspects as well as to cost and durability, the quality of the later built latrines will be better and the sustainability of the entire programme, greater. Latrines built with zero investment can be durable and user-friendly.

Additionally the project should explore the following two issues:

- The potential role the private sector (micro and small entrepreneurs such as local masons and suppliers of hardware goods) can play in providing services, including advice on technical options.
  - The possibilities of providing some sort of support to needy households (e.g. hardware subsidies targeted for the poorest) to help them to move up the sanitation ladder. However, this should only be considered in villages that have been declared ODF and who have been able to sustain that status for a recognisable period of time.
5. To encourage existing formal and informal community structures and community members to play a more active role in CLTS. Lao villages are predominantly paternalistic and people tend to look towards their formal and informal leaders for authority. The importance of leaders in CLTS is evidenced by the fact that in villages where triggering was actively supported by village leaders, there has been greater success. A number of examples:
    - Village health committees and village health volunteers should be supported to build their commitment. These committees could monitor and record results on a community sanitation map for public display and discussion. Community monitoring strengthens local ownership and acts as an ongoing triggering mechanism.
    - Natural leaders should be encouraged to get involved. Experience in other countries shows that natural leaders are vital in accelerating CLTS results. They often function as role models or ‘change agents’ by initiating and spreading latrine construction and good hygienic practices within the community and beyond. Natural Leaders are often existing informal leaders who have relevant knowledge and skills through life experience and training or educational background.
    - Women should be encouraged and supported to take an active role. CLTS should offer women more opportunities to take on leadership roles in their villages. They could be drawn from among school teachers, village health volunteers, dispensary staff, community women’s groups, etc.
    - Encourage the participation of a range of professionals from different sectors, including teachers, village midwives, government health workers and other government administrators. Their involvement will help with promoting the sustainability and scaling up of CLTS.
  6. To explore possibilities to go beyond creating ODF environments and to go for Total Sanitation<sup>14</sup> in a fuller sense by addressing other sanitation priorities. As soon as substantial progress is made on creating an ODF environment, meetings can be conveyed to encourage community analysis on a broader range of sanitation improvements and to facilitate learning on additional sanitation and hygiene behaviour changes. For example effective hand washing practices, safe drawing and storage of drinking water, and safe disposal of animal and human waste including infants. By doing

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<sup>14</sup> In the context of this report this means addressing a wider range of sanitation and hygiene issues.

so an optimal synergy is created between the CLTS programme and other components of the HHDP and this should contribute to realising the project targets.

7. To improve the skills and competences of the existing CLTS facilitators by providing periodic refresher training to strengthen their capacity to effectively plan, implement and monitor the programme. Any training should also contribute to addressing and challenging the existing attitudes and perceptions. Experience elsewhere shows that the identification, selection, training and orientation, mentoring and support of facilitators are fundamental to good practice. If it is decided to go to scale then the existing pool of facilitators might not be sufficient, hence, there might a need to organise another basic CLTS training for new/additional facilitators.
8. To develop an objectively verifiable system for certifying ODF status in villages. Certification is the confirmation of the ODF status in a village as well as its official recognition. Before any village is declared ODF, inspections need to be carried out to assess whether successful behavioural change has taken place and the village is truly open defecation free.

Some additional considerations when implementing CLTS at scale in Hua Meuang district.

- Working at scale is more cost-effective, particularly if villages are clustered geographically and if larger villages are selected. When relatively bigger villages are included, the potential output of CLTS is high in comparison to the effort made.
- It is easier to scale up CLTS in villages neighbouring those where demand has been created successfully through CLTS in the not so distant past.

Finally it is strongly recommended that CWW obtains periodic short-term external expert support to further develop the CLTS approach as well as to train, mentor and support the pool of facilitators. Likewise it is strongly recommended that CWW considers supporting the formation of a 'community of practice' which through joint activities could work on knowledge development, knowledge brokering and knowledge networking in the area of CLTS. Organisations working on CLTS in Lao PDR could work together, share experiences and continue to provide inputs to improving approaches and materials suitable for different contexts in Laos. Peer reviews could be a powerful tool to enhance reflection and continuous learning.

### **3.3 Suggestions for future reviews**

Section 1.3 of this report provides an overview of the limitations of this review. The following suggestions should be considered to improve the quality of future reviews:

1. Ensure that more time is available for improving the skills of the interviewers and for testing and improving the survey questionnaires.
2. Ensure that the review is coordinated and guided by a competent team leader who is available to provide on-the-job training, guidance and support to the interviewers.
3. Ensure that you have a good understanding of the attitudes and perceptions of the interviewers as this is likely to influence the quality of their work and as a consequence the findings of the review. This needs to be addressed during the initial training.
4. Ensure that checks and balances are in place to verify the findings of the interviewers to enhance the overall reliability of the review.
5. Ensure that sufficient time and resources are available to go back to the field, if deemed necessary, after the initial compilation and analysis of raw data to verify and cross check the data.



Past, present and future 'leaders'



## Annex 1: Overview of Concern Worldwide CLTS villages

No	Village	# of HH	Main ethnic group	Latrine coverage reported by CWW		Latrine coverage during review	Included in review
				In #	In %		
<b>Hua Meuang District</b>							
1	Mold	82	Fong	10	12%		No
2	Paxot	45	Fong	45	100%		No
3	Done	45	Fong	39	87%		No
4	Homxaii	60	Hmong	23	38%	60%	Yes
5	Paa	44	Fong	28	64%		No
6	Homphan	80	Kmu	80	100%	96%	Yes
7	Homthong	74	Kmu	74	100%	94%	Yes
<b>Totals</b>		<b>430</b>		<b>299</b>	<b>70%</b>	<b>85%</b>	
<b>Viengthong District</b>							
1	Huay yam	53	Hmong	14	26%		No
2	Namngao	44	Kmu	44	100%	94%	Yes
3	Lang	29	Lao Loum	29	100%	100%	Yes
4	Konngua	59	Kmu	56	95%	91%	Yes
5	Sopmane	27	Lao Loum	27	100%	100%	Yes
6	Phanlor	30	Lao Loum	30	100%	92%	Yes
7	Tumla neua	81	Lao Loum	45	56%		No
8	Tumla Tai	77	Lao Loum	52	68%		No
9	Nakoud	90	Lao Loum	55	61%		No
10	Poudane	28	Kmu	25	89%	81%	Yes
11	Chak	60	Hmong	44	73%		No
12	Vungkua	46	Lao Loum, Hmong, Kmu	16	35%		No
13	Huaylao	31	Hmong	15	48%		No
14	Huaysaguan	45	Hmong	19	42%		No
15	Xontai	161	Lao Loum	161	100%	100%	Yes
16	Huaysue	52	Hmong	40	77%	71%	Yes
17	Samsoom	47	Kmu	40	85%	72%	Yes
<b>Totals</b>		<b>960</b>		<b>712</b>	<b>74%</b>	<b>88%</b>	
<b>GRAND TOTALS</b>		<b>1,390</b>		<b>1,011</b>	<b>73%</b>	<b>86%</b>	

## Annex 2: Selected villages and field research sample size

Name of village	Sample size in # of households			Sample size in # of people		
	Total # of HH in village	Total # of HH included in CLTS review	In %	Total population of village	Total # of people included in CLTS review	In %
<b>Hua Meuang</b>						
Homthong	74	63	85%	478	404	85%
Homphan	80	77	96%	486	482	99%
Homxaii	60	60	100%	468	471	101%
<b>Totals</b>	<b>214</b>	<b>200</b>	<b>93%</b>	<b>1,432</b>	<b>1,357</b>	<b>95%</b>
<b>Viengthong</b>						
Samsoom	47	36	77%	323	271	84%
Xontai	146	39	27%	1030	256	25%
Lang	29	29	100%	216	223	103%
Namngao	44	34	77%	260	205	79%
Poudane	28	27	96%	167	143	86%
Konngua	59	35	59%	358	221	62%
Sopmane	28	16	57%	172	108	63%
Phanlor	30	13	43%	204	87	43%
Huaysue	52	41	79%	447	367	82%
<b>Totals</b>	<b>463</b>	<b>270</b>	<b>58%</b>	<b>3,177</b>	<b>1,881</b>	<b>59%</b>
<b>GRAND TOTALS</b>	<b>677</b>	<b>470</b>	<b>69%</b>	<b>4,609</b>	<b>3,238</b>	<b>70%</b>

### Annex 3: Information on ethnicity in CLTS villages included in review

Name of village	Ethnic groups included in review					
	Lao Loum	Hmong	Kmu	Leu/Phouan	Phounoy	Fong
<b>Hua Meuang District</b>						
Homthong	0%	0%	100%	0%	0%	0%
Homphan	0%	0%	100%	0%	0%	0%
Homxaii	0%	100%	0%	0%	0%	0%
<b>Averages Hua Meuang</b>	<b>0%</b>	<b>30%</b>	<b>70%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>Viengthong District</b>						
Samsoom	0%	0%	100%	0%	0%	0%
Xontai	8%	0%	0%	0%	0%	92%
Lang	0%	0%	0%	0%	0%	100%
Namngao	0%	0%	100%	0%	0%	0%
Poudane	0%	0%	100%	0%	0%	0%
Konngua	0%	0%	100%	0%	0%	0%
Sopmane	100%	0%	0%	0%	0%	0%
Phanlor	100%	0%	0%	0%	0%	0%
Huaysue	0%	100%	0%	0%	0%	0%
<b>Averages Viengthong</b>	<b>14%</b>	<b>0%</b>	<b>58%</b>	<b>0%</b>	<b>0%</b>	<b>28%</b>
<b>AVERAGES</b>	<b>7%</b>	<b>14%</b>	<b>63%</b>	<b>0%</b>	<b>0%</b>	<b>15%</b>

#### Annex 4: Information on household size in CLTS villages included in review

Name of village	Size of households			
	Total # of HH included in CLTS review	Largest HH size	Smallest HH size	Average HH size
<b>Hua Meuang District</b>				
Homthong	63	12	2	6.4
Homphan	77	12	2	6.3
Homxaii	60	16	1	7.9
<b>Averages</b>		<b>13.3</b>	<b>1.7</b>	<b>6.8</b>
<b>Viengthong District</b>				
Samsoom	36	19	2	7.5
Xontai	39	11	3	6.6
Lang	29	20	4	7.7
Namngao	34	11	2	6.0
Poudane	27	10	2	5.3
Konngua	35	11	3	6.3
Sopmane	16	11	3	6.8
Phanlor	13	10	3	6.7
Huaysue	41	14	3	9.0
<b>Averages</b>		<b>13.0</b>	<b>2.8</b>	<b>6.9</b>
<b>AVERAGES</b>		<b>13.1</b>	<b>2.5</b>	<b>6.9</b>

Annex 5: CLTS villages included in review

Name of village	CLTS review date	CLTS start		Monitoring visits				
		CLTS triggering date	Time lapse between triggering and review in days	No of monitoring visits to date	First visit	Time lapse between triggering and first visit in days	Most recent visit	Time lapse between most recent visit and review in days
<b>Hua Meuang District</b>								
Homthong	6-Aug-09	15-Mar-09	144	2	9-Apr-09	25	12-May-09	86
Homphan	7-Aug-09	5-Mar-09	155	2	8-Apr-09	34	11-May-09	88
Homxaii	22-Aug-09	18-Feb-09	185	3	10-Mar-09	20	17-May-09	97
<b>Averages</b>			<b>161</b>	<b>2.3</b>		<b>26</b>		<b>90</b>
<b>Viengthong District</b>								
Samsoom	9-Aug-09	18-Mar-09	144	2	8-Apr-09	21	9-May-09	92
Xontai	10-Aug-09	16-Mar-09	147	2	9-Apr-09	24	10-May-09	92
Lang	11-Aug-09	21-Nov-08	263	5	20-Jan-09	60	16-May-09	87
Namngao	11-Aug-09	21-Nov-08	263	5	21-Jan-09	61	16-May-09	87
Poudane	22-Aug-09	6-Mar-09	169	2	11-Apr-09	36	12-May-09	102
Konngua	19-Aug-09	10-Feb-09	190	3	24-Mar-09	42	13-May-09	98
Sopmane	19-Aug-09	11-Feb-09	189	3	25-Mar-09	42	14-May-09	97
Phanlor	20-Aug-09	12-Feb-09	189	3	26-Mar-09	42	15-May-09	97
Huaysue	23-Aug-09	17-Mar-09	159	2	10-Apr-09	24	11-May-09	104
<b>Averages</b>			<b>190</b>	<b>3.0</b>		<b>39</b>		<b>95</b>
<b>AVERAGES</b>			<b>176</b>	<b>2.7</b>		<b>33</b>		<b>93</b>
<b>MINIMUM</b>						<b>20</b>		<b>86</b>
<b>MAXIUM</b>						<b>61</b>		<b>104</b>

## Annex 6: Latrine coverage in CLTS villages included in review

Name of village	Latrines constructed prior to and after CLTS triggering				
	# of HH included in CLTS review	# of HH with latrine prior to CLTS triggering	# of HH that built a latrine after CLTS triggering	Total # of HH with a latrine	% of HH that have built a latrine
<b>Hua Meuang District</b>					
Homthong	63	4	55	59	94%
Homphan	77	6	68	74	96%
Homxaii	60	12	24	36	60%
<b>Totals</b>	<b>200</b>	<b>22</b>	<b>147</b>	<b>169</b>	<b>85%</b>
<b>Viengthong District</b>					
Samsoom	36	4	22	26	72%
Xontai	39	0	39	39	100%
Lang	29	0	29	29	100%
Namngao	34	4	28	32	94%
Poudane	27	3	19	22	81%
Konngua	35	8	24	32	91%
Sopmane	16	4	12	16	100%
Phanlor	13	9	3	12	92%
Huaysue	41	5	24	29	71%
<b>Totals</b>	<b>270</b>	<b>37</b>	<b>200</b>	<b>237</b>	<b>88%</b>
<b>GRAND TOTALS</b>	<b>470</b>	<b>59</b>	<b>347</b>	<b>406</b>	<b>86%</b>
	<b>100%</b>	<b>13%</b>	<b>74%</b>	<b>86%</b>	

## Annex 7: ODF status in CLTS villages included in review

Name of village	ODF status in villages			
	# of HH included in CLTS review	# of HH with a latrine	# of HH that use a latrine	# of HH that practice ODF
<b>Hua Meuang District</b>				
Homthong	63	59	57	90%
Homphan	77	74	69	90%
Homxaii	60	36	33	55%
<b>Totals</b>	<b>200</b>	<b>169</b>	<b>159</b>	<b>80%</b>
<b>Viengthong District</b>				
Samsoom	36	26	17	47%
Xontai	39	39	39	100%
Lang	29	29	29	100%
Namngao	34	32	30	88%
Poudane	27	22	20	74%
Konngua	35	32	26	74%
Sopmane	16	16	13	81%
Phanlor	13	12	9	69%
Huaysue	41	29	28	68%
<b>Totals</b>	<b>270</b>	<b>237</b>	<b>211</b>	<b>78%</b>
<b>GRAND TOTALS</b>	<b>470</b>	<b>406</b>	<b>370</b>	<b>79%</b>
	<b>100%</b>	<b>86%</b>	<b>79%</b>	

Annex 8: Existence of latrines prior to CLTS triggering

Name of village	Prior existence of latrines				Latrine construction dates				
	# of HH included in CLTS review	# of HH with a latrine prior to CLTS triggering		% of HH with latrine still in use	Construction date of oldest latrine	Construction date of newest latrine	Maximum time lapse up to review in years	Minimum time lapse up to review in years	Average time lapse up to review in years
		Not in use	Still in use						
<b>Hua Meuang District</b>									
Homthong	63	24	4	6%	Dec-97	Dec-07	11.7	1.7	6.8
Homphan	77	7	6	8%	Feb-06	Feb-09	3.5	0.5	1.0
Homxaii	60	0	12	20%	Jun-06	Dec-08	3.2	0.7	1.5
<b>Totals</b>	<b>200</b>	<b>31</b>	<b>22</b>	<b>11%</b>					
<b>Max, Min, Average</b>							<b>11.7</b>	<b>0.5</b>	<b>3.1</b>
<b>Viengthong District</b>									
Samsoom	36	0	4	11%	Dec-05	Aug-08	3.7	1.0	1.8
Xontai	39	0	0	0%					0.0
Lang	29	0	0	0%					0.0
Namngao	34	0	4	12%	Nov-05	Oct-07	3.8	1.9	2.5
Poudane	27	0	3	11%	Mar-07	Feb-09	2.5	0.5	1.5
Konngua	35	0	8	23%	Feb-07	May-08	2.5	1.3	2.0
Sopmane	16	0	4	25%	Mar-08	Sep-08	1.5	1.0	1.2
Phanlor	13	0	9	69%	Apr-02	May-08	7.4	1.3	2.1
Huaysue	41	0	5	12%	Mar-07	Nov-08	2.5	0.8	1.8
<b>Totals</b>	<b>270</b>	<b>0</b>	<b>37</b>	<b>14%</b>					
<b>Max, Min, Average</b>							<b>7.4</b>	<b>0.5</b>	<b>1.4</b>
<b>GRAND TOTALS</b>	<b>470</b>	<b>31</b>	<b>59</b>	<b>13%</b>					
<b>GRAND MAX, MIN, AVE</b>							<b>11.7</b>	<b>0.5</b>	<b>1.9</b>

## Annex 9: Latrines constructed after CLTS triggering

Name of village	Post-triggering latrine construction			Latrine construction dates				
	# of HH included in CLTS review	# of HH that built a latrine after CLTS triggering	% of HH that built a latrine after CLTS triggering	Construction date of oldest latrine	Construction date of newest latrine	Maximum time lapse up to review in years	Minimum time lapse up to review in years	Average time lapse up to review in years
<b>Hua Meuang District</b>								
Homthong	63	55	87%	Mar-09	Aug-09	0.4	0.0	0.3
Homphan	77	68	88%	Mar-09	Jul-09	0.4	0.1	0.3
Homxaii	60	24	40%	Mar-09	Jul-09	0.5	0.1	0.2
<b>Totals</b>	<b>200</b>	<b>147</b>	<b>74%</b>					
<b>Max, Min, Average</b>						<b>0.5</b>	<b>0.0</b>	<b>0.3</b>
<b>Viengthong District</b>								
Samsoom	36	22	61%	Mar-09	May-09	0.4	0.2	0.3
Xontai	39	39	100%	Mar-09	Jul-09	0.4	0.1	0.3
Lang	29	29	100%	Dec-08	Jul-09	0.7	0.1	0.6
Namngao	34	28	82%	Nov-08	Apr-09	0.8	0.3	0.6
Poudane	27	19	70%	Apr-09	May-09	0.4	0.3	0.3
Konngua	35	24	69%	Feb-09	May-09	0.5	0.3	0.5
Sopmane	16	12	75%	Feb-09	Apr-09	0.5	0.4	0.5
Phanlor	13	3	23%	Feb-09	Feb-09	0.5	0.5	0.5
Huaysue	41	24	59%	Mar-09	May-09	0.5	0.3	0.4
<b>Totals</b>	<b>270</b>	<b>200</b>	<b>74%</b>					
<b>Max, Min, Average</b>						<b>0.8</b>	<b>0.1</b>	<b>0.5</b>
<b>GRAND TOTALS</b>	<b>470</b>	<b>347</b>	<b>74%</b>					
<b>GRAND MAX, MIN, AVE</b>						<b>0.8</b>	<b>0.0</b>	<b>0.4</b>

## Annex 10: Investment details for latrines constructed after CLTS triggering

Name of village	Cash spent by HH on latrine construction					
	# of HH that built a latrine after triggering	Total # of HH that invested cash in latrine construction	In %	Maximum amount	Minimum amount	Average amount
<b>Hua Meuang District</b>						
Homthong	55	53	96%	80,000	20,000	43,000
Homphan	68	66	97%	100,000	20,000	48,000
Homxaii	24	24	100%	500,000	40,000	101,000
<b>Totals</b>	<b>147</b>	<b>143</b>	<b>97%</b>			
<b>Max, Min, Average</b>				<b>500,000</b>	<b>20,000</b>	<b>64,000</b>
<b>Viengthong district</b>						
Samsoom	22	14	39%	60,000	20,000	36,000
Xontai	39	39	100%	80,000	40,000	64,000
Lang	29	29	100%	80,000	40,000	56,000
Namngao	28	0	0%	0	0	0
Poudane	19	19	70%	60,000	40,000	43,000
Konngua	24	11	31%	60,000	20,000	40,000
Sopmane	12	12	75%	60,000	40,000	47,000
Phanlor	3	3	23%	60,000	40,000	47,000
Huaysue	24	24	59%	280,000	20,000	168,000
<b>Totals</b>	<b>200</b>	<b>151</b>	<b>76%</b>			
<b>Max, Min, Average</b>				<b>280,000</b>	<b>20,000</b>	<b>63,000</b>
<b>GRAND TOTALS</b>	<b>347</b>	<b>294</b>	<b>85%</b>			
<b>GRAND MAX, MIN, AVE</b>				<b>500,000</b>	<b>20,000</b>	<b>63,000</b>

## Annex 11: Summary of review findings by ethnic group

Name of village	Ethnicity	Sample size		Existence of HH latrines			Types of HH latrines		Hygienic conditions of HH latrines			ODF status
		Total # of HH included in CLTS review	Sample size as % of total HH	HH with latrines prior to CLTS triggering	HH with latrines constructed during CLTS	HH with latrines at time of review	Pour-flush latrine	Dry pit latrine	Pour-flush latrine	Dry pit latrine	Overall status	HH using latrine
Homxaii	Hmong	60	100%	20%	40%	60%	44%	56%	88%	5%	42%	55%
Huaysue	Hmong	41	79%	12%	59%	71%	79%	21%	96%	0%	76%	68%
<b>Totals</b>		<b>101</b>	<b>90%</b>	<b>17%</b>	<b>48%</b>	<b>64%</b>	<b>60%</b>	<b>40%</b>	<b>92%</b>	<b>4%</b>	<b>57%</b>	<b>60%</b>
Homthong	Kmu	63	85%	6%	87%	94%	2%	98%	100%	2%	3%	90%
Homphan	Kmu	77	96%	8%	88%	96%	0%	100%	-	16%	16%	90%
Samsoom	Kmu	36	77%	11%	61%	72%	0%	100%	-	4%	4%	47%
Namngao	Kmu	34	77%	12%	82%	94%	3%	97%	100%	6%	9%	88%
Poudane	Kmu	27	96%	11%	70%	81%	0%	100%	-	36%	36%	74%
Konngua	Kmu	35	59%	23%	69%	91%	0%	100%	-	28%	28%	74%
<b>Totals</b>		<b>272</b>	<b>82%</b>	<b>11%</b>	<b>79%</b>	<b>90%</b>	<b>1%</b>	<b>99%</b>	<b>100%</b>	<b>14%</b>	<b>14%</b>	<b>81%</b>
Sopmane	Lao loum	16	57%	25%	75%	100%	0%	100%	-	13%	13%	81%
Phanlor	Lao loum	13	43%	69%	23%	92%	17%	83%	100%	20%	33%	69%
<b>Totals</b>		<b>29</b>	<b>50%</b>	<b>45%</b>	<b>52%</b>	<b>97%</b>	<b>7%</b>	<b>93%</b>	<b>100%</b>	<b>15%</b>	<b>21%</b>	<b>76%</b>
Xontai	Phong	39	27%	0%	100%	100%	51%	49%	5%	5%	5%	100%
Lang	Phong	29	100%	0%	100%	100%	0%	100%	-	0%	0%	100%
<b>Totals</b>		<b>68</b>	<b>39%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>29%</b>	<b>71%</b>	<b>5%</b>	<b>2%</b>	<b>3%</b>	<b>100%</b>
<b>GRAND TOTALS</b>		<b>470</b>	<b>69%</b>	<b>13%</b>	<b>74%</b>	<b>86%</b>	<b>16%</b>	<b>84%</b>	<b>65%</b>	<b>11%</b>	<b>20%</b>	<b>79%</b>

## Annex 12: Summary of review findings by district

Name of village	District	Sample size		Existence of HH latrines			Types of HH latrines		Hygienic conditions of HH latrines			ODF status
		Total # of HH included in CLTS review	Sample size	Prior to CLTS triggering	Constructed after CLTS triggering	HH with latrines at time of review	Pour-flush latrine	Dry pit latrine	Pour-flush latrine	Dry pit latrine	Overall status	HH using latrine
Homphan	Hua Meuang	77	96%	8%	88%	96%	0%	100%	-	16%	16%	90%
Homthong	Hua Meuang	63	85%	6%	87%	94%	2%	98%	100%	2%	3%	90%
Homxaii	Hua Meuang	60	100%	20%	40%	60%	44%	56%	88%	5%	42%	55%
<b>Totals</b>		<b>200</b>	<b>93%</b>	<b>11%</b>	<b>74%</b>	<b>85%</b>	<b>10%</b>	<b>90%</b>	<b>88%</b>	<b>9%</b>	<b>17%</b>	<b>80%</b>
Huaysue	Viengthong	41	79%	12%	59%	71%	79%	21%	96%	0%	76%	68%
Konngua	Viengthong	35	59%	23%	69%	91%	0%	100%	-	28%	28%	74%
Lang	Viengthong	29	100%	0%	100%	100%	0%	100%	-	0%	0%	100%
Namngao	Viengthong	34	77%	12%	82%	94%	3%	97%	100%	6%	9%	88%
Phanlor	Viengthong	13	43%	69%	23%	92%	17%	83%	100%	20%	33%	69%
Poudane	Viengthong	27	96%	11%	70%	81%	0%	100%	-	36%	36%	74%
Samsoom	Viengthong	36	77%	11%	61%	72%	0%	100%	-	4%	4%	47%
Sopmane	Viengthong	16	57%	25%	75%	100%	0%	100%	-	13%	13%	81%
Xontai	Viengthong	39	27%	0%	100%	100%	51%	49%	5%	5%	5%	100%
<b>Totals</b>		<b>270</b>	<b>58%</b>	<b>14%</b>	<b>74%</b>	<b>88%</b>	<b>19%</b>	<b>81%</b>	<b>57%</b>	<b>13%</b>	<b>22%</b>	<b>78%</b>
<b>GRAND TOTALS</b>		<b>470</b>	<b>69%</b>	<b>13%</b>	<b>74%</b>	<b>86%</b>	<b>16%</b>	<b>84%</b>	<b>65%</b>	<b>11%</b>	<b>20%</b>	<b>79%</b>

## References

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- i Current sanitation approaches used in the Lao PDR are described in a Project Report prepared for SNV Laos by IRC (March 2009) as part of an SNV assignment entitled “Research on Innovative Policies, Practices and Approaches for Improved Basic Sanitation and Hygiene in Laos PDR”.  
The report is available at <http://groups.google.com/group/WASH-LaoPDR>
- ii The Water Supply & Sanitation Collaborative Council ([www.wssc.org](http://www.wssc.org)) (2009) have just published an interesting publication on “Public Funding for Sanitation: The many faces of sanitation subsidies”. This publication assists the reader in understanding the debate on subsidies and sanitation financing, and provides guidance on how to select the most appropriate funding arrangements for sanitation programming in differing situations.  
The publication is available at <http://groups.google.com/group/WASH-LaoPDR>
- iii For further reading on CLTS:
  - 1. Kamal Kar (November 2005) Practical Guide to Community-Led Total Sanitation (CLTS) available in both English and Lao language versions on <http://groups.google.com/group/WASH-LaoPDR?hl=en>
  - 2. A wealth of additional reading on CLTS and regular monthly CLTS updates can be obtained from <http://communityledtotalsanitation.org>
- iv Kamal Kar with Robert Chambers (2008) Handbook on Community-Led Total Sanitation, Plan UK and the Institute of Development Studies at the University of Sussex UK.  
The handbook is available at <http://communityledtotalsanitation.org>  
  
The World Bank Water and Sanitation Program (WSP-EAP) (May 2009) Economic Impacts of Sanitation in Lao PDR, A five-country study conducted in Cambodia, Indonesia, Lao PDR, the Philippines, and Vietnam under the Economics of Sanitation Initiative (ESI), Research Report May 2009).  
The publication is available at [http://www.wsp.org/UserFiles/file/ESI\\_Laos\\_english.pdf](http://www.wsp.org/UserFiles/file/ESI_Laos_english.pdf)